ATTACHMENT B

City of Pasadena

Central Park Apartments Sustainable Communities Environmental Assessment



Prepared by:

City of Pasadena
Planning & Community Development
175 North Garfield Avenue
Pasadena, CA 91101

Prepared with the assistance of:

Impact Sciences, Inc.
811 West 7th Street, Suite 200
Los Angeles, CA 90017

January 2022

Table of Contents

Section			Page
1.0	Introduction		1.0-1
	1.1	Purpose of a Sustainable Communities Environmental Assessment	1.0-1
	1.2	Project Summary	1.0-2
	1.3	Statutory Background	1.0-3
	1.4	Responses to Agency and Public Comments	1.0-4
	1.5	Revisions and Clarifications	1.0-4
	1.6	Organization of the SCEA	1.0-5
2.0	Project Description		2.0-1
	2.1	Project Title	2.0-1
	2.2	Lead Agency Name and Address	2.0-1
	2.3	Contact Person and Phone Number	2.0-1
	2.4	Project Location	2.0-1
	2.5	Project Sponsor's Name and Address	2.0-1
	2.6	General Plan & Specific Plan Designations	2.0-5
	2.7	Zoning	2.0-5
	2.8	Surrounding Land Uses and Setting	2.0-5
	2.9	Description of Project	2.0-16
	2.10	Other Public Agencies Whose Approval Is Required	2.0-50
	2.11	Have California Native Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1? If So, Has Consultation Begun?	2.0-50
	2.12	Cumulative Scenario	2.0-51
3.0	Sustainable Communities Environmental Assessment Eligibility		3.0-1
	3.1	Sustainable Communities Strategy Consistency Analysis	3.0-1
	3.2	Transit Priority Project Consistency Analysis	3.0-4
	3.3	Incorporation of Feasible Mitigation Measures, Performance Standards, and Criteria from Prior Applicable EIRs	3.0-5
4.0	SCEA Environmental Checklist		4.0-1
	Environmental Factors Potentially Affected		4.0-1
	Determination		4.0-1
	Evaluation of Environmental Impacts		4.0-3
	Environmental Impacts		4.0-4
	4.1	Aesthetics	4.0-4
	4.2	Agricultural Resources	4.0-23
	4.3	Air Quality	4.0-24
	4.4	Biological Resources	4.0-37
	4.5	Cultural Resources	4.0-43
	4.6	Energy	4.0-79
	4.7	Geology and Soils	4.0-81
	4.8	Greenhouse Gas Emissions	4.0-86
	4.9	Hazards and Hazardous Materials	4.0-95
	4.10	Hydrology and Water Quality	4.0-97
	4.11	Land Use and Planning	4.0-104
	4.12	Mineral Resources	4.0-104
	4.13	Noise	4.0-105
	4.14	Population and Housing	4.0-114
	4.15	Public Services	4.0-114
	4.16	Recreation	4.0-116
	4.17	Transportation	4.0-117
	4.18	Tribal Cultural Resources	4.0-118

Table of Contents (continued)

Section			Page
	4.19	Utilities and Service Systems	4.0-120
	4.20	Wildfire	4.0-127
	4.21	Earlier Analysis	4.0-128
	4.22	Mandatory Findings of Significance	4.0-128
5.0	List of Preparers		5.0-1
6.0	References		6.0-1
7.0	Master Responses to Comments		7.0-1
	7.1	Introduction	7.0-1
	7.2	Current Project vs. Previous Project	7.0-7
	7.3	Use of a Sustainable Communities Environmental Assessment (SCEA)	7.0-7
	7.4	The Meaning/Purpose of the Inclusion of Appendix A	7.0-11
	7.5	Analysis of Carbon Monoxide (CO) Hotspots	7.0-12
	7.6	Clarification of Impacts to Existing Trees	7.0-14
	7.7	Provision and Findings of a Historical Resources Technical Report	7.0-23
	7.8	Land Use Consistency Analysis	7.0-28
	7.9	Analysis of Cumulative Construction Noise Impacts	7.0-46
	7.10	Discussion of Operational Noise Impacts	7.0-50
	7.11	Emergency (Fire Department) Access	7.0-52
	7.12	Responses to Transportation Related Comments	7.0-53
	7.13	Additional Information Provided by the Project Applicant	7.0-55

Appendices

A	Incorporation of Applicable Mitigation Measures, Performance Standards, and Criteria from Prior Applicable EIRs
B	Air Quality Impact Assessment
C	Biological Resources Report
D	Greenhouse Gas Analysis
E	Historic Resources Technical Report
F	Noise Report
G	Transportation Report
H	Letters Received on the SCEA during the Public Comment Period
I	Green Hotel Apartments Final EIR – *Not Certified*
J	Supplemental Noise Analysis for Section 7.10

Tables

Table		Page
2.0-1	Summary of On-Site Protected Trees	2.0-7
2.0-2	Project Unit Summary	2.0-17
2.0-3	Project Parking Summary	2.0-18
2.0-4	Pasadena General Plan Update: Development Capacities (2035)	2.0-53
3.0-1	Consistency Analysis with Connect SoCal (2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy)	3.0-2

4.3-1 South Coast Air Quality Management District Regional Significance Thresholds – Pounds per Day 4.0-25
4.3-2 Local Significance Thresholds – Pounds per Day 4.0-27

Tables (continued)

Table Page
4.3-3 Construction-Related Pollutant and Precursor Emissions – Maximum Pounds per Day 4.0-28
4.3-4 Long-Term Operational Emissions - Maximum Pounds per Day 4.0-29
4.3-5 Localized Significance of Construction Emissions – Maximum Pounds per Day 4.0-34
4.4-1 Summary of On-Site Protected Trees 4.0-39
4.8-1 CAP Action Measures 4.0-87
4.8-2 Project Implementation of the CAP Actions 4.0-90
4.8-3 Project Consistency with Applicable 2017 Scoping Plan Measures 4.0-91
4.8-4 Project Consistency with SCAG 2016-2040 RTP/SCS 4.0-92
4.8-5 Project Consistency with SCAG Connect SoCal 4.0-94
4.13-1 Ambient, Short-term Noise Measurements 4.0-107
4.13-2 Construction Equipment List Noise Emission Levels 4.0-108
4.13-3 Vibration Source Levels for Construction Equipment 4.0-110
4.13-4 Vibration Levels at Off-Site Sensitive Uses from Project Construction – Unmitigated 4.0-111
4.19-1 Projected Water Use 4.0-123
7.0-1 Matrix of Comments Received in Response to the SCEA 7.0-2
7.6-1 Summary of Impacts to Existing Trees 7.0-15
7.8-1 Consistency with Land Use Element of General Plan 7.0-36

Figures

Figure Page
2.0-1 Regional Location 2.0-2
2.0-2 Local Vicinity 2.0-3
2.0-3 Aerial Overview 2.0-4
2.0-4 Existing On-Site Tree Locations 2.0-6
2.0-5 Existing Site Context 2.0-11
2.0-6 Existing Site Context 2.0-12
2.0-7 Existing Conditions Photo Montage – Fair Oaks 2.0-13
2.0-8 Existing Conditions Photo Montage – Central Park 2.0-14
2.0-9 Central District Specific Plan Area 2.0-15
2.0-10 Project Height Averaging Analysis 2.0-20
2.0-11 Project Site Plan – Ground Floor 2.0-21

2.0-12 Project Site Plan – Mezzanine Floor 2.0-22
2.0-13 Project Site Plan – Second Floor 2.0-23
2.0-14 Project Site Plan – Third Floor 2.0-24

Figures (continued)

Figure Page

2.0-15 Project Site Plan – Fourth Floor 2.0-25
2.0-16 Project Site Plan – Fifth Floor 2.0-26
2.0-17 Project Site Plan – Sixth Floor 2.0-27
2.0-18 Project Site Plan – Sixth Floor Mezzanine Plan 2.0-28
2.0-19 Project Roof Plan 2.0-29
2.0-20 Project Site Plan – Parking Level P1 ..... 2.0-30
2.0-21 Project Site Plan – Parking Level P2 ..... 2.0-31
2.0-22 Project Site Plan – Parking Level P3 ..... 2.0-32
2.0-23 Project Site Plan – Parking Level P4 ..... 2.0-33
2.0-24 South (Dayton Street) Elevation 2.0-34
2.0-25 West (Fair Oaks) Elevation 2.0-35
2.0-26 South and West Building Elevations 2.0-36
2.0-27 North and East Building Elevations 2.0-37
2.0-28 North Ramp Building Section 2.0-38
2.0-29 East Ramp Building Section 2.0-39
2.0-30 South Ramp Building Section 2.0-40
2.0-31 West Ramp Building Section 2.0-41
2.0-32 Landscape Plan – Ground Level 2.0-42
2.0-33 Landscape Plan – Roof Deck 2.0-43
2.0-34 Perspective Rendering at the Corner of Fair Oaks Avenue and Dayton Street 2.0-44
2.0-35 Perspective Rendering along Dayton Street 2.0-45
2.0-36 Bird's Eye Perspective Rendering along Fair Oaks Avenue 2.0-46
2.0-37 Perspective Rendering along Fair Oaks Avenue 2.0-47
2.0-38 Bird's Eye Perspective Rendering of Project Courtyard 2.0-48
4.1-1 View Key Map 4.0-13
4.1-2 View A 4.0-14
4.1-3 View B 4.0-15
4.1-4 View C 4.0-16
4.1-5 View D 4.0-17
4.1-6 View E 4.0-18
4.1-7 View F 4.0-19
4.1-8 View G 4.0-20

4.1-9 View H 4.0-21
4.4-1 Existing On-Site Tree Locations 4.0-42

Figures (continued)

Figure Page
4.5-1 Old Pasadena Historic District Map 4.0-55
4.5-2 Nearby Historical Resources Map 4.0-65
4.13-1 Noise Monitoring Locations 4.0-106
7.6-1a Updated Tree Tables 7.0-16
7.6-1b Updated Tree Tables 7.0-17
7.6-1c Updated Tree Tables 7.0-18
7.6-1d Updated Tree Tables 7.0-19
7.6-1e Updated Tree Tables 7.0-20
7.6-2a Updated Tree Exhibits 7.0-21
7.6-2b Updated Tree Exhibits 7.0-22
7.13-1a Height Study 7.0-56
7.13-1b Height Study 7.0-57
7.13-2a Distance Study 7.0-58
7.13-2b Distance Study 7.0-59
7.13-3a Shadow Study 7.0-60
7.13-3b Shadow Study 7.0-61
7.13-4 Turn Analysis 7.0-62

1.0 INTRODUCTION

1.1 PURPOSE OF A SUSTAINABLE COMMUNITIES ENVIRONMENTAL ASSESSMENT

The purpose of this Sustainable Communities Environmental Assessment (SCEA) is to evaluate the environmental effects of the proposed Central Park Apartments Project (proposed project; project) in accordance with the California Environmental Quality Act (CEQA). In addition, the SCEA evaluates the project's consistency with the Southern California Association of Government's (SCAG's) Connect SoCal Regional Transportation Plan/Sustainable Communities Strategy Environmental impact Report (Connect SoCal RTP/SCS EIR) adopted in September 2020, and incorporates the feasible mitigation measures, performance standards, and/or criteria from SCAG's Connect SoCal EIR, the City's General Plan 2015 EIR and the 2004 Central District Specific Plan EIR into the proposed project (included as **Appendix A** to this SCEA).

The SCEA form of CEQA documentation was established by SB 375 to provide streamlined environmental review for certain "Transit Priority Projects." SB 375 (Public Resources Code § 21155(b)) defines Transit Priority Projects (TPPs) as projects that shall:

> (1) contain at least 50 percent residential use, based on total building square footage and, if the project contains between 26 percent and 50 percent nonresidential uses, a floor area ratio of not less than 0.75;
>
> (2) provide a minimum net density of at least 20 dwelling units per acre; and
>
> (3) be within one-half mile of a major transit stop or high-quality transit corridor included in a regional transportation plan. A major transit stop is as defined in § 21064.3, except that, for purposes of this section, it also includes major transit stops that are included in the applicable regional transportation plan. For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. A project shall be considered to be within one-half mile of a major transit stop or high-quality transit corridor if all parcels within the project have no more than 25 percent of their area farther than one-half mile from the stop or corridor and if not more than 10 percent of the residential units or 100 units, whichever is less, in the project are farther than one-half mile from the stop or corridor.

See **Section 3.0, SCEA Assessment Eligibility**, for a discussion of the project's consistency with the criteria listed above.

The intent of the CEQA streamlining provisions is not to undercut or circumvent CEQA requirements, but rather to reduce documentation and redundancy and to provide an incentive for TPPs that are consistent with a larger effort to reduce greenhouse gas (GHG) emissions by integrating transportation and land use planning.

An SCEA is comparable to an Initial Study-Mitigated Negative Declaration since the lead agency must find that all potentially significant impacts of a project have been identified, adequately analyzed, and mitigated to a level of insignificance. However, unlike a negative declaration, the SCEA need not consider the cumulative effects of the project that have been adequately addressed and mitigated in prior EIRs, in this case the SCAG Connect SoCal RTP/SCS EIR, the City's General Plan EIR, and the Central District Specific Plan EIR. Also, growth-inducing impacts are not required to be referenced, described, or addressed and project specific or cumulative impacts from cars and light duty truck trips on global warming or the regional transportation network need not be referenced, described or discussed.

1.2 PROJECT SUMMARY

The subject of this SCEA is a proposed mixed-use development located at 86 South Fair Oaks Avenue, at the northeast corner of Fair Oaks Avenue at Dayton Street (Assessor's Parcel # 5722-001-002). The project site is bordered by a one-story commercial building and the existing Green Hotel Apartments on the north, Castle Green on the east, Dayton Street on the south, and South Fair Oaks Avenue on the west (refer to **Figure 2.0-3, Aerial Overview**).

The proposed project is a 6-story plus mezzanine transit-oriented mixed-use development that includes retail space, restaurants, and work/live units at the ground level and mixed-rate apartment units on levels 2-6. Using height averaging, the building height would average 69 feet with a maximum roof height to 90 feet.[1] Along Fair Oaks Avenue, the ground floor of the proposed building includes approximately 6,200 square feet of retail and food uses. Four work/live units, approximately 1,300 square feet each, are proposed in the ground floor along Dayton Street, facing Central Park. The proposed project contains 84 apartment units (24 studios, 37 one-bedroom flats, three (3) one-bedroom townhouses, 18 two-bedroom flats, and two (2) two-bedroom townhouses), including eight (8) on-site residences for very low-income

[1] Height Averaging allows for additional height permitted over no more than 30% of the building footprint (excluding parking garages), provided that the average height of that footprint does not exceed the otherwise required max building height. Refer to page 2.0-18 for a detailed height averaging calculation.

residents. All parking for the proposed project would be located in four (4) levels of underground parking that accommodate 195 parking spaces, including replacement of existing parking spaces for the adjacent Green Hotel Apartments, which currently utilizes the surface parking located on the project site. Access to and from the proposed project site would be from Dayton Street on the southeast corner of the proposed project site.

The proposed project would include amenity space for project residents, including a swimming pool and spa with cabana and changing rooms, gym, lounge, and multiple roof decks/terraces. The proposed project would provide 16,231 sf of open space, which would be divided between approximately 12,037 sf of hardscape and 4,194 sf of landscape (softscape). Landscaping for the proposed project would include native and adaptive species that are drought tolerant. The proposed project would include 38 proposed trees, including one 96" box tree, 10 - 60" box trees, 21 - 24" box trees and 6 - 36" box trees. (Landscape Plans are presented in **Figure 2.0-32 and Figure 2.0-33**).

The project site is zoned CD-1 (Central District Specific Plan Sub-district 1, Old Pasadena Subdistrict) and has a General Plan Land Use designation of High Mixed Use. A mixed-use building is an allowable use within both the CD-1 zone and the High Mixed Use land use designation, subject to certain restrictions enumerated in the Central District Specific Plan, such as the requirement of commercial uses on the ground floor and the exclusion of residential uses on the ground floor. Development of the site is subject to the review and approval of the City of Pasadena Design Commission. In addition, the applicant has applied for a Vesting Tentative Tract Map to allow for the potential to convert the apartments to condominiums, and a Private Tree Removal for removal and relocation of Protected Trees as outlined in **Table 2.0-1**.

The project is utilizing the State Density Bonus Law pursuant to Government Code § 65915 to allow for an increase in the residential base density from 64 units to 84 units (excluding the four work-live units which are classified as commercial uses by the City's Zoning Code), eight of which will be reserved for Very Low Income residents. No other entitlement actions are required or being requested by the project applicant.

1.3 STATUTORY BACKGROUND

The Sustainable Communities and Climate Protection Act of 2008 amended the CEQA regulations to add Chapter 4.2, Implementation of the Sustainable Communities Strategy (PRC § 21155), which provides a CEQA exemption for Sustainable Community Projects and streamlined CEQA analysis for Transit Priority Projects.

One such streamlining provision is the SCEA, the provisions of which are specified primarily in PRC § 21155.2. § 21155.2(a) states that if a TPP incorporates all feasible mitigation measures, performance

standards, or criteria set forth in the prior applicable environmental impact reports and adopted findings made pursuant to PRC § 21081, then it shall be eligible for a Sustainable Communities Environmental Assessment. For a detailed analysis of the project's compliance with SCEA statutory requirements, see the "Sustainable Communities Environmental Assessment Eligibility" section of this document.

1.4 RESPONSES TO AGENCY AND PUBLIC COMMENTS

According to *CEQA Guidelines* §§ 15073 and 15074, the lead agency must consider the comments received during consultation and review periods together with the SCEA Environmental Checklist. However, comments received on a SCEA Environmental Checklist are not required to be attached to the SCEA Environmental Checklist, nor must the lead agency make specific written responses to public agencies or individual commenters. Further, CEQA does not require the lead agency to send responses individually or directly to commenters.

However, according to Public Resources Code (PRC) § 21155.2 (b) (4):

> Prior to acting on the Sustainable Communities Environmental Assessment, the lead agency shall consider all comments received.

As a number of similar issues related to the analysis in the SCEA Environmental Checklist were raised by multiple commenters, the City of Pasadena, as the lead agency, has chosen to provide responses to the comments received during the public review process for the proposed project SCEA in the form of a number of Topical Responses. In order to provide the public and the decisionmakers with the information required under PRC § 21155.2 (b) (4), these responses are provided in Section 7.0 of this SCEA document.

1.5 REVISIONS AND CLARIFICATIONS

Revisions to the SCEA that represent minor changes or additions in response to certain agency and public comments received on the SCEA, and additional edits to provide clarification of SCEA text, are provided in underline/~~strikeout~~ format throughout the text in the relevant sections. These changes do not add significant new information that would affect the analysis or conclusions presented in the SCEA.

1.6 ORGANIZATION OF THE SCEA

This SCEA is organized into eight sections as follows:

- **Section 1.0, Introduction.** This section (above) provides introductory information summarizing the key elements of the Sustainable Communities and Climate Protection Act and information about the Project.

- **Section 2.0, Project Information/Project Description.** This section contains a detailed project description, contact information, existing and proposed general plan land use and zoning information, description of surrounding land uses, project objectives, a summary of required approvals, and the cumulative development scenario.

- **Section 3.0, Sustainable Communities Environmental Assessment Eligibility.** This section analyzes the proposed project's consistency with the Transit Priority Project Criteria, the project's consistency with SCAG's Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy) goals and policies and identifies applicable mitigation measures from previously prepared and certified EIRs.

- **Section 4.0, Sustainable Communities Environmental Assessment - Initial Study Checklist.** This section contains the completed Initial Study Checklist showing the significance level under each environmental impact category. Each environmental issue identified in the Initial Study Checklist contains an assessment and discussion of impacts associated with each subject area. When the evaluation identifies potentially significant effects, as identified in the Checklist, mitigation measures are provided to reduce such impacts to a less than significant level.

- **Section 5.0, List of Preparers.** This section provides a list of City personnel, other governmental agencies, and consultant team members that participated in the preparation of the SCEA.

- **Section 6.0, References.** This section provides references for the sources of information cited in the SCEA.

- **Section 7.0, Master Responses to Comments.** This section provides topical responses to the agency and public comments received on the Sustainable Communities Environmental Assessment - Initial Study Checklist.

- **Appendices.** Includes various documents, technical reports, and information used in the SCEA and can be found in the case file for the proposed project.

2.0 PROJECT INFORMATION / PROJECT DESCRIPTION

2.1 PROJECT TITLE

Central Park Apartments

2.2 LEAD AGENCY NAME AND ADDRESS

City of Pasadena
175 North Garfield Avenue
Pasadena, California 91101

2.3 CONTACT PERSON AND PHONE NUMBER

Kevin Johnson
Senior Planner
626-744-7806

2.4 PROJECT LOCATION

The 32,362-square-foot project site is located at 86 South Fair Oaks Avenue in the City of Pasadena (the City), which is located approximately 10 miles northeast of downtown Los Angeles, in the County of Los Angeles (**Figure 2.0-1, Regional Location**). Regional access to the City is provided by State Route 134 (SR 134), Interstate 210 (I-210 or Foothill Freeway), and State Route 110 (SR 110). The project site is located at the northeast corner of Fair Oaks Avenue at Dayton Street (Assessor's Parcel # 5722-001-002) and is currently in use as a surface parking lot with landscaping, outdoor furniture for the adjacent Green Hotel Apartments and an advertising billboard. The project site is bordered by a one-story commercial building and the existing Green Hotel Apartments on the north, Castle Green on the east, Dayton Street on the south, and South Fair Oaks Avenue on the west, as shown in **Figure 2.0-2, Local Vicinity,** and **Figure 2.0-3, Aerial Overview**.

2.5 PROJECT SPONSOR'S NAME AND ADDRESS

Applicant:
Architectural Resources Group, Inc.
360 E. 2nd Street, Suite 225
Los Angeles, CA 90012

Owner:
Green Hotel Apartments, L.P.
5150 Overland Avenue
Culver City, CA 90230

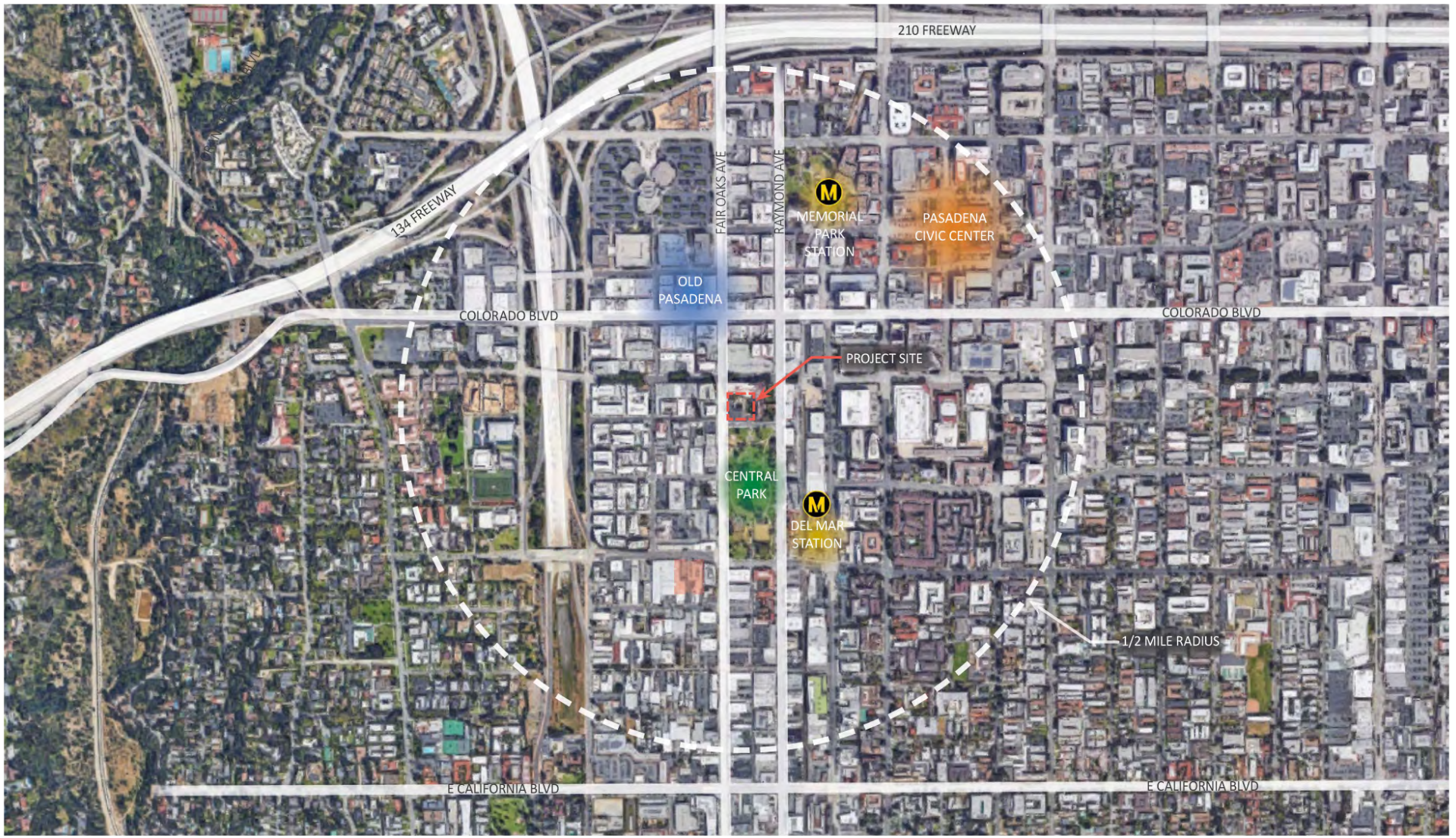


SOURCE: U.S. Census Bureau, Geography Division, 2010

FIGURE **2.0-1**

IMPACT SCIENCES

Regional Location



NOT TO SCALE

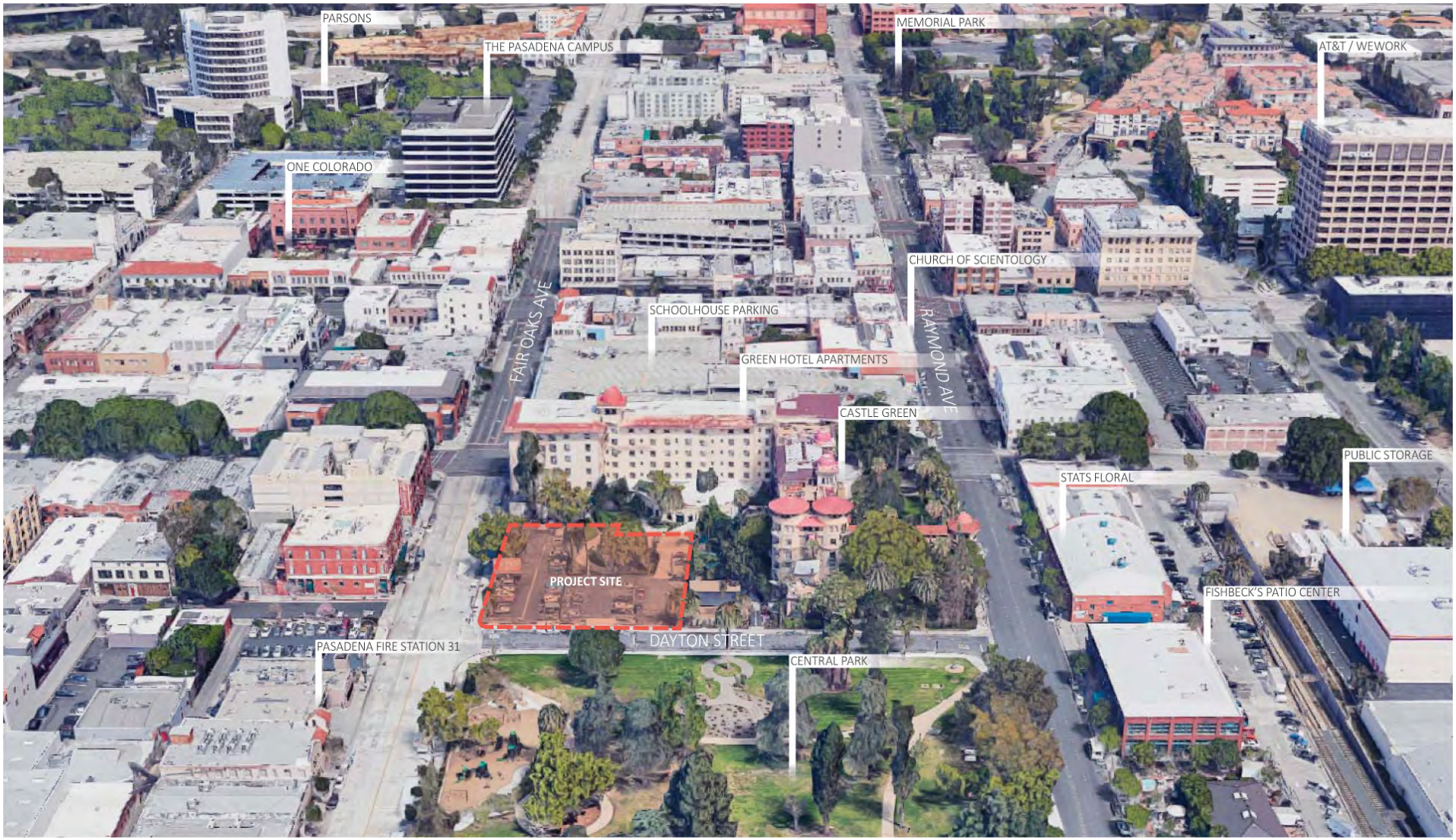
SOURCE: Architectural Resources Group, 2018

FIGURE **2.0-2**

Local Vicinity

IMPACT SCIENCES

1136.004•03/2020



SOURCE: Architectural Resources Group, 2018

FIGURE **2.0-3**

Aerial Overview

IMPACT SCIENCES

1136.004•02/2020

2.6 GENERAL PLAN & SPECIFIC PLAN DESIGNATIONS

General Plan: High Mixed Use (0-3.0 FAR)

Central District Specific Plan Sub-district 1, Old Pasadena Subdistrict

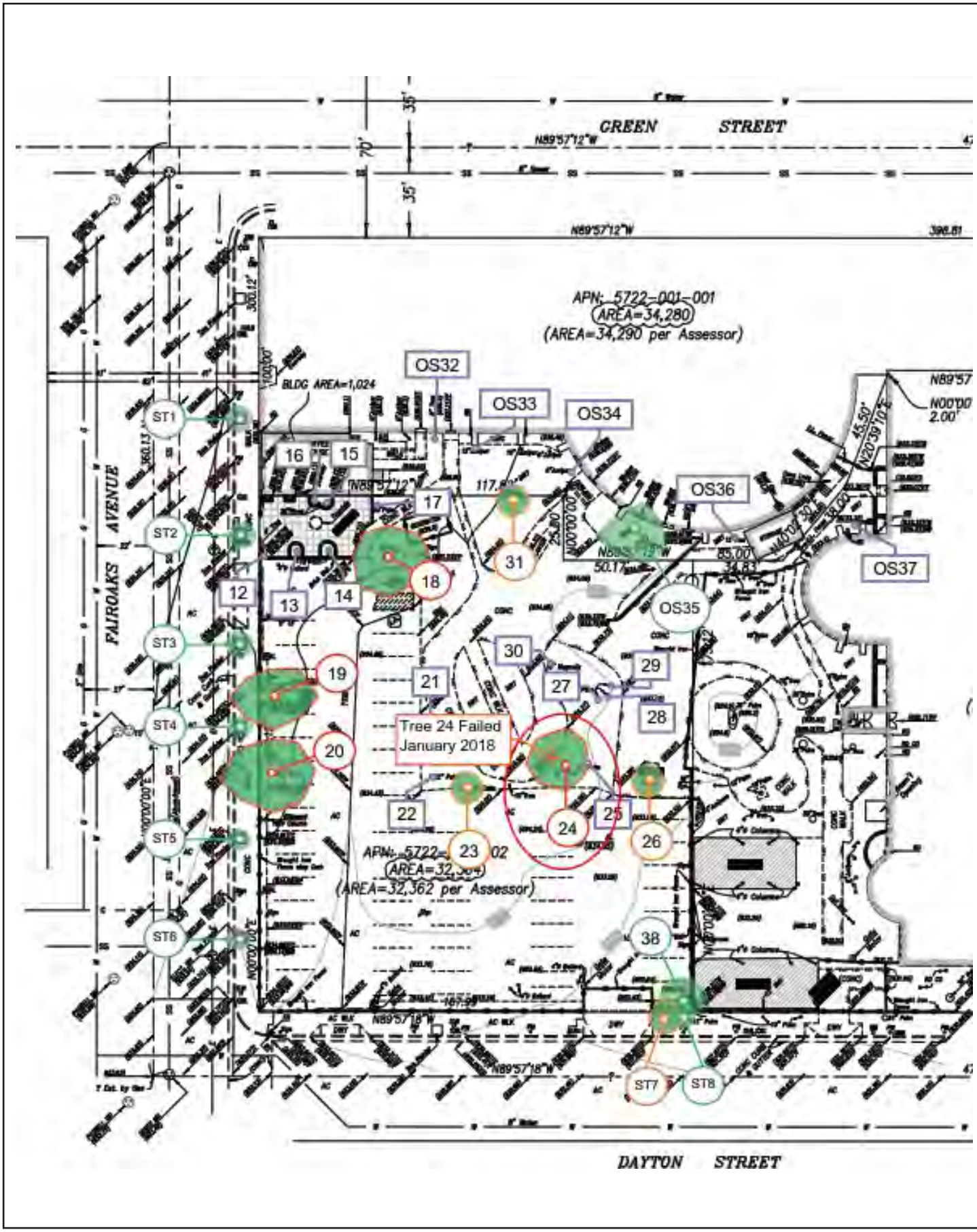
2.7 ZONING

The project site is zoned CD-1 (Central District Specific Plan Sub-district 1, Old Pasadena Subdistrict) and has a General Plan Land Use designation of High Mixed Use. A mixed-use building is an allowable use within both the CD-1 zone and the High Mixed Use land use designation, subject to certain restrictions enumerated in the Central District Specific Plan (CDSP), such as the requirement of commercial uses on the ground floor and the exclusion of residential uses on the ground floor. The project would require review and approval of applications for Concept and Final Design Review from the City of Pasadena Design Commission. Approvals are discussed further under **Section 2.9**, **Description of Project**, and **Section 2.10, Other Public Agencies Whose Approval is Required**.

2.8 SURROUNDING LAND USES AND SETTING

Existing Conditions

The project site is rectangular in shape and approximately 32,362 square feet (sf) in size. The site is flat and currently has a surface parking lot with 53 parking spaces (2 handicapped parking spaces and 51 regular parking spaces), concrete pathways, benches, an outdoor eating area, and 21 trees, with an additional eight street trees in the adjacent the public right-of-way. Eight of the trees onsite and all of the adjacent street trees are protected under the City Trees and Tree Protection Ordinance. A tree survey was completed in ~~July 2017~~ May 2018 by Carlberg Associates, to identify the existing on-site trees, evaluate the size and condition of each tree, and note whether or not the tree could remain in place, be relocated, or would need to be removed entirely, refer to **Figure 2.0-4, Existing On-site Tree Locations**. As detailed in **Table 2.0-1, Summary of On-Site Protected Trees**, the eight protected trees consist of two California fan palms, two Canary Island date palms, three Camphor trees, and one Indian laurel fig tree.



SOURCE: Carlberg Associates, Horticulturalists and Registered Consulting Arborists, December 2019

FIGURE **2.0-4**

IMPACT SCIENCES

Existing On-Site Tree Locations

Table 2.0-1
Summary of On-Site Protected Trees

Tree ID #	Botanical Name	Common Name	DBH/ BTH[1]	Height	Health & Structure Grades	Disposition	Protected?
ST1	Lagerstroemia indica	Crape myrtle	3”	20	B B	Retain	**Yes**
ST2	Lagerstroemia indica	Crape myrtle	3”	15	A A	Retain	**Yes**
ST3	Lagerstroemia indica	Crape myrtle	2”	13	A- B	Retain	**Yes**
ST4	Lagerstroemia indica	Crape myrtle	1”	10	F F	Retain	**Yes**
ST5	Lagerstroemia indica	Crape myrtle	1”	10	B B	Retain	**Yes**
ST6	Lagerstroemia indica	Crape myrtle	stump sprouts	4	A- C	Retain	**Yes**
ST7	Syagrus romanzoffiana	Queen palm	*20’*	30	A A	Relocate	**Yes**
ST8	Syagrus romanzoffiana	Queen palm	*15’*	20	A B	Retain	**Yes**
12	Ailanthus altissima	Tree of Heaven	8.5”	30	A B	Remove	No
13	Washingtonia robusta	Mexican fan palm	*50’*	58	A A	Remove	No
14	Washingtonia robusta	Mexican fan palm	*65’*	73	A A	Remove	No
15	Pinus canariensis	Canary Island pine	21”	80	B B	Remove	No
16	Pinus canariensis	Canary Island pine	18.5”	75	A B-	Remove	No
17	Washingtonia robusta	Mexican fan palm	*42’*	50	A A	Remove	No
18	Cinnamomum camphora	Camphor tree	19, 21,31”	45	B C	Remove	**Yes**
19	Cinnamomum camphora	Camphor tree	16,16.5”	45	B B	Remove	**Yes**
20	Cinnamomum camphora	Camphor tree	18.5, 23.5”	45	B B	Remove	**Yes**
21	Ulmus parvifolia	Chinese elm	15”	25	B C	Remove	No
22	Washingtonia robusta	Mexican fan palm	*50’*	57	A A-	Remove	No
23	Washingtonia filifera	California fan palm	*45’*	55	A A-	Relocate	**Yes**

Tree ID #	Botanical Name	Common Name	DBH/ BTH[1]	Height	Health & Structure Grades	Disposition	Protected?
24	Ficus microcarpa[1]	Indian laurel fig	40.5"	45	B C	***Failed[1]***	**Yes**
25	Washingtonia robusta	Mexican fan palm	*50'*	58	A A-	Remove	No
26	Phoenix canariensis	Canary Island date palm	*50'*	58	A A	Relocate	**Yes**
27	Washingtonia robusta	Mexican fan palm	*55'*	62	A A	Remove	No
28	Washingtonia robusta	Mexican fan palm	*55'*	62	A A	Remove	No
29	Washingtonia robusta	Mexican fan palm	*60'*	68	A A	Remove	No
30	Magnolia grandiflora	Southern magnolia	15"	30	B B	Remove	No
31	Washingtonia filifera	California fan palm	*50'*	60	A B	Relocate	**Yes**

DBH = diameter at breast height BTH = brown trunk height

1 – Tree #24 failed in January 2019 and is no longer on-site

Source: Carlberg Associates, Horticulturalists and Registered Consulting Arborists, ~~July 10, 2017~~ May 2021

Site History

The project site is currently utilized as a surface parking lot for the existing Green Hotel Apartments. In 1982, the project site, along with the Castle Green located immediately to the east and the existing Green Hotel Apartments located immediately to the north, were listed together in the National Register of Historic Places. As detailed in the Historic Resources Technical Report,[1] originally there were plans to expand the hotel (currently occupying the northern and eastern portions of the block bound by Green Street to the north, Raymond Avenue to the east, Dayton Street to the south, and Fair Oaks Avenue to the west), onto the third parcel of the block, which is the project site. According to historical records, the proposed design would have created a U-shaped building with a landscaped central courtyard with a greenhouse and connecting arcade along Dayton Street. The wing along Fair Oaks Avenue, including the arcade and the greenhouse, was never constructed. The project site was then landscaped and utilized for recreation by hotel guests. The landscaping, which consisted of trees, shrubs and winding paths, complemented the hotel park, which was on the eastern portion of the block prior to the hotel expansion west of Raymond Avenue. Additionally, a single bungalow was constructed on the project site.

1 *86 South Fair Oaks Avenue Historic Resources Technical Report*, prepared by Historic Resources Group, September 2020, included as Appendix D, to this document.

In 1903, Central Park, just south of the project site, was constructed and became a seamless continuum of landscaped recreational open space. A tennis court was added to the project site, and ultimately the bungalow was removed. According to the 1951 Sanborn map, the parcel was utilized for vehicle parking, and a swimming pool was added in the south gardens. The swimming pool was filled in during the early 1970's when the existing Green Hotel Apartments building was converted from a hotel into low-income senior apartments. The oval shape of the swimming pool still exists and is currently covered with grass as well as a shuffleboard court.

Surrounding Uses

As shown in **Figure 2.0-3, Aerial Overview**, the project site is located within a developed area of Downtown Pasadena on one of the City's main commercial streets and is surrounded by residential, commercial, institutional, and recreational land uses. The project site is within the Old Pasadena Historic District, which is listed in the National Register of Historic Places (National Register). The Castle Green, located to the east of the project site, and the existing Green Hotel Apartments buildings, located to the north of the project site, were listed together, along with the project site, in the National Register in 1982, and are therefore also listed in the California Register of Historical Resources (California Register). The Castle Green/Green Hotel Apartments listing that includes the project site is an individual listing on the National Register (not as an historic district), and the two buildings are also listed as contributors to the Old Pasadena Historic District (1983; revised, 2008). The boundaries of the Castle Green and existing Green Hotel Apartments are defined in the 1982 National Register registration form as: "The square block bounded by Raymond Avenue on the east, Green Street on the north, Fair Oaks [A]venue on the west and Dayton Street on the south." Thus, the entire block, which includes the project site, is listed as a historical property in the National Register. Refer to **Figure 2.0-5** and **Figure 2.0-6, Existing Site Context**. Additional existing site conditions are pictured in **Figure 2.0-7** and **2.0-8, Existing Conditions Photo Montages**.

Across Dayton Street to the south is Central Park, a 9.2-acre park which is also a contributing resource to the Old Pasadena Historic District. Across Fair Oaks Avenue to the west are three to four-story mixed-use buildings and parking lots including a three-story red brick building located at 103-115 South Fair Oaks Avenue and a two-story building designed by Hunt & Grey located at 155 South Fair Oaks Avenue, which are contributing to the Old Pasadena Historic District and buildings at 81-89 S. Fair Oaks Avenue, 145, 151 and 165 S. Fair Oaks Avenue, which are non-contributing to the district. Across Raymond Avenue to the east are one and two-story commercial buildings, including a two-story industrial brick building at 150 South Raymond Avenue and a three-story plaster-over-brick building at 62-70 South Raymond Avenue which are contributing to the Old Pasadena Historic District and a one-story building at the southeast corner of Raymond Avenue and Green Street at 80-82 South Raymond Avenue which is non-contributing to the district. (Refer to **Section 4.5, Cultural Resources,** of this Draft SCEA for further information.)

The Los Angeles County Metropolitan Transportation Authority (Metro) Del Mar L Line (formerly known as the Gold Line) Light Rail Station is located less than a quarter of a mile to the southeast of the project site along Raymond Avenue just north of Del Mar Boulevard and the Memorial Park Station is located less than a half mile to the northeast of the project site along Holly Street at the terminus of N. Arroyo Parkway.

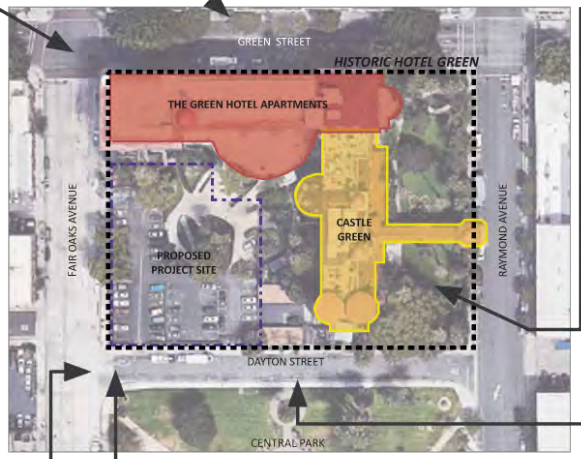
The project site is located within the City of Pasadena's Central District Specific Plan area. The Specific Plan area encompasses 960 acres corresponding to the areas recognized by Pasadena residents as "downtown." As shown in **Figure 2.0-9, Central District Specific Plan Area**, included within the boundaries of the Specific Plan area are activity centers known as Old Pasadena, the Civic Center, the Playhouse District, and South Lake Avenue. Historically significant uses and structures within the Central District Specific Plan include, but are not limited to, the Old Pasadena Historic District; the Green Hotel Apartments and Castle Green; Pasadena Playhouse and Pasadena Playhouse Historic District; the Pasadena Civic Center Historic District, which includes City Hall, the Public Library Central Branch, and the Y.W.C.A. building; and the Pasadena Humane Society.



NORTH ELEVATION OF THE GREEN HOTEL APARTMENTS FROM ROOF OF PARKING STRUCTURE



WEST ANNEX NOW CASTLE GREEN





VIEW OF WOOSTER BLOCK FROM NORTHWEST CORNER OF FAIR OAKS AVE. AND GREEN ST.



VIEW OF SOUTH ELEVATION FROM CENTRAL PARK



LOOKING EAST ON DAYTON ST. WITH CASTLE GREEN ON THE LEFT



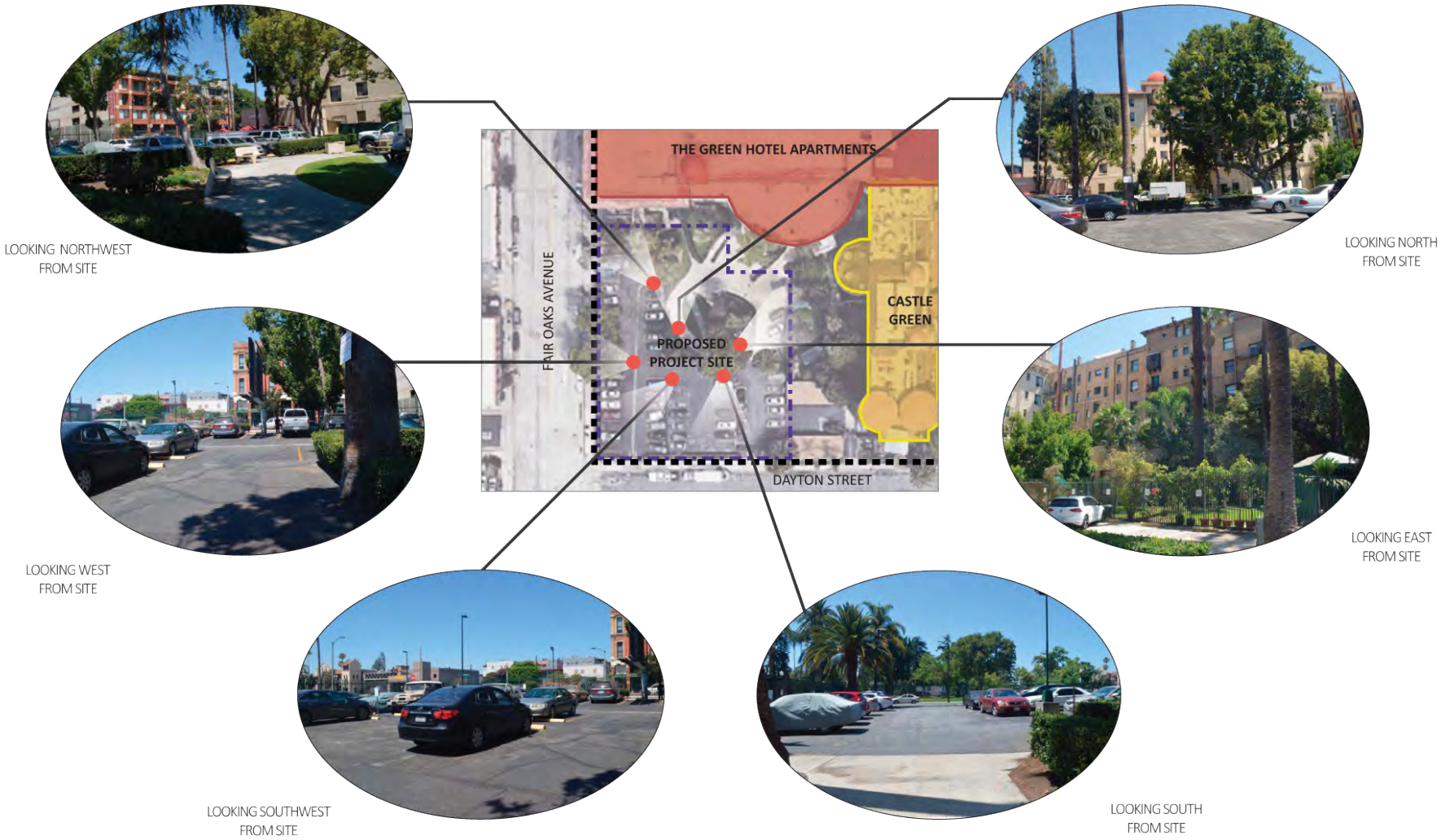
LOOKING NORTH ON FAIR OAKS AVE.

SOURCE: Architectural Resources Group, 2018

FIGURE **2.0-5**

IMPACT SCIENCES

Existing Site Context



SOURCE: Architectural Resources Group, 2018

FIGURE **2.0-6**

Existing Site Context

IMPACT SCIENCES

1136.004•03/2020



11 W. Dayton St. 86 S. Fair Oaks Ave. (Project Site) 120 S. Raymond Ave.

North Side Street Elevation along Dayton St.



150 S. Raymond Ave. Central Park 135 S. Fair Oaks Ave.

South Side Street Elevation along Dayton St.

SOURCE: Architectural Resources Group, 2018

FIGURE **2.0-7**

IMPACT SCIENCES

Existing Conditions Photo Montage - Central Park



42 S. Fair Oaks Ave. | 78 - 82 S. Fair Oaks Ave. | 84 S. Fair Oaks Ave. | 86 S. Fair Oaks Ave. (Project Site) | Central Park

East Side Street Elevation along Fair Oaks Ave.



135 S. Fair Oaks Ave. | 107 S. Fair Oaks Ave. | 81 - 89 S. Fair Oaks Ave. | 61 S. Fair Oaks Ave.

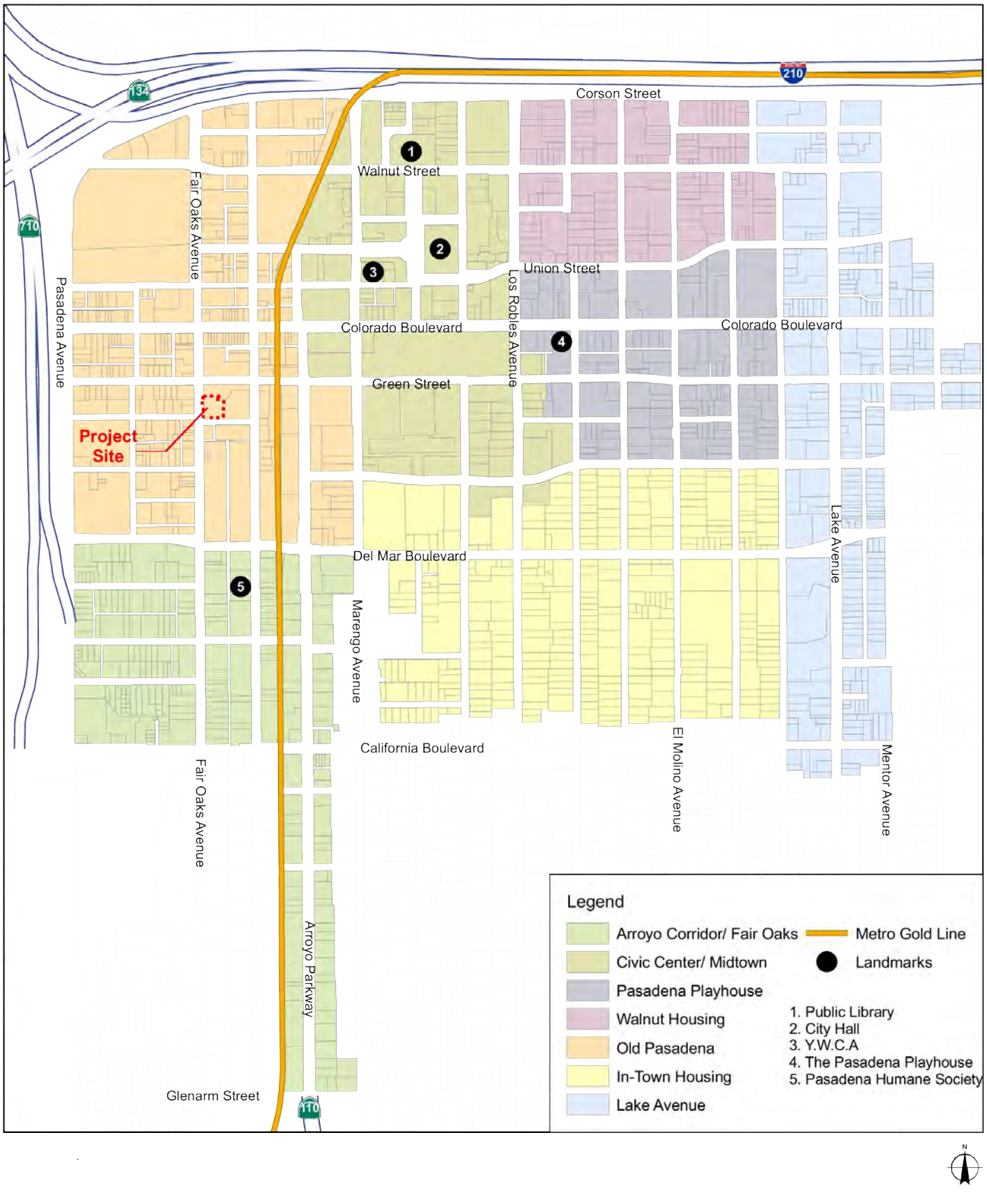
West Side Street Elevation along Fair Oaks Ave.

SOURCE: Architectural Resources Group, 2018

FIGURE **2.0-8**

IMPACT SCIENCES

Existing Conditions Photo Montage - Fair Oaks



SOURCE: City of Pasadena, 2003

FIGURE **2.0-9**

Central District Specific Plan Area

IMPACT SCIENCES

1136.004•03/2020

2.9 DESCRIPTION OF PROJECT

Project Objectives

The following are the applicant's objectives for the proposed Central Park Apartments project:

- Provide new apartments to assist in satisfying the increasing demand for this product type in the City of Pasadena, and particularly in the Central District and within easy walking distance of jobs and the Metro Del Mar L Line (formerly known as the Gold Line).
- Provide new restaurant, commercial, and retail shops in Old Pasadena, thereby increasing tax revenues throughout the City.
- Provide affordable multi-family housing to the City's underserved affordable market demand, particularly within the Central District and within walking distance of service-oriented jobs.
- Provide the residents of the adjacent existing Green Hotel Apartments appropriate parking with direct ingress/egress.
- Build out the third parcel of the Castle Green/existing Green Hotel Apartments in a manner that is based on the original turn of the 20th century vision, which has been underutilized as surface parking since the 1950's, to thereby create a compatible new gateway framing an entrance to Old Pasadena.
- Broaden the retail connection on Fair Oaks Avenue to Colorado Boulevard by providing retail services along the street frontage.
- Create a mixed-use development that faces, complements, and engages with the open space to the south of the site.
- Preserve views of the park from the south-facing units of the existing Green Hotel Apartments by providing an open space corridor between the Castle Green and the proposed project.

Project Characteristics

Project Overview

The proposed project is a 6-story plus mezzanine transit-oriented mixed-use development that includes retail space, restaurants, and work/live units at the ground level and mixed-rate apartment units on levels 2-6. Using height averaging, the building height would average 69 feet with a maximum roof height to 90 feet. Along Fair Oaks Avenue, the ground floor of the proposed building includes approximately 6,200 square feet of retail and food uses. Four work/live units, approximately 1,300 square feet each, are

proposed in the ground floor along Dayton Street, facing Central Park. The proposed project contains 84 apartment units (24 studios, 37 one-bedroom flats, three (3) one-bedroom townhouses, 18 two-bedroom flats, and two (2) two-bedroom townhouses), including eight (8) on-site residences for very low-income residents. All parking for the proposed project would be located in four (4) levels of underground parking that accommodate 195 parking spaces, including replacement of existing parking spaces for the adjacent Green Hotel Apartments, which currently utilizes the surface parking located on the project site. Access to and from the proposed project site would be along Dayton Street on the southeast corner of the proposed project site.

The applicant's stated design intent for the proposed project is to ensure that the building exteriors reference historical commercial and residential land uses that surround the site and incorporate stone, stucco and metal in an earth tone palette. The applicant's stated primary goal for the proposed project is to have a unified appearance with the Castle Green and Hotel Green and for the site plan to reference the adjacent Central Park with a landscaped ground floor courtyard that adjoins amenity spaces. The proposed project design will be subject to design review before the Pasadena Design Commission.

Plans for the proposed project are presented in **Figures 2.0-11** through **Figure 2.0-33**.

Proposed Uses

In accordance with the Central District Specific Plan, the ground floor along Fair Oaks Avenue features approximately 6,200 sf of retail and restaurant uses. Four work-live units, approximately 1,300 sf each, on the ground floor along Dayton Street, facing Central Park, are intended to create a transition from the Fair Oaks commercial corridor to Castle Green to the east. The proposed project contains 84 apartment units of varying types and sizes, including eight on-site residences for very low-income residents. **Table 2.0-2, Project Unit Summary,** details the proposed residential units provided.

Table 2.0-2
Project Unit Summary

Unit Type	Quantity
Studios	24
1 bedroom (under 650 sf)	33
1 bedroom (townhouse under 650 sf)	3
1 bedroom (over 650 sf)	4
2 bedroom (apartment)	18
2 bedroom (townhouse)	2
Total Units	84

Source: Architectural Resources Group. December 2019.

The proposed project would include approximately 4,600 sf of amenity space for project residents, including a swimming pool and spa with cabana and changing rooms, gym, lounge and roof deck.

The proposed project would provide 16,231 sf of open space, which would be divided between approximately 12,037 sf of hardscape and 4,194 sf of landscape. Landscaping for the proposed project would include native and adaptive species that are drought tolerant. The proposed project would include 38 proposed trees, including one 96" box tree, 10 – 60" box trees, 21 - 24" box trees and 6 – 36" box trees. Following the planting of these new trees, there would be a net gain of 21 new trees on the Project Site, and the Proposed Project would exceed the City's Replacement Tree Requirement for the trees removed. (Landscape Plans are presented in **Figure 2.0-32 and Figure 2.0-33**).

Parking, Access, and Circulation

All parking for the project would be located within four levels of underground parking that would accommodate 195 parking spaces, including replacement of existing parking spaces for the Green Hotel Apartments, which currently utilizes the surface parking located on the project site. Parking would meet development standards with the condition that the applicant obtains agreements to lease out the replacement parking serving the Green Hotel Apartments. **Table 2.0-3, Project Parking Summary,** details the proposed parking provided. A total of 20 bicycle parking spaces (16 residential, four non-residential) would be provided.

Table 2.0-3
Project Parking Summary

Land Use	Calculation		Provided
Residential	Under 650 sf	60 units x 1	60
	Over 650 sf	24 units x 1.5 (min) 24 units x 1.75 (max)	36
Guest	1 space/10 units	84 units x 0.1	9
Work-Live	3 spaces/1,000 sf x 75%		12
Retail	3 spaces/1,000 sf x 75%		10
Restaurant	10 spaces/1,000 sf x 75%		15
Joint Parking	Green Hotel Apartment Replacement spaces		53
Total Parking Provided			195

Source: Architectural Resources Group. December 2019.

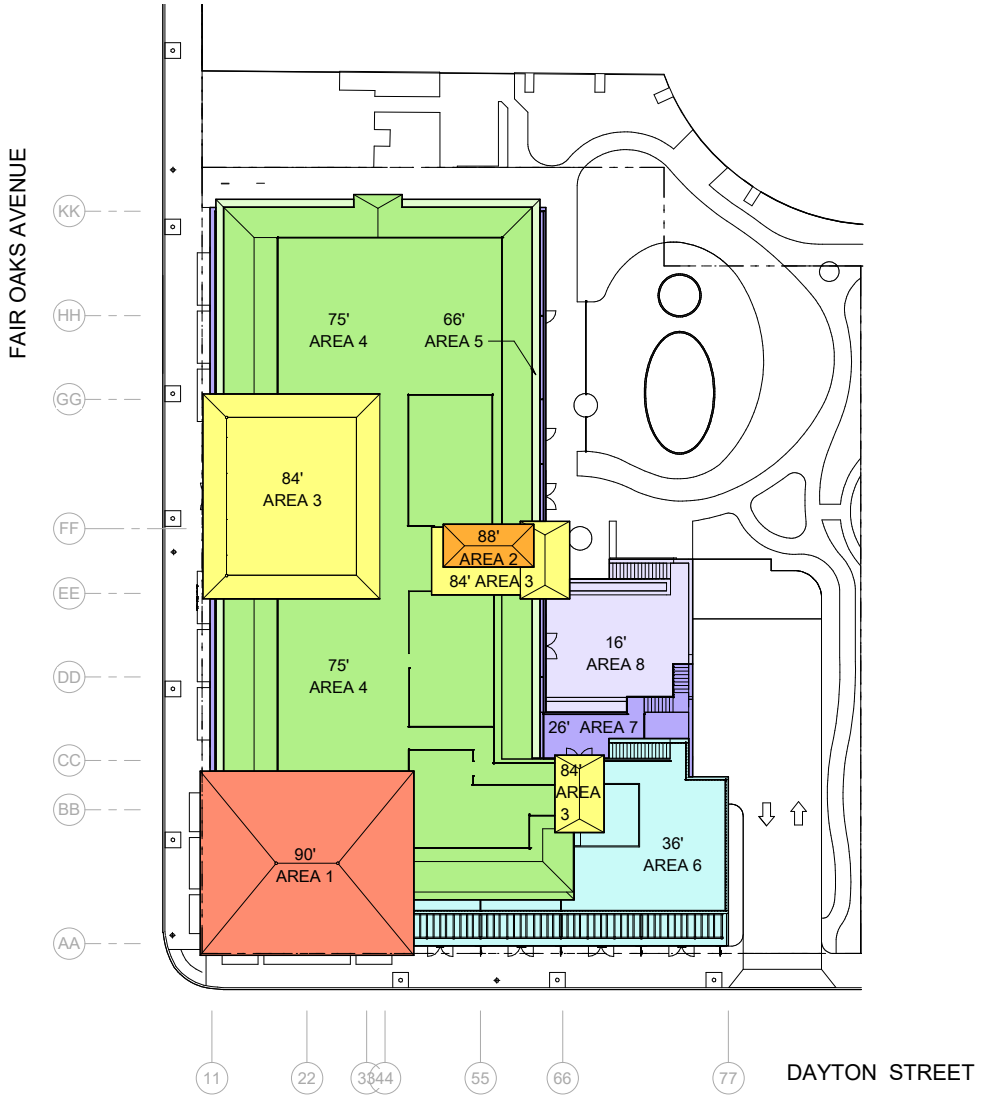
The project site driveway would be located along Dayton Street and would provide access to the underground parking. Both ingress and egress would be available from Dayton Street. Pedestrian access to the residential lobby and commercial uses would be available off of Fair Oaks Avenue, and off of Dayton Street for all of the work/live units.

Architectural Features and Height Averaging Analysis

The proposed 6-story plus mezzanine building has rectangular plan with a small extension at the southeast corner of the building. It has 190' of building frontage along South Fair Oaks Avenue and 134' of frontage along Dayton Street. The South Fair Oaks Avenue frontage would contain ground-level commercial space as well as a lobby for the upper-level residential units. Behind these spaces are a leasing office, restrooms, a mechanical equipment room, trash rooms, a pool/amenity space, bike storage, elevators, and stairs. The remaining floors contain residential units. At the corner of South Fair Oaks Avenue and Dayton Street is a tower element with a maximum roof height of 90 feet; the remainder of the Dayton Street frontage is two stories plus mezzanine at the street edge with a maximum height of 36 feet, and a portion that is six stories set back approximately 14 feet from the street edge. The Dayton Street frontage has four work/live units at the ground floor with residential units above. There are roof decks proposed at the southeast corner of the mezzanine level, second floor, and third floor and at the sixth floor mezzanine level between the tower and penthouses. A ground-level pool area and garden are proposed at the northeast corner of the site behind the building. The proposed palette of building materials includes stone cladding at the ground floor and tower element; plaster at the upper residential floors, painted metal storefronts, grillwork, railings, penthouses and balcony projections; cast ornamentation at solid balconies and tower crown; barrel tile roofs; metal windows and fabric or metal awnings.

The proposed project would be an average of 69 feet in height, with limited building areas up to 90 feet in height, balanced by areas that are lower than 75 feet in height. Height averaging allows for additional height permitted over no more than 30% of the building footprint (excluding parking garages), provided that the average height of that footprint does not exceed the otherwise required maximum building height of 75 feet. Height averaging requires approval from the Design Commission during the design review process. **Figure 2.0-10, Project Height Averaging Analysis,** provides a detailed height averaging analysis.

Conceptual project plans, elevations, sections, landscape plans, and project renderings are shown in **Figure 2.0-11** through **Figure 2.0-38**



HEIGHT AVERAGING ANALYSIS

			20,742		
PROPOSED AREA		**HGT (FT)**	**AREA (SF)**	**% FTPRNT**	**AVG HGT (FT)**
	AREA 1 @	90	2,561.50	0.123	11.11
	AREA 2 @	88	251.54	0.012	1.07
	AREA 3 @	84	3,009.04	0.145	12.19
	AREA 4 @	75	10,093.19	0.487	36.50
	AREA 5 @	66	560.51	0.027	1.78
	AREA 6 @	36	2,267.18	0.109	3.93
	AREA 7 @	26	758.32	0.037	0.95
	AREA 8 @	16	1,240.94	0.060	0.96
	TOTAL		20,742.22	1.000	SEE BELOW

TOTAL AVG HGT CALCULATION =
[(90' x 2,561.50 SF) + (88' x 251.54 SF) + (84' x 3,009.04 SF) + (75' x 10,093.19 SF) + (66' x 560.51 SF) + (36' x 2,267.18 SF) + (26' x 758.32 SF) + (16' x 1,240.94 SF)] / 20,742.22 SF = 68.49

ACTUAL AVERAGE HEIGHT **69 FEET**

ACTUAL AVG HGT < BASE ALLOWABLE HEIGHT
69 FT < 75 FT

ADDITIONAL HEIGHT ANALYSIS

BASE ALLOWABLE HEIGHT (75')

ADDITIONAL ALLOWABLE HGT (90'MAX)
20,742.22 SF X 30% = 6,222.67 **6,223 SF**

TOTAL ADDITIONAL HEIGHT OVER BASE HEIGHT
AREA 1 @ 90' + AREA 2 @ 88' + AREA 3 @ 84' **5,822 SF**
2,561.50 + 251.54 + 3,009.04 = 5,822 SF

ADDITIONAL HGT OVER BASE LIMIT < 30% TOTAL FOOTPRINT AREA
5,822 SF < 6, 223 SF

SITE COVERAGE

20,742.21 SF/ 32,362 SF= 64%

16 0 16 32

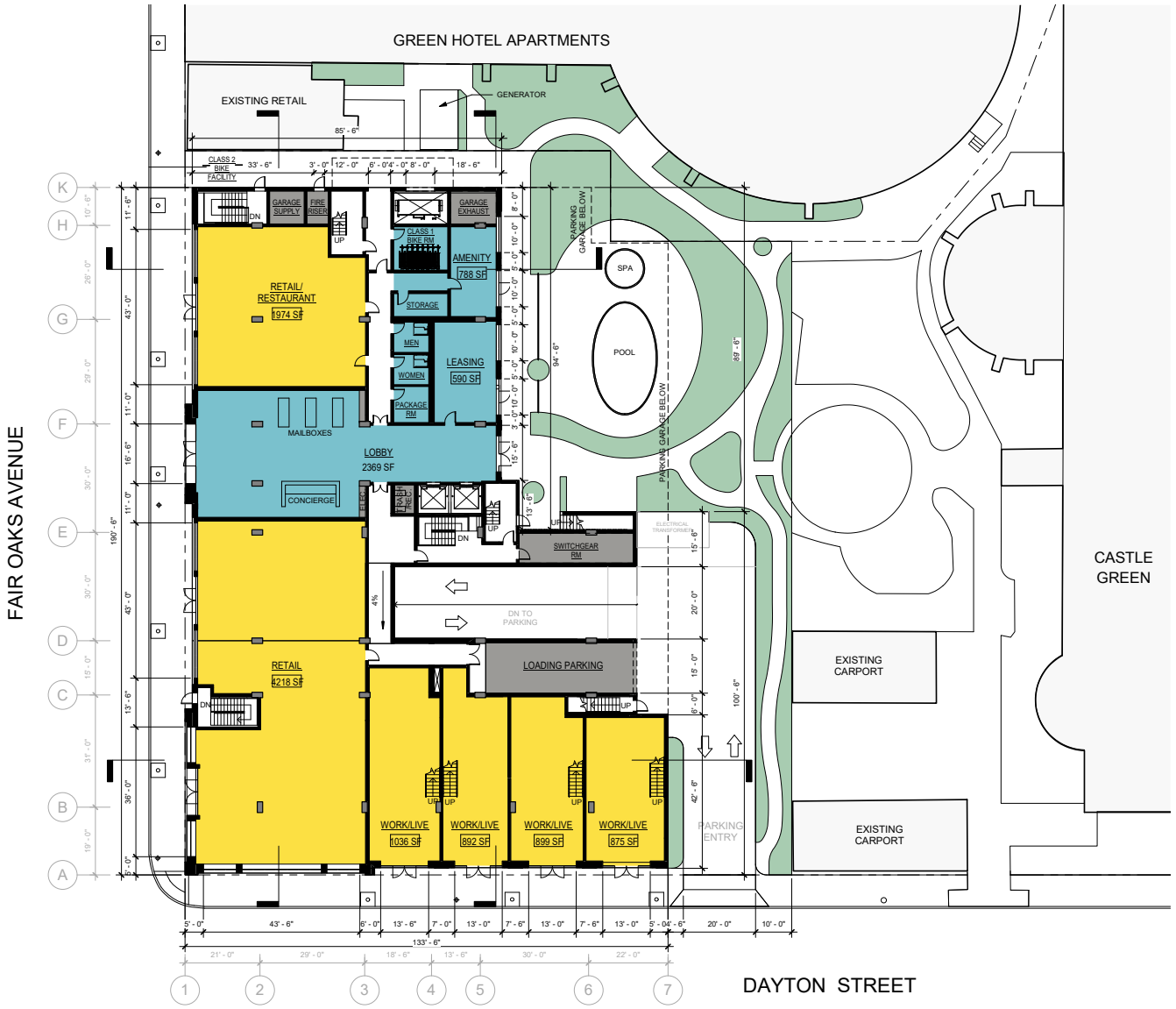
N

SOURCE: Architectural Resources Group, 2018

FIGURE **2.0-10**

IMPACT SCIENCES

Project Height Averaging Analysis



PROJECT AREA SUMMARY

GROSS FLOOR AREA, PER FLOOR	
GROUND FLOOR	17,508
MEZZANINE	7,147
2ND FLOOR	14,868
3RD FLOOR	13,235
4TH FLOOR	13,226
5TH FLOOR	13,226
6TH FLOOR	14,145 *
TOTAL GROSS FLOOR AREA =	**93,355**

*INCLUDES 1,202 SF LOCATED IN MEZZANINES

GROUND FLOOR SUMMARY

GROSS FLOOR AREA **17, 508 SF**

PROGRAM SUMMARY	**NET SF**
RETAIL	4,218 SF
RESTAURANT	1,974 SF
WORK/LIVE	3,702 SF
LOBBY	2,369 SF
AMENITY SPACE	788 SF

SOFTSCAPE
BUILDING AMENITY
COMMERCIAL
APARTMENT UNITS
SERVICE & EQUIPMENT
EXISTING BUILDINGS

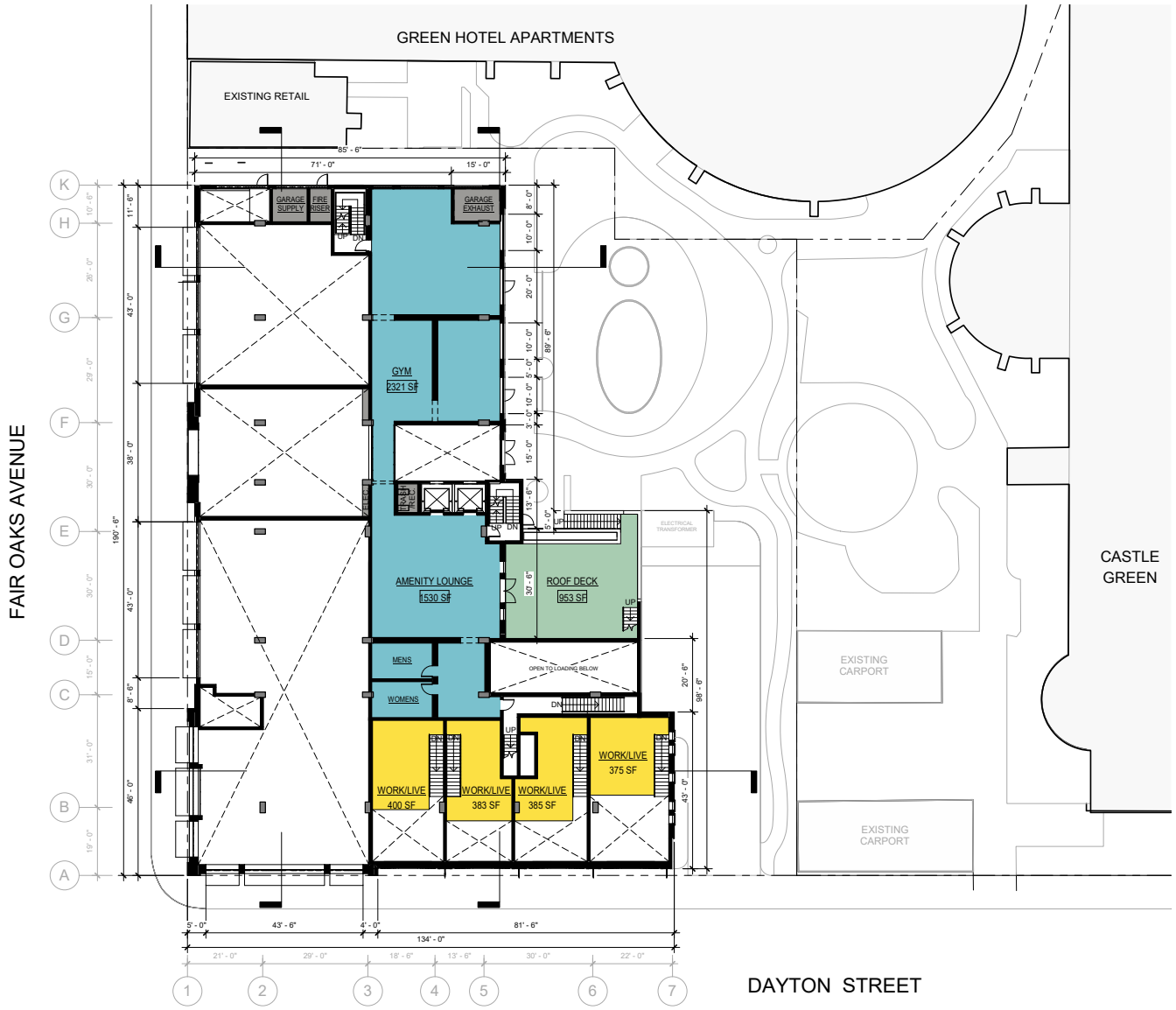
16 0 16 32 N

SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-11**

Project Site Plan - Ground Floor

IMPACT SCIENCES



MEZZANINE FLOOR SUMMARY

GROSS FLOOR AREA	**7,147 SF**

PROGRAM SUMMARY	**NET SF**
WORK/LIVE	1,543 SF
AMENITY SPACE	3,851 SF

SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-12**

Mezzanine Floor Plan

IMPACT SCIENCES

1136.004•03/2020



PROJECT UNIT SUMMARY

STUDIOS	24
1 BED - UNDER 650 SF	33
1 BED T/H - UNDER 650 SF	3
1 BED - OVER 650 SF	4
2 BED	18
2 BED T/H	2
TOTAL UNITS:	**84**

SECOND FLOOR SUMMARY

GROSS FLOOR AREA	**14,868 SF**

UNIT SUMMARY

STUDIOS	5
1 BED - UNDER 650 SF	9
1 BED - OVER 650 SF	1
2 BED	4
TOTAL UNITS:	**19**

SOFTSCAPE
BUILDING AMENITY
COMMERCIAL
APARTMENT UNITS
SERVICE & EQUIPMENT
EXISTING BUILDINGS

16 0 16 32

N

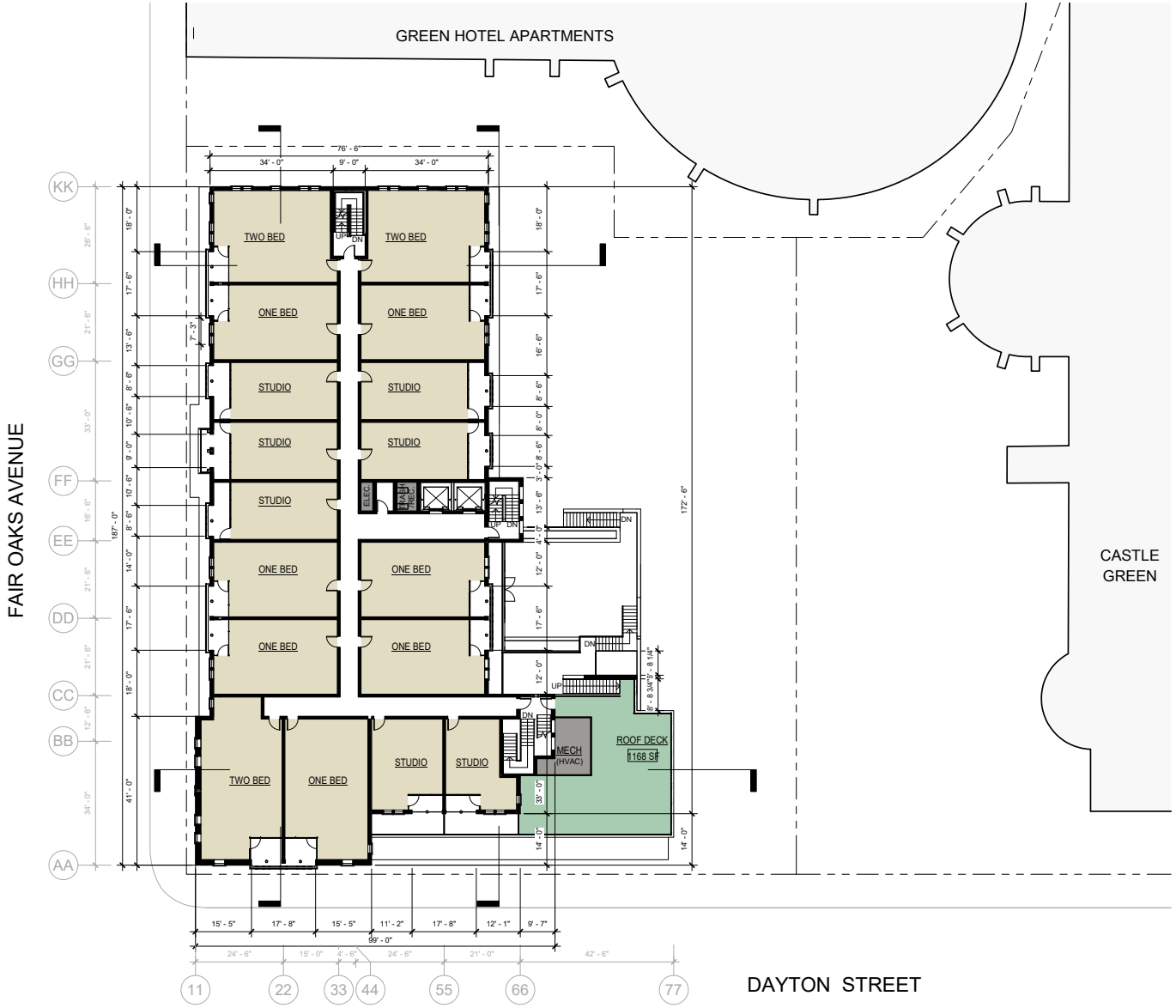
SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-13**

Second Floor Plan

IMPACT SCIENCES

1136.004•03/2020



THIRD FLOOR SUMMARY

GROSS FLOOR AREA	**13,235 SF**

UNIT SUMMARY

STUDIOS	7
1 BED - UNDER 650 SF	6
1 BED - OVER 650 SF	1
2 BED	3
TOTAL UNITS:	**17**

SOFTSCAPE
BUILDING AMENITY
COMMERCIAL
APARTMENT UNITS
SERVICE & EQUIPMENT
EXISTING BUILDINGS

16 0 16 32

N

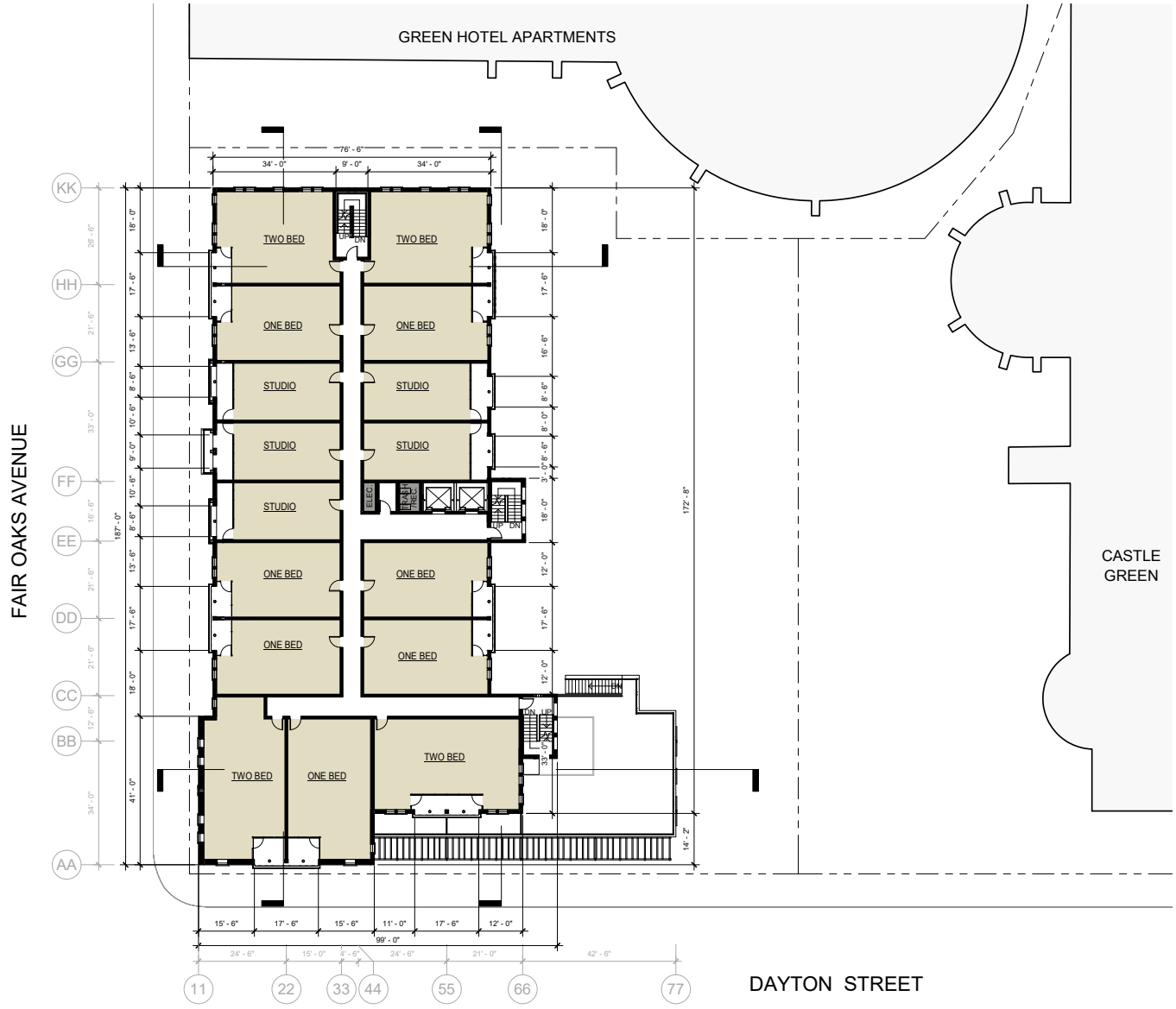
SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-14**

Third Floor Plan

IMPACT SCIENCES

1136.004•03/2020



FOURTH FLOOR SUMMARY

GROSS FLOOR AREA	**13,226 SF**

UNIT SUMMARY	
STUDIOS	5
1 BED - UNDER 650 SF	6
1 BED- OVER 650 SF	1
2 BED	4
TOTAL UNITS:	**16**

SOFTSCAPE
BUILDING AMENITY
COMMERCIAL
APARTMENT UNITS
SERVICE & EQUIPMENT
EXISTING BUILDINGS

16 0 16 32

N

SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-15**

Fourth Floor Plan

IMPACT SCIENCES

1136.004•03/2020



FIFTH FLOOR SUMMARY

GROSS FLOOR AREA	**13,226 SF**

UNIT SUMMARY

STUDIOS	5
1 BED - UNDER 650 SF	6
1 BED- OVER 650 SF	1
2 BED	4
TOTAL UNITS:	**16**

SOFTSCAPE
BUILDING AMENITY
COMMERCIAL
APARTMENT UNITS
SERVICE & EQUIPMENT
EXISTING BUILDINGS

16 0 16 32

N

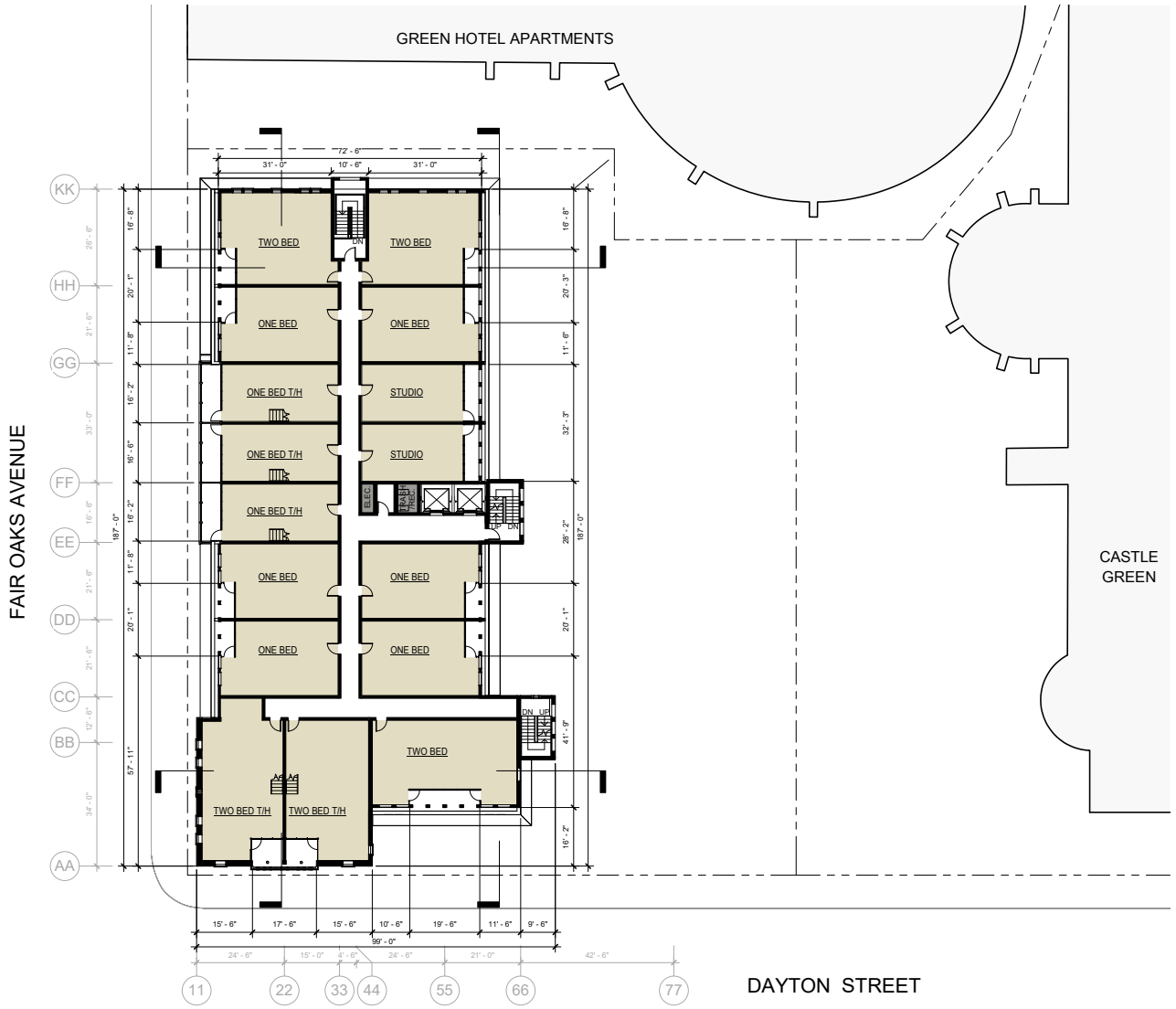
SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-16**

Fifth Floor Plan

IMPACT SCIENCES

1136.004•03/2020



SIXTH FLOOR SUMMARY

GROSS FLOOR AREA **14,145 SF***

* Includes 1,202 SF located in Mezzanines of Townhouse units.

UNIT SUMMARY

STUDIOS	2
1 BED - UNDER 650 SF	6
1 BED T/H - UNDER 650 SF	3
2 BED	3
2 BED TOWNHOUSE	2
TOTAL UNITS:	**16**

SOFTSCAPE
BUILDING AMENITY
COMMERCIAL
APARTMENT UNITS
SERVICE & EQUIPMENT
EXISTING BUILDING

16 0 16 32 N

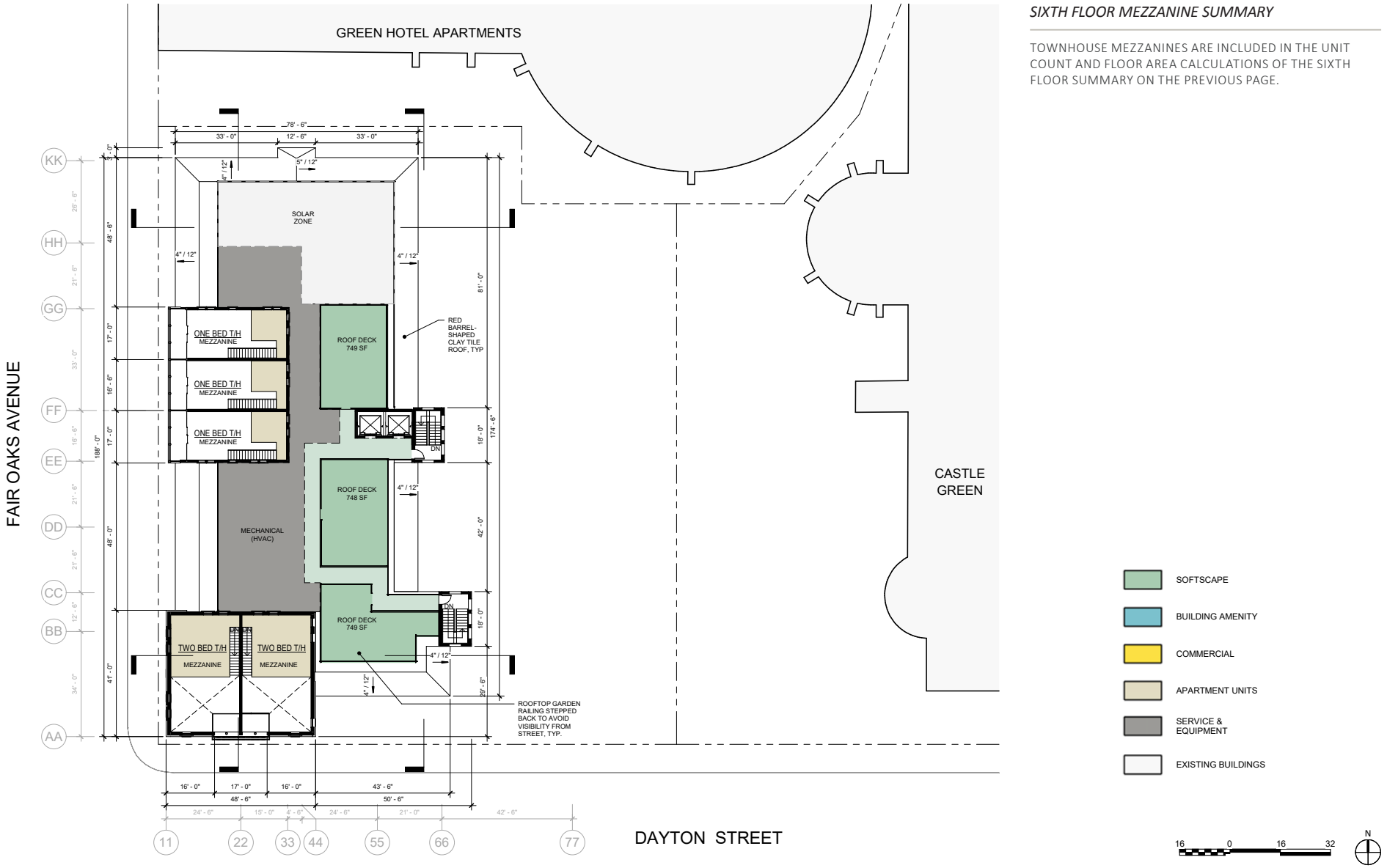
SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-17**

Sixth Floor Plan

IMPACT SCIENCES

1136.004•03/2020



SIXTH FLOOR MEZZANINE SUMMARY

TOWNHOUSE MEZZANINES ARE INCLUDED IN THE UNIT COUNT AND FLOOR AREA CALCULATIONS OF THE SIXTH FLOOR SUMMARY ON THE PREVIOUS PAGE.

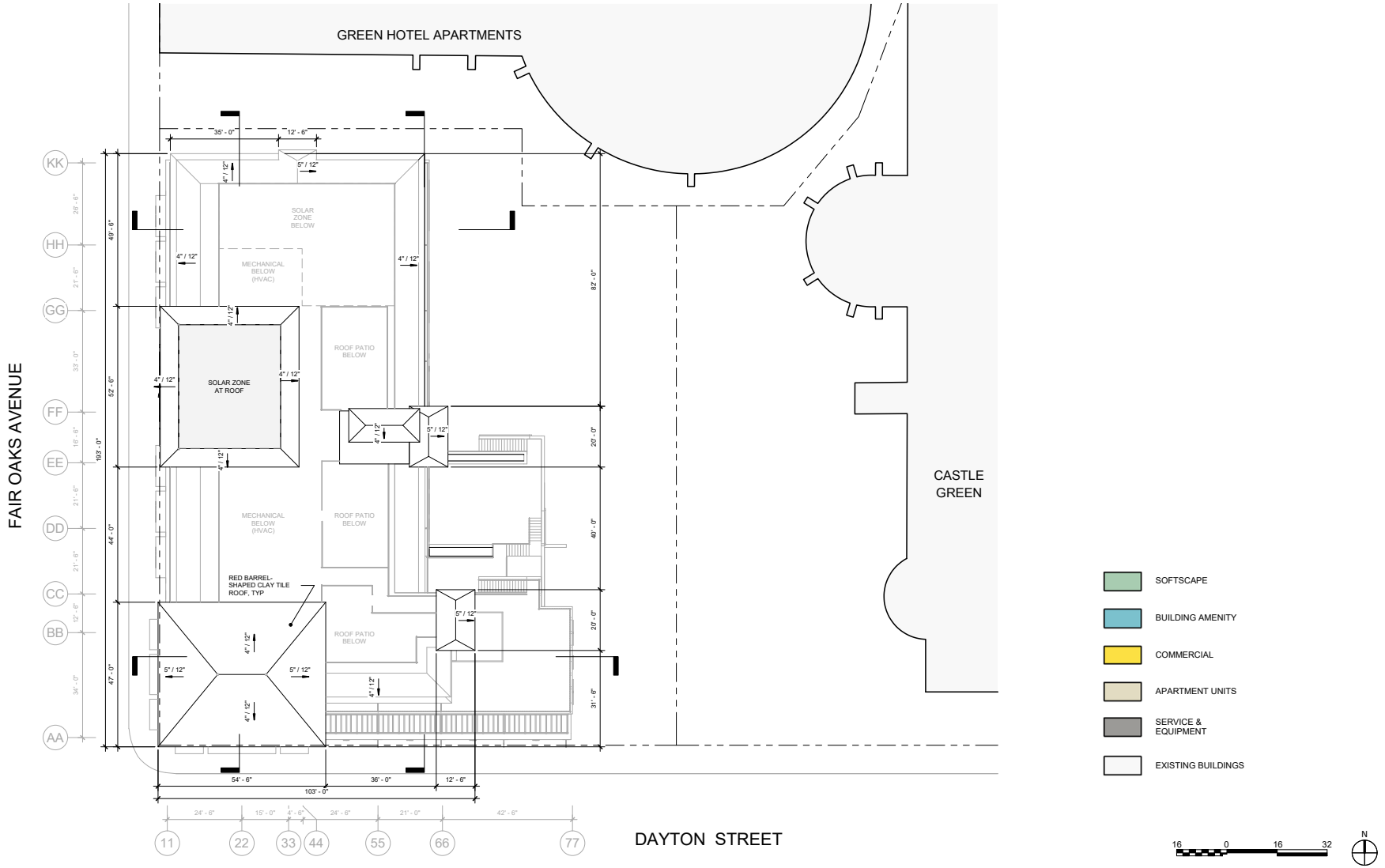
SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-18**

Sixth Floor Mezzanine Plan

IMPACT SCIENCES

1136.004•03/2020



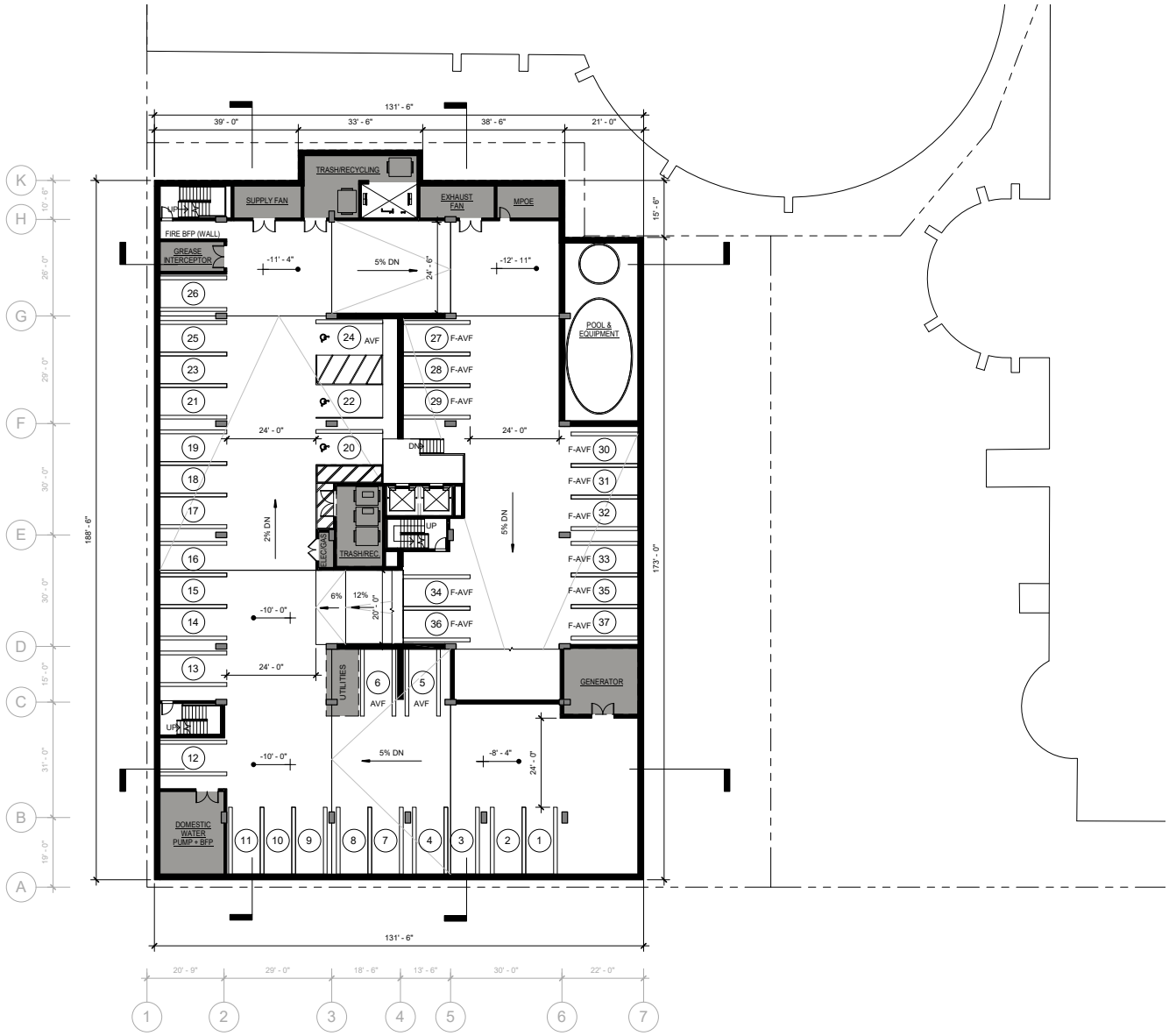
SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-19**

Roof Plan

IMPACT SCIENCES

1136.004•03/2020



OVERALL PARKING SUMMARY

Refer to page 4 for complete parking tabulations.

RESIDENTIAL*	96 SPACES
GUEST	9 SPACES
WORK/LIVE*	12 SPACES
RETAIL/RESTAURANT*	25 SPACES
JOINT (GREEN HOTEL APTS)	53 SPACES
TOTAL PARKING	**195 SPACES**
STANDARD	189 SPACES
ACCESSIBLE	6 SPACES

*On-site parking for residential tenants at the Central Park Apartments will be licensed or leased via separate agreements with building management, and a fee charged per parking space.

○ **TOTAL AVF:** ALTERNATIVE VEHICLE FUELING SPACES (3% of 195 SPACES = 5.85)	6 SPACES
○ **TOTAL F-AVF:** INFRASTRUCTURE FOR FUTURE CHARGER INSTALLATION (F-AVF) (25% of 195 SPACES = 48.75)	49 SPACES

P1 PARKING SUMMARY

TOTAL PARKING	**37 SPACES**
STANDARD	34 SPACES
ACCESSIBLE	3 SPACES
● **AVF:** ALTERNATIVE VEHICLE FUELING SPACES	3 SPACES
● **F-AVF:** INFRASTRUCTURE FOR FUTURE CHARGER INSTALLATION (F-AVF)	11 SPACES

(Locations of AVF & F-AVF spaces shown on plans are preliminary and for illustrative purposes only.)

16 0 16 32

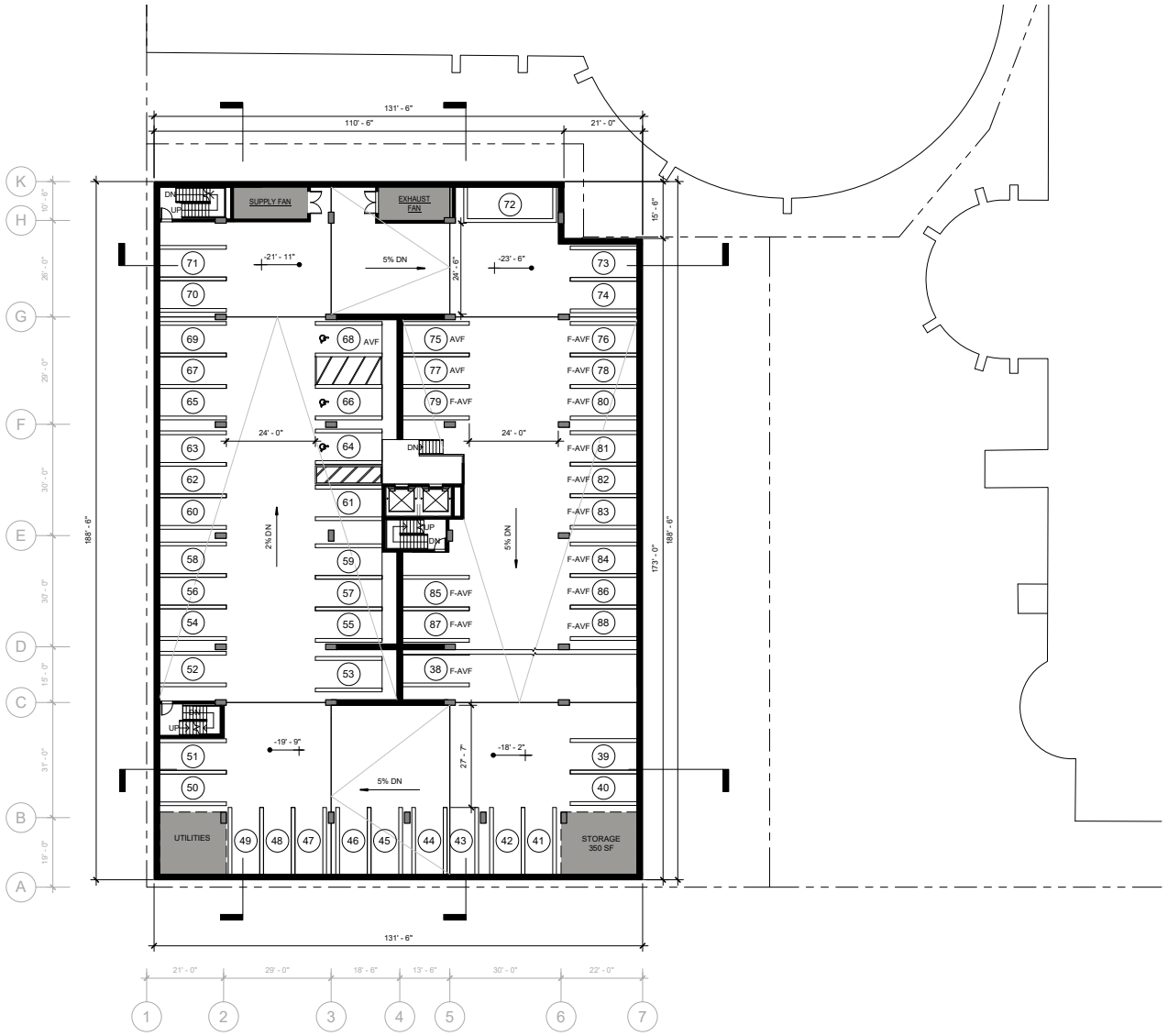
N

SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-20**

P1 Parking Level Plan

IMPACT SCIENCES



P2 PARKING SUMMARY

Refer to page 4 for complete parking tabulations.

TOTAL PARKING	**51 SPACES**
STANDARD	48 SPACES
ACCESSIBLE	3 SPACES

- **AVF:** ALTERNATIVE VEHICLE FUELING SPACES — 3 SPACES
- **F-AVF:** INFRASTRUCTURE FOR FUTURE CHARGER INSTALLATION — 13 SPACES

(Locations of AVF & F-AVF spaces shown on plans are preliminary and for illustrative purposes only.)

16 0 16 32

N

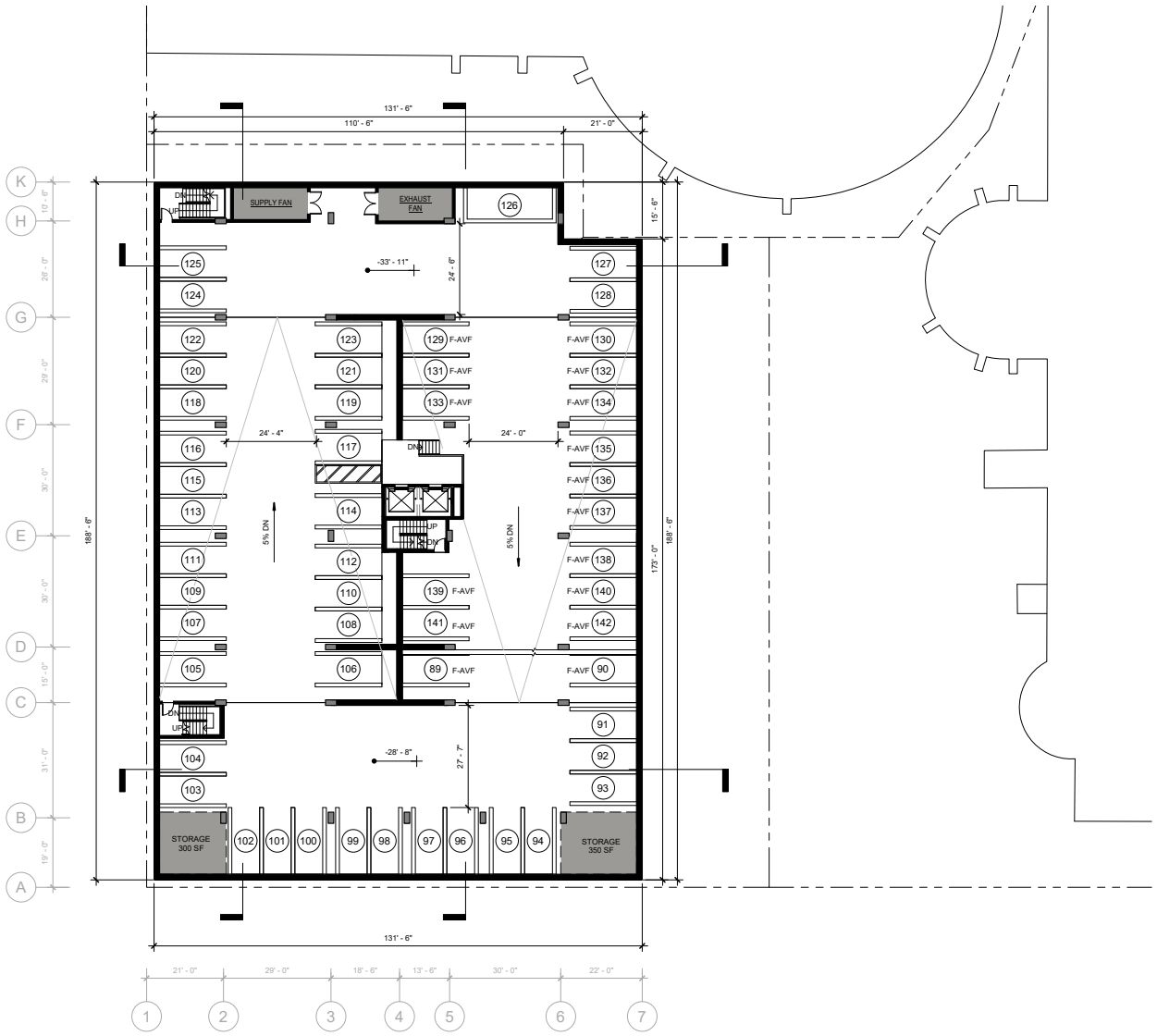
SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-21**

P2 Parking Level Plan

IMPACT SCIENCES

1136.004•03/2020



P3 PARKING SUMMARY

Refer to page 4 for complete parking tabulations.

TOTAL PARKING	**54 SPACES**
STANDARD	54 SPACES
ACCESSIBLE	0 SPACES

- **AVF:** ALTERNATIVE VEHICLE FUELING SPACES — 0 SPACES
- **F-AVF:** INFRASTRUCTURE FOR FUTURE CHARGER INSTALLATION — 16 SPACES

(Locations of AVF & F-AVF spaces shown on plans are preliminary and for illustrative purposes only.)

16 0 16 32 N

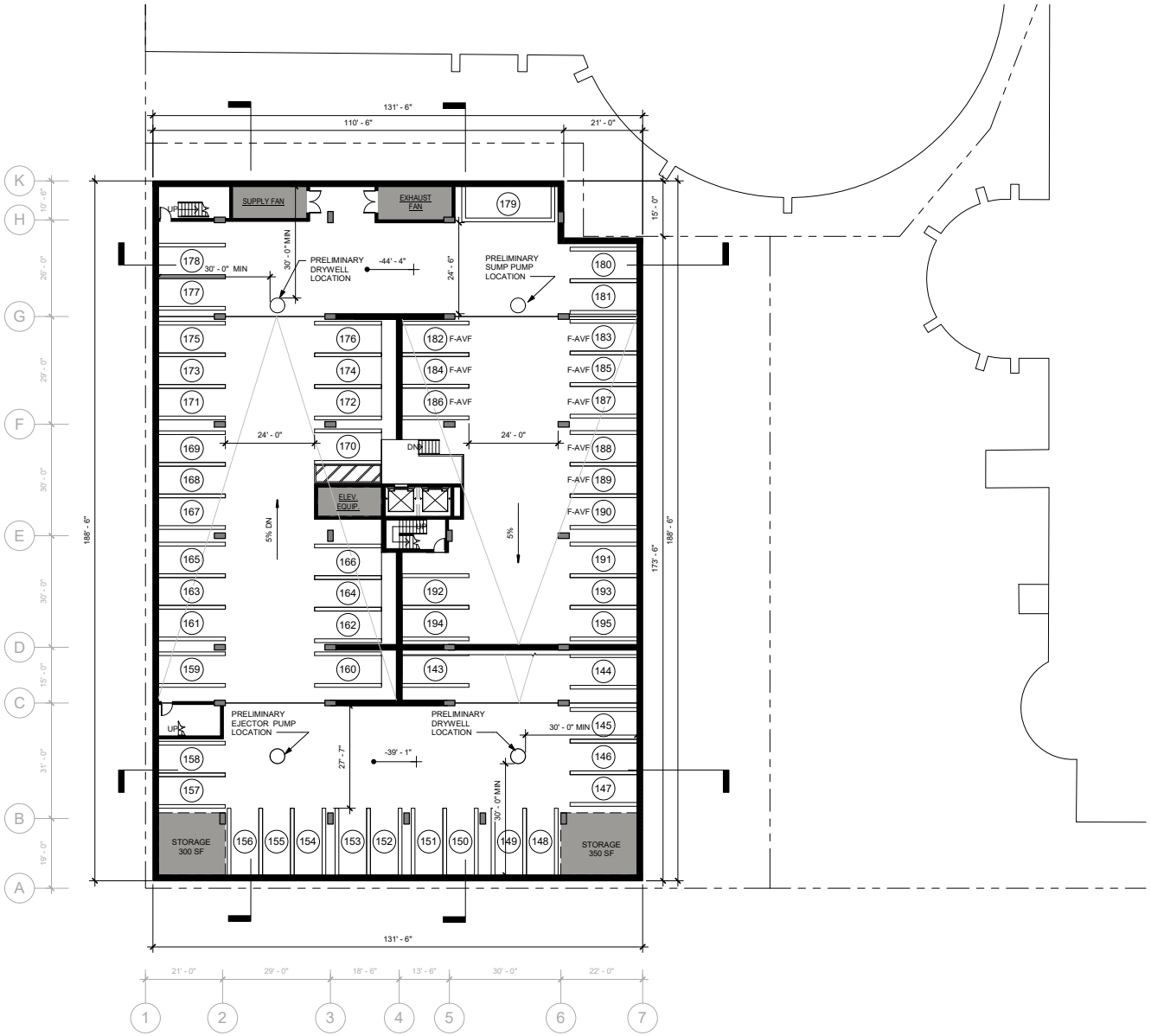
SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-22**

P3 Parking Level Plan

IMPACT SCIENCES

1136.004•03/2020



P4 PARKING SUMMARY

Refer to page 4 for complete parking tabulations.

TOTAL PARKING	**53 SPACES**
STANDARD	53 SPACES
ACCESSIBLE	0 SPACES

- **JOINT PARKING** 53 SPACES
- **AVF:** ALTERNATIVE VEHICLE FUELING SPACES 0 SPACES
- **F-AVF:** INFRASTRUCTURE FOR FUTURE CHARGER INSTALLATION 9 SPACES

(Locations of AVF & F-AVF spaces shown on plans are preliminary and for illustrative purposes only.)

16 0 16 32

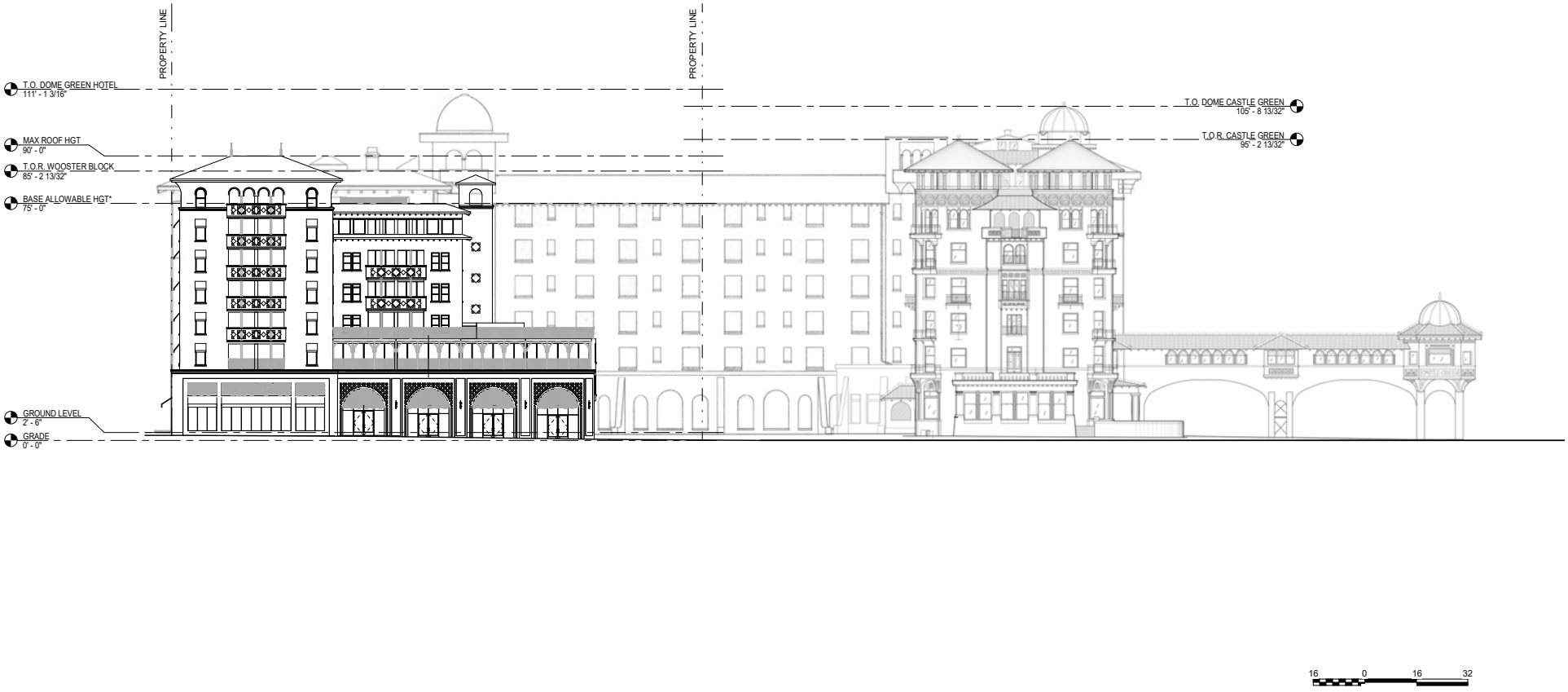
N

SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-23**

IMPACT SCIENCES

P4 Parking Level Plan

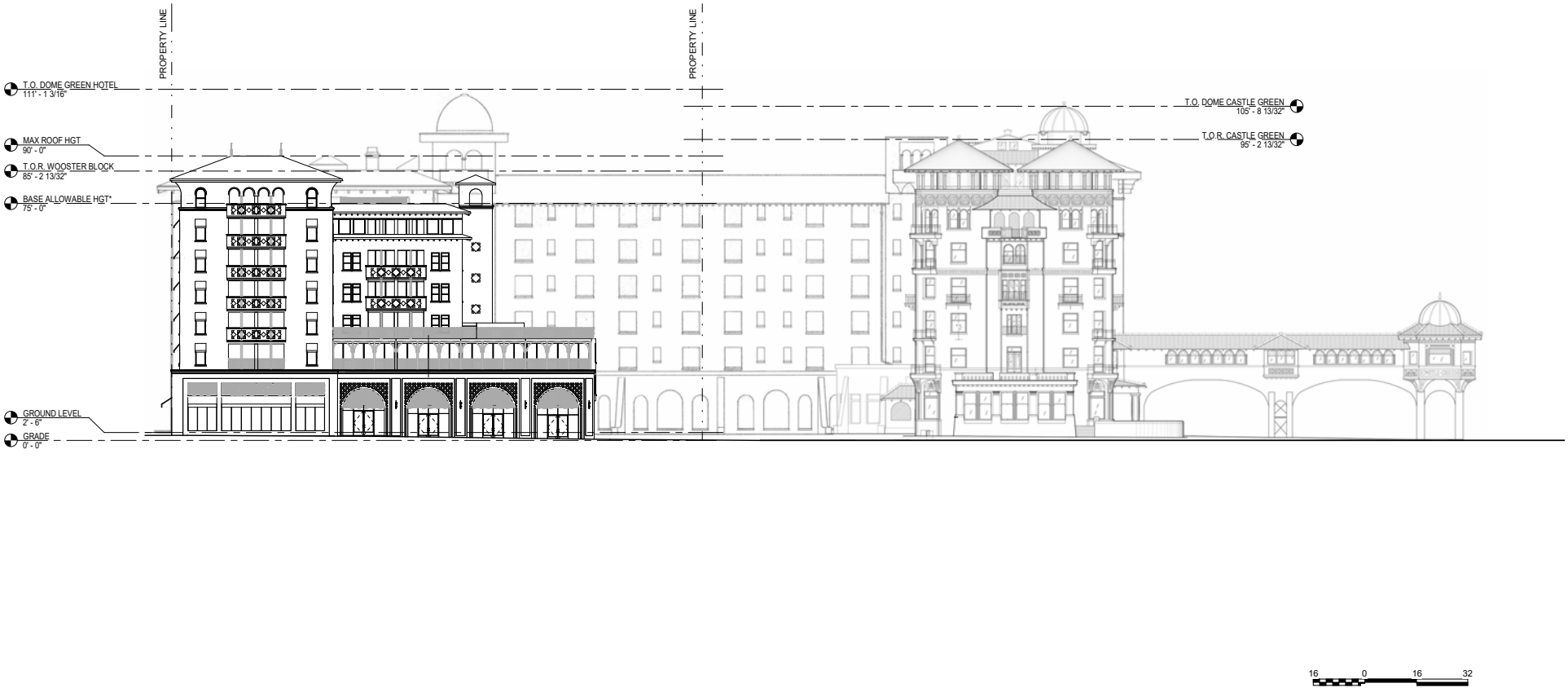


SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-24**

IMPACT SCIENCES

Overall South Elevation

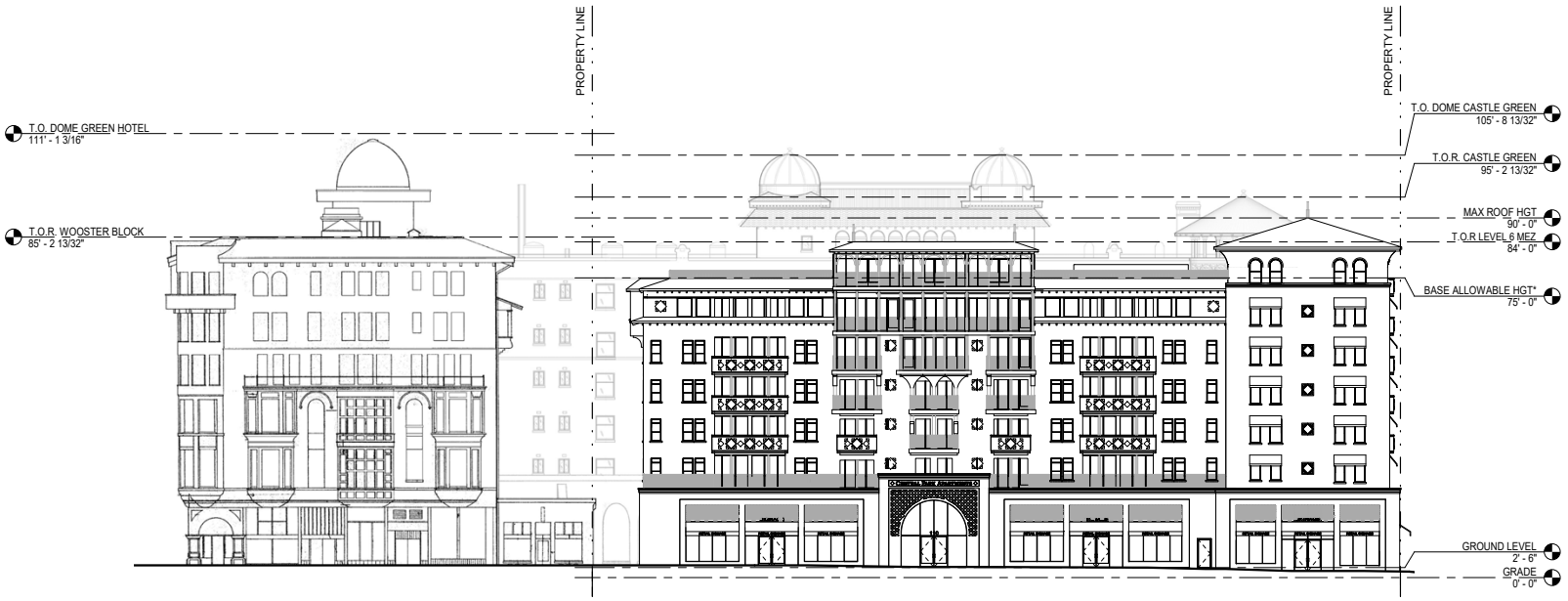


SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-24**

IMPACT SCIENCES

Overall South Elevation



SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-25**

Overall West Elevation

IMPACT SCIENCES



SOUTH ELEVATION



WEST ELEVATION

BUILDING MATERIALS

The concept for the building materials along all the elevations draws from studies, existing drawings, and conservation efforts of the historic Green Hotel Apartments and Castle Green. Paint samples of both buildings will be analyzed to assess matching and complementary materials.

Initial material palate consists of the following:

- Cast Stone Cladding and Ornament - Building base to approx. 20' above grade, typical balcony fronts, tower crown, etc.
- Exterior Painted Plaster – Exterior walls above approx. 20'.
- Painted Metal Assemblies – Storefronts and ornamental metal grills, balcony and terrace railings, ornamental cladding at Penthouse and associated feature balconies on Fair Oaks.
- Barrel-Shaped Clay Tile - Typical eave condition and roofs of corner tower and stair towers.
- Windows – Double hung and casement.
- Awnings – Fabric or metal.

* Base Allowable Height and Maximum Roof Height per Pasadena Zoning Code - 17.30.030,

16 0 16 32

SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-26**

IMPACT SCIENCES

South and West Building Elevations



NORTH ELEVATION



EAST ELEVATION

BUILDING MATERIALS

The concept for the building materials along all the elevations draws from studies, existing drawings, and conservation efforts of the historic Green Hotel Apartments and Castle Green. Paint samples of both buildings will be analyzed to assess matching and complementary materials.

Initial material palate consists of the following:

- Cast Stone Cladding and Ornament - Building base to approx. 20' above grade, typical balcony fronts, tower crown, etc.
- Exterior Painted Plaster – Exterior walls above approx. 20'.
- Painted Metal Assemblies – Storefronts and ornamental metal grills, balcony and terrace railings, ornamental cladding at Penthouse and associated feature balconies on Fair Oaks.
- Barrel-Shaped Clay Tile - Typical eave condition and roofs of corner tower and stair towers.
- Windows – Double hung and casement.
- Awnings – Fabric or metal.

ALLOWABLE OPENINGS - NORTH ELEVATION

The maximum area of unprotected openings permitted on the north exterior wall shall not exceed 45%.

(Per 2010 CBC 705.8.1: Allowable areas of openings & CBC table 705.8: Maximum area of exterior wall openings based on fire separation distance and degree of opening protection.)

Fire separation distance: 10 ft

Degree of opening protection: unprotected, sprinklered

Allowable area: 45%

Proposed:

Exterior wall= 5,521 SF

Openings= 939 SF

939/5,521 = 17%

* Base Allowable Height and Maximum Roof Height per Pasadena Zoning Code 17.30.030, Figure 3-8.

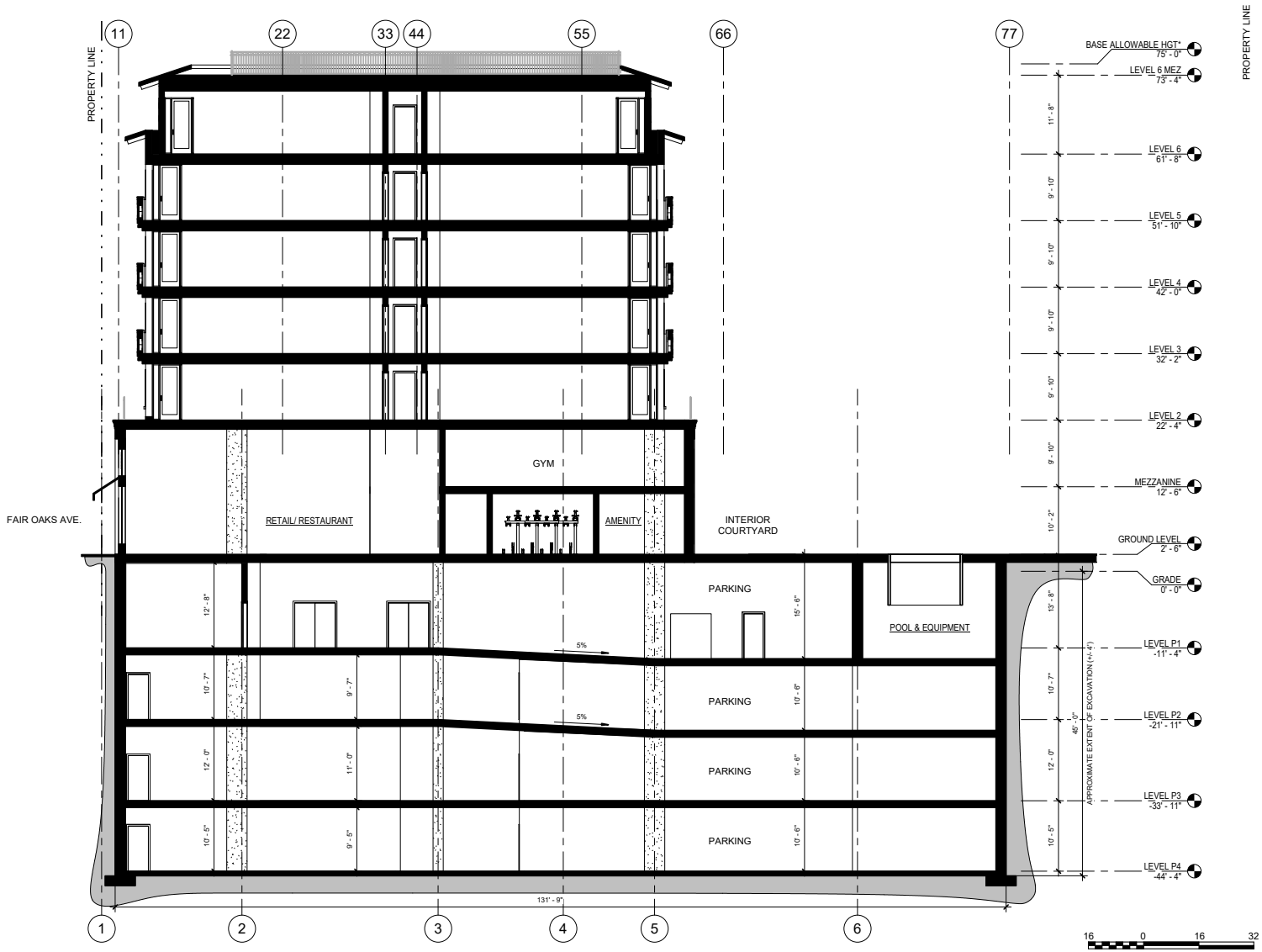
16 0 16 32

SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-27**

IMPACT SCIENCES

North and East Building Elevations



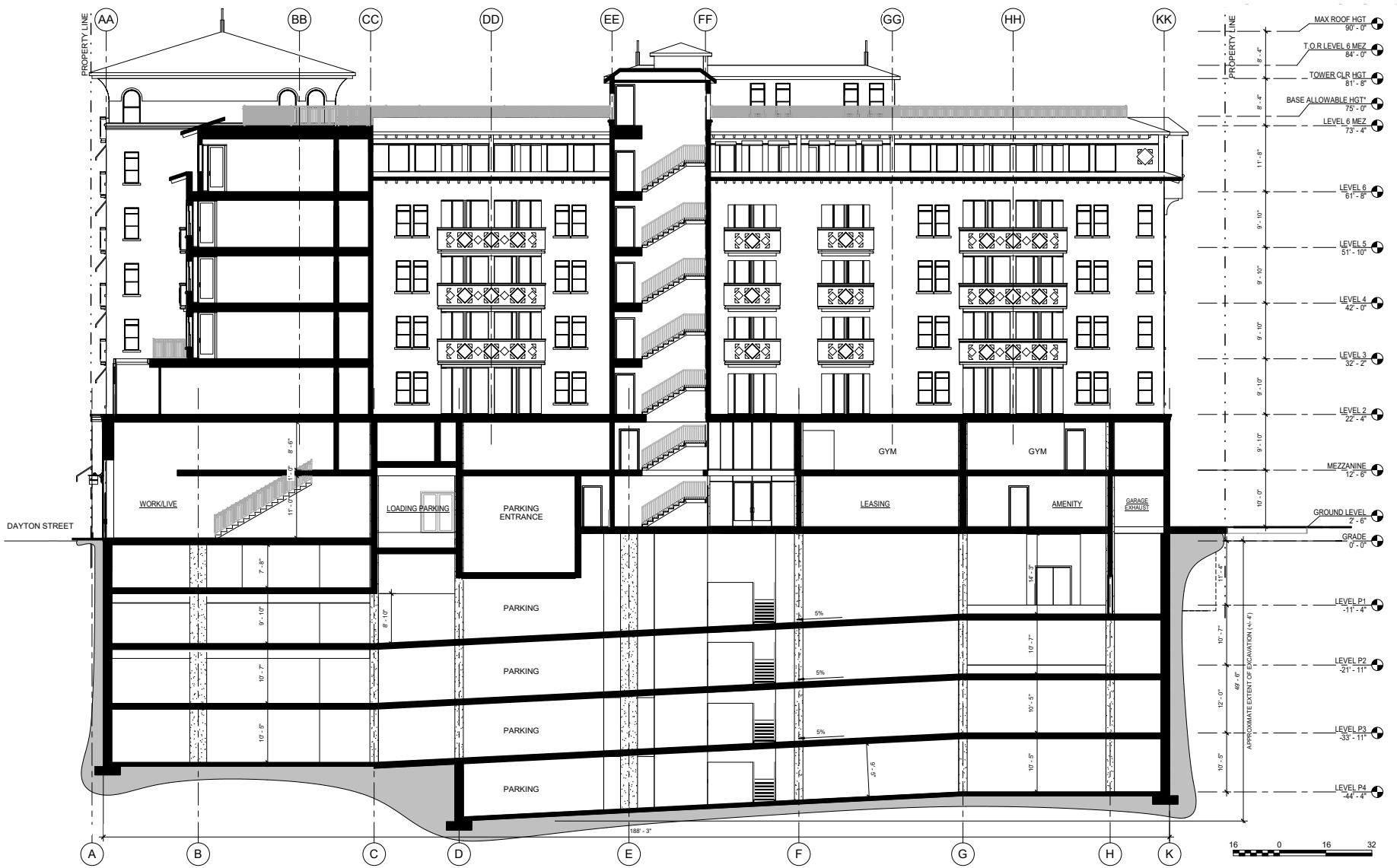
SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-28**

IMPACT SCIENCES

North Ramp Building Section

1136.004•03/2020



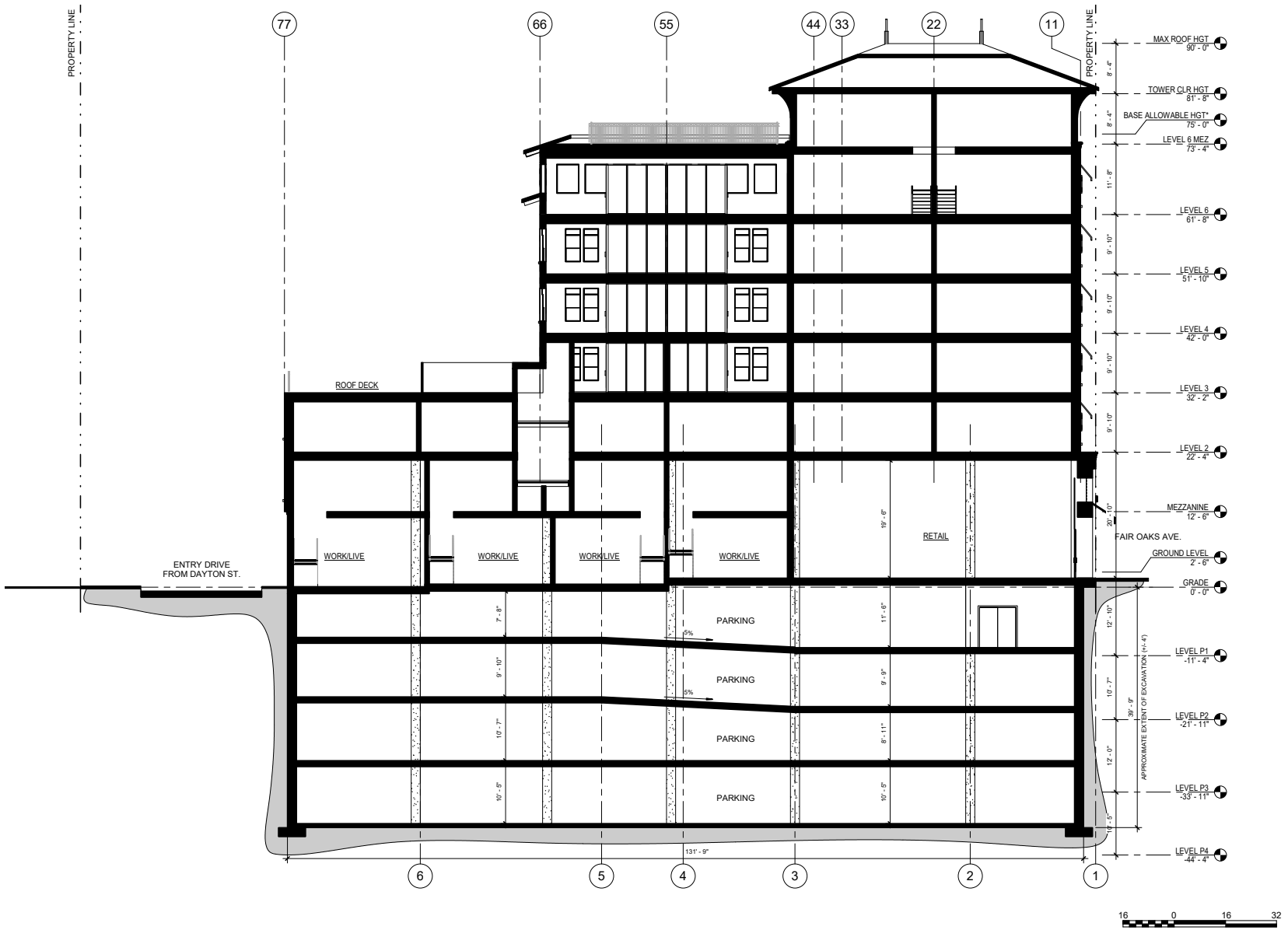
SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-29**

East Ramp Building Section

IMPACT SCIENCES

1136.004•03/2020



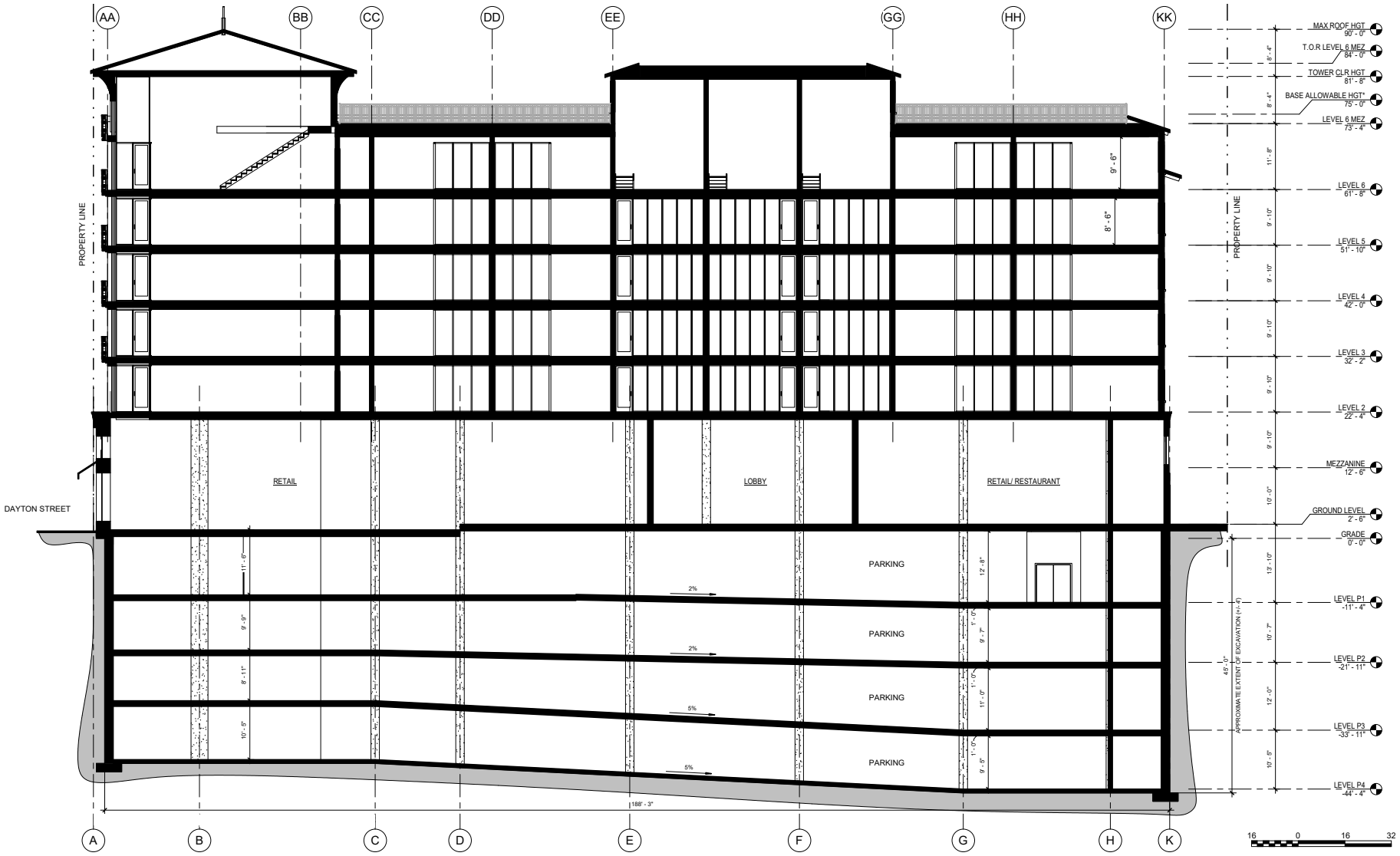
SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-30**

IMPACT SCIENCES

South Ramp Building Section

1136.004•03/2020



SOURCE: Architectural Resources Group, 2020.

FIGURE **2.0-31**

IMPACT SCIENCES

West Ramp Building Section

1136.004•03/2020

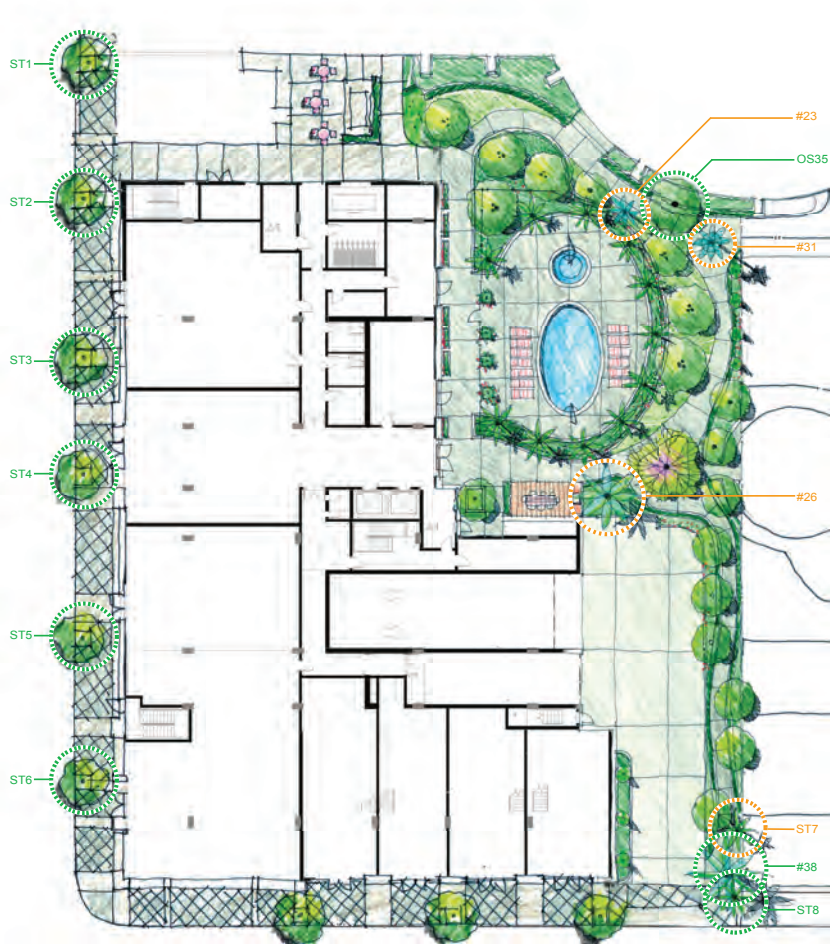
TREE LEGEND:

SYMBOL	BOTANICAL NAME "COMMON NAME"	SIZE	WUCOLS	COMMENTS
	OLEA EUROPAEA "MAJESTIC BEAUTY" FRUITLESS OLIVE	60" BOX	LOW	MULTI-TRUNK
	ARCHONTOPHOENIX CUNNINGHAMIANA "KING PALM"	24" BOX	MODERATE	STANDARD
	UMBELLULARIA CALIFORNICA "BAY LAUREL"	24" BOX	LOW	STANDARD
	QUERCUS ENGELMANNII "ENGLEMANN OAK"	96" BOX	LOW	STANDARD
	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	36" BOX	LOW	STANDARD, MATCH EXISTING STREET TREES
	PHOENIX CANARIENSIS "CANARY ISLAND DATE PALM"	–		SEE TREE REPLACEMENT CALCULATIONS
	SYAGRUS ROMANZOFFIANA "QUEEN PALM"	–		SEE TREE REPLACEMENT CALCULATIONS
	WASHINGTONIA FILIFERA "CALIFORNIA FAN PALM"	–		SEE TREE REPLACEMENT CALCULATIONS

TREE REPLACEMENT CALCULATIONS:

TREE ID	STATUS	BOTANICAL NAME "COMMON NAME"	DBH / BT HT.	REPLACEMENT TREES REQUIRED (ORD. NO. 2237, § 2, 2012.)
#38	TO BE RETAINED	PHOENIX CANARIENSIS "CANARY ISLAND DATE PALM"	20" BT	NONE
ST1	TO BE RETAINED	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	3	NONE
ST2	TO BE RETAINED	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	3	NONE
ST3	TO BE RETAINED	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	2	NONE
ST4	TO BE RETAINED	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	1	NONE
ST5	TO BE RETAINED	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	1	NONE
ST6	TO BE RETAINED	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	STUMP SPROUTS	NONE
ST8	TO BE RETAINED	SYAGRUS ROMANZOFFIANA "QUEEN PALM"	15" BT	NONE
ST7	TO BE TRANSPLANTED	SYAGRUS ROMANZOFFIANA "QUEEN PALM"	20" BT	NONE
#23	TO BE TRANSPLANTED	WASHINGTONIA FILIFERA "CALIFORNIA FAN PALM"	50" BT	NONE
#31	TO BE TRANSPLANTED	WASHINGTONIA FILIFERA "CALIFORNIA FAN PALM"	45" BT	NONE
#26	TO BE TRANSPLANTED	PHOENIX CANARIENSIS "CANARY ISLAND DATE PALM"	50" BT	NONE
#24	NO LONGER EXISTS*	FICUS MICROCARPA "INDIAN LAUREL FIG"	40.5"	NONE
#18	TO BE REMOVED	CINNAMOMUM CAMPHORA "CAMPHOR TREE"	31"	(4) 36" BOX TREES OR (8) 24" BOX TREES
#19	TO BE REMOVED	CINNAMOMUM CAMPHORA "CAMPHOR TREE"	16.5"	(2) 36" BOX TREES OR (4) 24" BOX TREES
#20	TO BE REMOVED	CINNAMOMUM CAMPHORA "CAMPHOR TREE"	23.5"	(4) 36" BOX TREES OR (8) 24" BOX TREES

* TREE #24 NO LONGER EXISTS. SEE PRIVATE TREE REMOVAL REQUEST APPLICATION FOR DETAILS REGARDING UPDATED TREE CONDITION.



PROTECTED TREE TO REMAIN

PROTECTED TREES TO BE RELOCATED

SCALE: 1/16" = 1'-0"

SHRUB, VINE & GROUNDCOVER LEGEND:

SYMBOL	BOTANICAL NAME "COMMON NAME"	SIZE	WUCOLS
	AGAVE ATTENUATA "FOXTAIL AGAVE"	15 GAL.	LOW
	ARCTOSTAPHYLOS "SUNSET" "SUNSET MANZANITA"	5 GAL.	LOW
	ARTEMISIA 'POWIS CASTLE' "WORMWOOD"	5 GAL.	MODERATE
	CARPENTERIA CALIFORNICA "BUSH ANEMONE"	5 GAL.	LOW
	DASYLIRION LONGISSIMUM "MEXICAN GRASS TREE"	15 GAL.	VERY LOW
	DISTICTIS "RIVERS" "ROYAL TRUMPET VINE"	5 GAL	MODERATE
	DRACENA DRACO "DRAGON TREE"	24" BOX	VERY LOW
	ARMERIA MARITIMA 'ALBA' "WHITE FLOWERED THRIFT"	1 GAL.	MODERATE
	LAVANDULA ANGUSTIFOLIA "HIDCOTE PINK" "HIDCOTE PINK LAVENDER"	1 GAL.	LOW
	PRUNUS ILICIFOLIA SSP. 'LYONII' "CATALINA CHERRY"	15 GAL.	LOW
	ROSA X 'NOASCHNEE' "FLOWER CARPET WHITE GROUNDCOVER ROSE"	2 GAL.	MODERATE
	STRELITZIA REGINAE "BIRD OF PARADISE"	15 GAL.	MODERATE
	SALVIA CLEVELANDII 'WINNIFRED GILMAN' "BLUE SAGE"	5 GAL.	VERY LOW
	VERBENA LILACINA "DE LA MINA"	5 GAL.	LOW

NOTE:

ALL IRRIGATION TO BE DRIP IRRIGATION WITH WEATHER BASED IRRIGATION CONTROLLER.

GROUND FLOOR PROPOSED LANDSCAPE:

TREES 36" BOX OR LARGER	17
TREES 24" BOX	21
TOTAL LANDSCAPE	11,600 SF
SOFTSCAPE	3,257 SF
HARDSCAPE	8,343 SF

REPLACEMENT TREES REQUIRED:

TREES 36" BOX OR LARGER OR TREES 24" BOX	10 20

EXISTING TREES	19
PROPOSED TREES	38
NET GAIN OF TREES	**19**

SOURCE: AHBE Landscape Architects, Architectural Resources Group, 2020

FIGURE **2.0-32**

Ground Level Landscape Plan

IMPACT SCIENCES

1136.004•03/2020

MEZZANINE PROPOSED LANDSCAPE:	
TOTAL OPEN SPACE	953 SF
SOFTSCAPE	121 SF
HARDSCAPE	832 SF

SECOND FLOOR PROPOSED LANDSCAPE:	
TOTAL OPEN SPACE	264 SF
SOFTSCAPE	75 SF
HARDSCAPE	189 SF

THIRD FLOOR PROPOSED LANDSCAPE:	
TOTAL OPEN SPACE	1,168 SF
SOFTSCAPE	230 SF
HARDSCAPE	938 SF

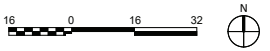
SIXTH LEVEL MEZ PROPOSED LANDSCAPE:	
TOTAL OPEN SPACE	2,246 SF
SOFTSCAPE	511 SF
HARDSCAPE	1,735 SF



LANDSCAPE DESIGN

The concept for the buildings landscape design throughout the grounds draws from studies, existing drawings, and conservation efforts of the historic Green Hotel Apartments and Castle Green. The project's landscape/hardscape elements are:

- A pedestrian "walk alley" at the north edge of the site, with feature paving and movable planters compatible with emergency access requirements.
- A landscape zone in the northeast portion of the site that integrates a pool terrace with climate-appropriate trees and plantings in native soil. Winding walkways and green zones will evoke historical paths and planting to create a coherent visual relationship with the adjacent Castle Green landscape. Castle Green's entry axis and associated circular walk are continued in the new layout.
- A path along the access drive that extends the site's landscape features to Dayton Street, connects the green space inside the block and Central Park. The 10' width available will be carefully landscaped to present a welcoming pedestrian space clearly separate from the vehicular drive.
- Second and third floor terraces and planters at the southeast corner of the new building, connected by processional stairs to ground level. These terraces have been further articulated to break down their scale and incorporate more green area.
- Roof level terraces with fixed and movable planting areas.
- Existing trees outside construction areas will be protected in place. Existing trees in construction areas will be moved to landscape zones on the east side of the site.
- The proposed project incorporates a net gain of nineteen trees, which reinforces the courtyard's historical connection with Central Park to the south and increases the comfortabilty of the microclimate.



SOURCE: AHBE Landscape Architects, Architectural Resources Group, 2020

FIGURE **2.0-33**

IMPACT SCIENCES

Roof Level Landscape Plan



SOURCE: Architectural Resources Group, December 2019

FIGURE **2.0-34**

IMPACT SCIENCES

Perspective Rendering at the Corner of Fair Oaks Avenue and Dayton Street



SOURCE: Architectural Resources Group, December 2019

FIGURE **2.0-35**

IMPACT SCIENCES

Perspective Rendering along Dayton Street



SOURCE: Architectural Resources Group, December 2019

FIGURE **2.0-36**

IMPACT SCIENCES

Bird's-Eye Perspective Rendering along Fair Oaks Avenue

1136.004•01/21



SOURCE: Architectural Resources Group, December 2019

FIGURE **2.0-37**

IMPACT SCIENCES

Perspective Rendering along Fair Oaks Avenue

1136.004•01/21



SOURCE: Architectural Resources Group, December 2019

FIGURE **2.0-38**

IMPACT SCIENCES

Bird's-Eye Rendering of Project Courtyard

1136.004•01/21

Sustainability Features

Green Building Measures, including passive environmental control strategies and/or active environmental control systems, are incorporated into the building's design. These proposed systems include:

- Building configuration:
  - Building is oriented to provide all occupied rooms with daylight and a view.
  - Useable exterior balconies at all apartment units.
- Building materials:
  - Exterior materials selected for durability and local availability
  - Interior materials selected for wear-resistance and low-VOC emissions.
  - Cool roofing material.
- Windows:
  - Apartment windows would be operable.
  - Glass would be dual pane / low-e glass.
  - Overhangs and fixed canopies would provide solar shading at east, south, and west windows.
- Energy efficient building system:
  - High efficiency gas boilers.
  - Commissioning to align system performance with design targets and energy efficiency standards.
  - Water submetering and individual electric meters.
- System Control:
  - Each apartment and commercial unit would have its own controllable thermostat.
  - Daylighting, occupancy sensors, and dimmer switches would be used to optimize lighting.
- Landscape:
  - Drought tolerant planting is proposed.
  - Landscaped roof terraces at mezzanine, second, third. and penthouse floors.
  - Low backlight/uplight/glare-rated exterior light fixtures.
  - Storage and collection of recyclables.

Utilities and Drainage

Connections for utilities including sewer, water, gas, electric, and telecommunications, would be installed on-site (for more information refer to **Section 4.19, Utilities**). As there would be an insignificant change in impervious surfaces on the project site as a result of the redevelopment, the proposed project would be able to use existing drainage facilities for stormwater flows from the project site; nevertheless, as required by the City of Pasadena Building & Safety division, the project will prepare a Low Impact Development (LID) Plan to demonstrate stormwater management post-construction and as required, the LID Plan will be prepared by a registered engineer (for more information refer to **Section 4.10, Hydrology and Water Quality**).

Construction

Construction is anticipated to last a total of approximately 28 months, beginning in January 2022 and completing in April 2024. Demolition would occur over a period of approximately 1 month and require the removal of 620 cubic yards (cy) of debris. Site grading would occur over a period of 6 months and would require the export of approximately 45,500 cy of soil. Building construction would occur over a period of 21 months.

Requested Approvals

The proposed project would require Design Review Approval from the City of Pasadena Design Commission. In addition, the applicant has applied for a Vesting Tentative Tract Map to allow for the potential to convert the apartments to condominiums, and a Private Tree Removal for removal and relocation of Protected Trees as outlined in Table 2.0-1, above.

The project is utilizing the State Density Bonus Law pursuant to Government Code § 65915 to allow for the increase in the residential base density from 64 units to 84 units (excluding four work-live units), eight of which would be reserved for Very Low Income residents. No other entitlement actions are required or being requested by the project applicant.

2.10 OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

The proposed project does not require discretionary approval from other public agencies.

2.11 HAVE CALIFORNIA NATIVE AMERICAN TRIBES TRADITIONALLY AND CULTURALLY AFFILIATED WITH THE PROJECT AREA REQUESTED

CONSULTATION PURSUANT TO PUBLIC RESOURCES CODE SECTION 21080.3.1? IF SO, HAS CONSULATION BEGUN?

Two tribes (the Gabrieleno Band of Missions Indians – Kizh Nation and the Gabrielino-Tongva Tribe) requested formal notification of all projects within the City. Accordingly, the City notified the Gabrieleno Band of Mission Indians – Kizh Nation and Gabrielino-Tongva Tribe of the proposed project under AB 52 in order to provide an opportunity to consult on tribal cultural resources and other matters of concern.

2.12 CUMULATIVE SCENARIO

In accordance with *CEQA Guidelines* Section 15064(h), this SCEA includes an evaluation of the proposed project's cumulative impacts. This section provides information on the conditions assumed to occur under the cumulative scenario; the cumulative impact of the proposed project is based on evaluating the potential impacts that may result from the project when considered in context of the cumulative scenario. The guidance provided under *CEQA Guidelines* Section 15064(h) is as follows:

1. When assessing whether a cumulative effect requires an EIR, the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable. An EIR must be prepared if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

2. A lead agency may determine in an initial study that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. When a project might contribute to a significant cumulative impact, but the contribution will be rendered less than cumulatively considerable through mitigation measures set forth in a mitigated negative declaration, the initial study shall briefly indicate and explain how the contribution has been rendered less than cumulatively considerable.

3. A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including, but not limited to, water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, plans or regulations for the reduction of greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review

process to implement, interpret, or make specific the law enforced or administered by the public agency. When relying on a plan, regulation or program, the lead agency should explain how implementing the particular requirements in the plan, regulation, or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding that the project complies with the specified plan or mitigation program addressing the cumulative problem, an EIR must be prepared for the project.

4. The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable."

In light of the guidance summarized above, an adequate discussion of a project's contribution to cumulative impacts can be based on either: (1) a list of past, present, and probable future related impacts; or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect (*CEQA Guidelines* Section 15130(b)(1)(A)-(B). The lead agency may also blend the "list" and "plan" approaches to analyze the severity of impacts and their likelihood of occurrence. Accordingly, the vision and growth projections contained in the City General Plan and relevant specific plans were identified and included for evaluation.

The project site is within the Central District Specific Plan (CDSP) Area and is designated as High-Mixed Use under the Land Use Element of the City of Pasadena General Plan. This designation allows for a maximum of 3.00 FAR, up to 87 dwellings per acre, and is intended to support the development of multi-story buildings with a variety of compatible commercial (retail and office) and residential uses. The vision for the CDSP Area, as stated in the Land Use Element, is to build upon the existing strengths as a vibrant downtown with a mix of uses, walkable areas with shopping, entertainment, restaurants, offices, and housing connected by multiple modes of transit. Within the Central District there are a number of distinct neighborhoods (or sub-districts) with unique identities including Old Pasadena, the Civic Center, Pasadena Playhouse, and South Lake. The project site is within the Old Pasadena sub-district, identified as the historic core of the City, which has developed into a vibrant retail and entertainment destination. The Central District is served by three Metro L Line (formerly Gold Line) stations (Del Mar, Memorial Park, and Lake) creating a myriad of opportunities for higher-density, transit-oriented development, served by multimodal linkages, and pedestrian and open space amenities.

To regulate the building intensity and population density within the City consistently with the designations established by the Land Use Element, development capacities for each Specific Plan Area are used to set threshold limits for residential and commercial development. Within these capacities, cumulative new development in these areas would not exceed the set limits for housing units or square feet of commercial

use. For the CDSP Area, the Land Use Element stipulates a development capacity of 4,272 residential units and 2,112,000 sf of commercial development. The proposed project involves development of 84 residential units and 6,200 sf of supporting commercial use, and also includes four work-live units. Though the project would be within the established development capacity for the CDSP area, this development could potentially produce cumulative impact when considered in conjunction with the General Plan buildout within the City.

The cumulative analysis in this Draft SCEA considers the buildout of the City's General Plan. The forecasted land use growth identified in the City's General Plan, which has been incorporated into the Project's cumulative analyses, is shown in **Table 2.0-4** below. This table shows the total development forecasted to occur by 2035.

Table 2.0-4
Pasadena General Plan Update: Development Capacities[a] (2035)

Specific Plan	Residential Units	Commercial Square Feet
Central District	4,272	2,112,000
South Fair Oaks	802	988,000
East Pasadena	750	1,095,000
Lamanda Park	100	630,000
East Colorado	300	300,000
North Lake	250	250,000
Fair Oaks / Orange Grove	323	300,000
Lincoln Avenue	180	300,000

[a] *Development capacities regulate building intensity and population density consistently with the designations established by the Land Use Diagram developed for the 2015 General Plan Update. Within these, cumulative new development within the specific plan areas shall not exceed the number of housing units and commercial square footage specified in this table.*

Source: City of Pasadena, Revised Final EIR, August 7, 2015.

An analysis of the proposed project's potential contribution to cumulative impacts is provided, as appropriate, under relevant environmental impact categories of this SCEA.

3.0 SUSTAINABLE COMMUNITIES ENVIRONMENTAL ASSESSMENT ELIGIBILITY

3.1 SUSTAINABLE COMMUNITIES STRATEGY CONSISTENCY ANALYSIS

SB 375 provides CEQA streamlining opportunities for TPPs that are "consistent with the use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy, for which the ARB has accepted a metropolitan planning organization's determination that the sustainable communities strategy or the alternative planning strategy would, if implemented, achieve the greenhouse gas emission reduction targets established by ARB (see Public Resources Code, § 21155 (a)).

Use Designation, Density, and Building Intensity

On May 7, 2020, SCAG's Regional Council approved Connect SoCal (2020 – 2045 Regional Transportation Plan/Sustainable Communities Strategy) for conformity purpose by the Federal Highway Administration (FHWA). On September 3, 2020, the Regional Council formally adopted the Connect SoCal plan to provide a roadmap to expand transportation options, improve air quality and bolster Southern California's long-term economic viability. The proposed project would be consistent with the land use patterns promoted by the Connect SoCal Forecasted Regional Development Pattern. The project site, which is within one-half mile from a major transit stop, is in an area that is considered by SCAG as a Priority Growth Area. Furthermore, the project would not be located in any absolutely constrained areas such as on agricultural land, open space, or tribal lands.[1]

The proposed project would include 84 apartment units in a 6-story plus mezzanine transit oriented mixed-use development that includes retail, restaurants, and work/live units at the ground level. Using height averaging, the building height would average 69 feet with a maximum roof height to 90 feet. Along Fair Oaks Avenue, the ground floor of the proposed building includes approximately 6,200 square feet of retail and food uses. The proposed project would include a total of 4,600 sf of amenity space for project residents, including a swimming pool and spa, gym, lounge, and roof deck. All parking for the project would be located within four levels of underground parking that would accommodate 195 parking spaces. The project site driveway would be located along Dayton Street and would provide access to the underground parking. Both ingress and egress would be available from Dayton Street. Pedestrian access to the residential lobby and commercial uses would be available off of Fair Oaks Avenue. The project would be served by the Metro L

[1] Southern California Association of Governments. 2020. Sustainable Communities Strategy Technical Report. Available at: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_sustainable-communities-strategy.pdf?1606002097

Line (formerly Gold Line), with the Central District served by three stations; Del Mar, Memorial Park, and Lake.

Further analysis of the proposed project's consistency with Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy) is provided in **Table 3.0-1, Consistency Analysis with Connect SoCal (2020 – 2045 Regional Transportation Plan/Sustainable Communities Strategy)**.

Table 3.0-1
Consistency Analysis with Connect SoCal
(2020–2045 Regional Transportation Plan/Sustainable Communities Strategy)

Goals and Strategies	Consistency Assessment
Connect SoCal Goals	
Goal 1: Encourage regional economic prosperity and global competitiveness	**Not Applicable.** This Goal is directed at SCAG and the City of Pasadena and does not apply to the proposed project. This strategy calls on encouraging regional economic prosperity and global competitiveness. The proposed project would not interfere with such policymaking.
Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods	**Consistent.** The project site is located in an urbanized area within the City of Pasadena. The proposed project would develop 84 apartment units, four work/live units approximately 1,300 sf each, 6,200 sf of retail and restaurant uses, and 4,600 sf of amenity space within a High Quality Transit Area (HQTA) as defined by SCAG and a transit priority area as defined by SB 743. The project site is located less than one-quarter mile from the Metro Del Mar L Line (formerly Gold Line) station to the southeast of the project site and less than one-half a mile to the Memorial Park Station to the northeast of the project site. Furthermore, the site is located less than one-half mile from Metro bus lines with frequency of service intervals of 15 minutes or less during the morning and afternoon peak commute periods. The proposed project would provide residents, employees, and visitors with convenient access to public transit and opportunities for walking and biking. The location of the proposed project encourages a variety of transportation options and access and is therefore consistent with this Goal.
Goal 3: Enhance the preservation, security, and resilience of the regional transportation system	**Not Applicable.** This Goal is directed towards SCAG and does not apply to the proposed project. While this strategy calls on enhancing the preservation, security, and resilience of the transportation system, the proposed project would not interfere with such policymaking.
Goal 4: Increase person and goods movement and travel choices within the transportation system	**Not Applicable.** This strategy calls on SCAG to increase person and goods movement and travel choices across the transportation system. The proposed project would not interfere with this goal.
Goal 5: Reduce greenhouse gas emissions and improve air quality	**Consistent.** The Project would result in criteria air pollutant and GHG emissions during construction and operation. However, emissions would not exceed the SCAQMD significance thresholds and would be consistent with the City's CAP.
Goal 6: Support healthy and equitable communities	**Not Applicable.** This Goal is directed towards SCAG and does not apply to the proposed project. This strategy calls on supporting healthy and equitable communities. The proposed project would not interfere with this goal.

Goals and Strategies	Consistency Assessment
Goal 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network	**Not Applicable.** This goal is directed towards SCAG and does not apply to individual development projects. The proposed project would be located in proximity to public transit opportunities and would implement a transportation demand management (TDM) program.
Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel	**Not Applicable.** This Goal is directed towards SCAG and does not apply to the proposed project. This strategy calls on SCAG to use new transportation technologies and data-driven solutions to increase travel efficiency. The proposed project would not interfere with this goal.
Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options	**Consistent.** The proposed project would construct 84 apartment units which would include 24 studios, 37 one-bedroom flats, three (3) one-bedroom townhouses, 18 two-bedroom flats, and two (2) two-bedroom townhouses. Furthermore, eight on-site residents would be set aside for very low-income residents. The proposed project would also include four work/live units. The proposed project would be within a quarter-mile radius of the Del Mar Metro Station and within a half-mile of the Memorial Park Station.
Goal 10: Promote conservation of natural and agricultural lands and restoration of habitats	**Not Applicable.** This Goal is directed towards SCAG and does not apply to the proposed project. This strategy calls on SCAG to promote the conservation of natural and agricultural land and the restoration of habitats. The proposed project site currently serves as a surface parking lot. Therefore, the proposed project would not interfere with this goal.
Connect SoCal Strategies	
Strategy 1: Focus growth near destinations and mobility options	**Consistent.** The proposed project site is located within a HQTA and transit priority area as defined by SCAG. The project site is located within one-quarter mile of the Metro Del Mar Station and within one-half mile of Memorial Park Station.
Strategy 2: Promote diverse housing choices.	**Consistent.** The proposed project would develop 84 apartments units (24 studios, 37 one-bedroom flats, three (3) one-bedroom townhouses, 18 two-bedroom flats, and two (2) two-bedroom townhouses), including eight (8) on-site residences for very low-income residents. The proposed project would also include four work/live units.
Strategy 3: Leverage technology innovations	**Not Applicable.** This strategy is directed to SCAG and does not apply to the proposed project. This strategy aims to promote low emission technologies, improve access to services through technology, and identify ways to incorporate "micro-power grids" in communities. The proposed project would not interfere with this strategy.
Strategy 4: Support implementation of sustainability policies	**Consistent.** The proposed project incorporates Green Building Measures, including passive environmental control strategies and/or active environmental control systems, into the building's design.
Strategy 5: Promote a Green Region	**Consistent.** The proposed project would promote access to public park space located across Dayton Street at Central Park due to the project's proximity. Furthermore, the development would emphasize sustainability features that promote more resource efficient development. The project site is also located within one-quarter mile of the Metro Del Mar Station and one-half mile of Memorial Park Station.

Source: SCAG Connect SoCal (2020 – 2045 Regional Transportation Plan/ Sustainable Communities Strategy.

3.2 TRANSIT PRIORITY PROJECT CRITERIA ANALYSIS

SB 375 provides CEQA streamlining opportunities for certain Transit Priority Projects (TPPs). A TPP is a project that meets the following three criteria (see Public Resources Code, § 21155 (b)):

a) Contains at least 50 percent residential use, based on total building square footage and, if the project contains between 26 percent and 50 percent nonresidential uses, a floor area ratio of not less than 0.75;

b) Provides a minimum net density of at least 20 units per acre; and

c) Is within one-half mile of a major transit stop or high-quality transit corridor included in a regional transportation plan.

As discussed below, the proposed project qualifies as a TPP pursuant to the criteria set by Public Resources Code § 21155.

Consistency with Criterion #1a

The proposed project is a mixed-use development consisting of 84 apartment units of varying types and sizes, including eight on-site residences for very low-income residents. The residential component of the proposed project encompasses approximately 54,448 sf of the project's total 93,355 sf of floor area, or 58 percent of total floor area. As such, the proposed project would be consistent with this Criterion.

Consistency with Criterion #2a

The proposed project site is approximately 0.74 acres. With 84 residential dwellings, the proposed project would have a density of approximately 113 units per acre. As such, the proposed project would be consistent with this Criterion.

Consistency with Criterion #3a

PRC Section 21155 (b) defines a "high-quality transit corridor" as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

Public Resources Code Section 21099 defines a "transit priority area" as an area within one-half mile of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." Public Resources Code Section 21064.3 defines "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a

bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." PRC Section 21155 (b) states that a "major transit stop" is defined in PRC Section 21064.3, except that, for purposes of Section 21155 (b), it also includes major transit stops that are included in the applicable regional transportation plan.

The proposed project is located within a High Quality Transit Area (HQTA) as defined by SCAG and a transit priority area as defined by SB 743. The project site is located within one-quarter mile of the Metro Del Mar Station and within one-half mile of the Memorial Park Station. As such, all development on the project site is within one-half mile from the light rail station. The L Line (formerly Gold Line) provides service intervals less than 15 minutes during peak commute hours. The proposed project is consistent with this Criterion.

3.3 INCORPORATION OF FEASIBLE MITIGATION MEASURES, PERFORMANCE STANDARDS, AND CRITERIA FROM PRIOR APPLICABLE EIRS

Public Resources Code Section 21151.2 requires that a transit priority project incorporate all feasible mitigation measures, performance standards, or criteria from prior applicable EIRs. The City has complied with PRC Section 21151.2 by reviewing all of the suggested mitigation measures in the SCAG Connect SoCal (2020 – 2045 Regional Transportation Plan/Sustainable Communities Strategy) EIR, the City of Pasadena General Plan EIR, and the Central District Specific Plan EIR for imposition on the project. The mitigation measures were not imposed if the project was found to be in substantial compliance with the mitigation measure as proposed or if the mitigation measures were found not to be relevant. If the project was not found to be in substantial compliance or the mitigation measure was found relevant, the City considered whether to use the mitigation measure or an equally effective City mitigation measure (including the mitigation measures developed for the SCEA prepared for the proposed project). The applicable mitigation measures, performance standards, or criteria from the aforementioned documents are included in applicable technical sections of the Environmental Checklist portion of this SCEA. Some of the mitigation measures from prior applicable EIRs are duplicative or have minor inconsistencies with the project-specific mitigation measures set forth below. The City, as lead agency, retains the discretion to modify or delete the measures from the prior EIRs to avoid duplication or resolve inconsistencies.

4.0 SCEA ENVIRONMENTAL CHECKLIST

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
	Biological Resources		Cultural Resources		Energy
	Geology and Soils		Greenhouse Gas Emissions		Hazards and Hazardous Materials
	Hydrology and Water Quality		Land Use and Planning		Mineral Resources
	Noise		Population and Housing		Public Services
	Recreation		Transportation		Tribal Cultural Resources
	Utilities and Service Systems		Wildfire		Mandatory Findings of Significance

DETERMINATION: (to be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
I find that, although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.	
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	
I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment., but at least effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	
I find that the Project is a qualified "transit priority project" that satisfies the requirements of Sections 21155 and 21155.2 of the Public Resources Code (PRC), and a qualified "residential or mixed use residential project" that satisfies the requirements of Section 21159.28(d) of the PRC, and although the Project could have a potentially significant effect on the environment as identified in the Initial Study contained herein, there will not be a significant effect in this case, because this Sustainable Communities Environmental Assessment (SCEA) contains measures that either avoid or mitigate to a level of insignificance all potentially significant or significant effects of the Project.	**X**



12/8/2021

Signature | Date

Kevin Johnson | Senior Planner

Printed Name | Title

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact' is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 21, "Earlier Analysis," may be cross-referenced).

5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. See *CEQA Guidelines* Section 15063(c)(3)(D). Earlier analyses are discussed in Section 21 at the end of the checklist.

    a) Earlier Analysis Used. Identify and state where they are available for review.

    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier documents and the extent to which address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The explanation of each issue should identify:

a) The significance criteria or threshold, if any, used to evaluate each question; and

b) The mitigation measure identified, if any, to reduce the impact to less than significant.

ENVIRONMENTAL CHECKLIST FORM

BACKGROUND

Date checklist submitted: 12/8/2021

Department requiring checklist: Planning & Community Development
Case Manager: Kevin Johnson, Senior Planner

ENVIRONMENTAL IMPACTS (explanations of all answers are required):

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

4.1 AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

a. Have a substantial adverse effect on a scenic vista?

☐ ☐ ☐ ☒

WHY? The project site is not in an area that offers views of the San Gabriel Mountains, the Arroyo Seco, the San Rafael Hills, Eaton Canyon, or Old Pasadena.

The historic significance of the Hotel Green/Castle Green is largely conveyed by the public-facing primary facades oriented towards the adjoining public streets. These include the east façade of the Castle Green portion of the building facing east to Raymond Avenue, the south end of Castle Green facing Dayton Street, and the north façade of the Hotel Green portion of the building facing Green Street. Typically, these facades are considered "primary" because they were designed to directly address and communicate with the public right-of-way forming the "front" of the two buildings. It is these facades that contain public entrances and the highest level of design articulation, exterior ornamentation, and variations in massing and rooflines.

In contrast, the west-facing façade of the Castle Green portion and south-facing façade of the Hotel Green were somewhat less concerned with engaging the public as they front interior park and patio spaces. Anticipated development fronting Fair Oaks Avenue (never realized) would have further enclosed the interior of the block. Although also public facing in that they look onto park space and are visible from the park and Dayton Street, comparatively, these facades represent the "rear" elevations of the two buildings in that they did not provide primary entrance into the two buildings. As such, they are generally considered "secondary." While still carefully articulated, these facades display less of the variation and exterior ornamentation seen on the facades facing Raymond Avenue and Green Street.

The primary (east) façade of the Castle Green portion of the building faces east towards Raymond Avenue. This façade was historically, and remains today, the primary entrance to the Castle Green. The building was set back approximately 100 feet from the street to create a landscaped park-like area fronting the main entrance. This garden was the only park-like feature in Pasadena at the time. Extending from the center of this façade to the curb of Raymond Avenue is the remaining section of an enclosed pedestrian bridge that once spanned the street and linked to the original Hotel Green building (no longer extant) across the street.

The design articulation of east façade, the remnant pedestrian bridge and the front garden all combine to create the primary public face of the building.

The proposed project would obscure views of the existing Green Hotel Apartments from certain vantage points within Central Park to the south. However, the Green Hotel Apartments are already obscured by the trees located on or near the project site as well as within Central Park. The density of the existing tree canopy of Central Park as well as the tree canopy at the project site obstructs views of the existing Green Hotel Apartments and Castle Green from multiple angles. Furthermore, the portion of the Green Hotel Apartments between Castle Green and the proposed project would continue to be visible to the visitors of Central Park when looking immediately north across Dayton Street to the existing Green Hotel Apartment building. Views of Castle Green from Central Park would be unchanged. Therefore, views of the Green Hotel Apartments and Castle Green from Central Park would be altered; however, their primary elevations on East Green Street and South Raymond Avenue would remain unaltered and views of the south-facing façade of these two buildings would still mostly remain from within Central Park.

From the perspective of the existing Green Hotel Apartment residents, the proposed project would obstruct views to the south of Dayton Street, Fair Oaks Avenue, Central Park, and its tree canopy. The residents at the eastern end of the Green Hotel Apartments would continue to see Dayton Street and Central Park to the south. While the proposed project would affect private views from certain residences in the Castle Green and Green Hotel Apartment building, CEQA emphasizes evaluation of visual resources that are visible from public places, like streets, sidewalks, and parks. Although the project might affect private views, obstruction of private views is not generally regarded as a significant environmental impact under CEQA. Furthermore, the project would not in any way obstruct the views of any of the historic buildings or other scenic resources in the vicinity.

Pursuant to regulations provided in SB 743, which applies to residential, mixed-use residential, and employment center projects on infill sites within Transit Priority Areas (TPAs), aesthetic impacts cannot be considered significant. A TPA is defined as an area within one-half mile of a main transit stop that is existing or planned. As noted in Chapter 3, SCEA Eligibility, the proposed project qualifies as a Transit Priority Project (TPP). Therefore, pursuant to CEQA Section 21099(d), the project would have no impact to scenic vistas.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

☐ ☐ ☐ ☒

WHY? The only designated state scenic highway in the City of Pasadena is the Angeles Crest Highway (State Highway 2), which located north of Arroyo Seco Canyon in the extreme northwest portion of the City. The project site is not within the viewshed of the Angeles Crest Highway. Nor is the site visible from I-210, which is identified as an eligible state scenic highway west of S.R. 134 in Caltrans' Scenic Highway Program.

Pursuant to regulations provided in SB 743, which applies to residential, mixed-use residential, and employment center projects on infill sites within Transit Priority Areas (TPAs), aesthetic impacts cannot be considered significant. A TPA is defined as an area within one-half mile of a main transit stop that is existing or planned. As noted in Chapter 3, SCEA Eligibility, the proposed project qualifies as a Transit Priority Project (TPP). Therefore, the proposed project would have no impacts to state scenic highways or scenic roadway corridors.

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

☐ ☐ ☒ ☐

WHY? Senate Bill 743, signed into law in September 2013, made several changes to CEQA for projects located in areas served by transit (i.e., TPAs). While the thrust of SB 743 addressed a major overhaul on how transportation impacts are evaluated under CEQA, it also limited the extent to which aesthetics and parking are defined as impacts under CEQA. Specifically, Section 21099 (d)(1) of the Public Resources Code (PRC) states that a project's aesthetic and parking impacts shall not be considered a significant impact on the environment if:

1. The project is a residential, mixed-use residential, or employment center project, and
2. The project is located on an infill site within a transit priority area.

Section 21099 (a) of the PRC defines the following terms:

(4) "Infill site" means a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

(7) "Transit priority area" means an area within one-half mile of a major transit stop that is existing or planned.

Section 21064.3 of the PRC defines a "major transit stop" as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

As discussed in the Project Description, the project site is surrounded by existing development, thus qualifying the project site as an 'infill' site. In addition, the project consists of a mixed-use residential community. Further, the Los Angeles County Metropolitan Transportation Authority (Metro) Del Mar L Line (formerly known as the Gold Line) Light Rail Station is located less than a quarter of a mile to the southeast of the project site along Raymond Avenue just north of Del Mar Boulevard and the Memorial Park Station is located less than a half mile to the northeast of the project site along Holly Street at the terminus of N. Arroyo Parkway. For these reasons, the proposed project qualifies for this exemption, and the analysis below is provided for informational purposes only.

To provide context for project impacts related to visual character and public views, eight visual simulations of the project were prepared and are presented in **Figure 4.1-1** through **Figure 4.1-9**. The visual simulations are based on the conceptual plans for the proposed project and are intended to generally depict the project's building heights and massing relevant to the assessment of aesthetic impacts. Each figure presented below also contains a corresponding photograph showing the existing view for comparison.

View A (Project Site looking South along Fair Oaks Avenue)

This view is located at the intersection of Fair Oaks Avenue and Green Street looking south towards the project site. Currently, a view into Central Park, located south from the project across Dayton Street, is present. However, trees from both the project site and the adjacent Green Hotel Apartments obscure some of the view into Central Park from this location. The western face of the Green Hotel Apartments is viewable from this location running along Fair Oaks Avenue.

Construction of the project would obscure some of the view into Central Park from this location; however, trees and areas located on the western portions of the park would still be visible. The building height and massing would appear similar to the Green Hotel Apartments, which would be located just north of the project along Fair Oaks Avenue. This would create a longer building block face along Fair Oaks Avenue until the intersection of Dayton Street. The visual simulation reflects that the design, colors, and finish

materials of the project would be similar to the Green Hotel Apartments and be compatible with the existing environment and surrounding uses.

Pasadena Municipal Code §17.30.040 provides the general development standards for the Central District. The proposed project would be consistent with the site's development standards, such as for building height (75 feet building height maximum, 90 feet utilizing height averaging), setbacks (none required but allowable up to 5 feet along Dayton Street), and Floor Area Ratio (3.00:1 FAR). The proposed project would have an average height of 69 feet and maximum roof height of 90 feet. There would be no setback along Fair Oaks Avenue and a setback of 2 feet along Dayton Street at the work/live units. The proposed project would have a Floor Area Ratio of 2.89:1.

The proposed project would also comply with the City of Pasadena Ordinance No. 6896 "City Trees and Tree Protection Ordinance. As discussed below in the Biological Resources impact analysis, nine of the trees onsite and all of the adjacent street trees, a total of 17 trees, were noted as being protected under Ordinance 6896. Applications for Private Tree Removal and a landscape plan for the proposed project are required to be prepared and submitted for approval by the Design Commission in conjunction with the design review process. The applications for Private Tree Removal will be required to provide information and documentation to substantiate one or more of the findings for removal of protected trees listed in PMC Section 8.52.075(A). In addition, for any trees that are permitted to be removed using Tree Protection Ordinance finding #6, the required landscape plan will be required to demonstrate the minimum replacement ratio noted in the adopted Tree Replacement Matrix for the existing, protected trees and meet the requirements of the City of Pasadena City Trees and Tree Protection Ordinance No. 6896.

Since the project is within an urban area and would comply with regulations governing scenic quality, impacts would be less than significant.

View B (Project Site looking East along Dayton Street)

This view is located along Dayton Street, across Fair Oaks Avenue, looking east towards the project site. Currently, from this location, the southern edge of the Castle Green, including the distinctive turret, is viewable across the project site which is currently in use as a surface parking lot.

Construction of the project would be similar in building height and massing to the existing Green Hotel Apartments and Castle Green. The height of the proposed project is permittable under the maximum height limits of the Central District Specific Plan and the Pasadena Municipal Code. Looking east from Dayton Street, the project would block views of Castle Green from this vantage point. However, from the View B

vantage point, the southwest corner rotunda of Castle Green would still be visible. Furthermore, as elaborated below in the Cultural Resources impact analysis, the primary east- and west-facing facades would remain unobstructed. Therefore, given that the most prominent aesthetic views of Castle Green would not be affected, impacts from this vantage point are not considered to be a significant impact.

Furthermore, Design Review for the project would ensure the project's compatibility with existing and surrounding uses as it relates to architecture, materials, scale, massing, color, lighting, landscaping, and other design concepts. As discussed above for View A, the proposed project would be consistent with the site's development standards, the City Trees and Tree Protection Ordinance, and regulations governing the existing conditions of the site and the site's historic significance. Since the project is within the urban core of the City, compliance with regulations governing scenic quality would ensure impacts would be less than significant.

View C (Project Site looking Northwest along Dayton Street)

This view is located within Central Park, across Dayton Street and looking northwest into the project site. As the site is currently used as a surface parking lot, the buildings across Fair Oaks Avenue are currently visible from this vantage point. The rear elevation of the Green Hotel Apartments, located north of the project site, is also currently visible.

As the existing surface parking lot would be developed with the proposed six-story building, the buildings across Fair Oaks Avenue from the project site would be obscured from this vantage point upon construction of the project. As would be required by section 17.61.030 of the Pasadena Municipal Code and as the visual simulations demonstrate, the design, colors, and finish materials will be required to achieve compatibility with the surrounding area, including the Green Hotel Apartments. As discussed above for View A, the proposed project would be consistent with the site's development standards, the City Trees and Tree Protection Ordinance, and regulations governing the existing conditions of the site and the site's historic significance.

As discussed in the Cultural Resources impact analysis, since the existing condition of the site no longer reflects the landscape and recreational uses associated with the Hotel's period of significance, demolition of the billboard, surface parking lot, landscaped picnic area, shuffleboard court, and removal of the mature trees would not alter the property's integrity. Furthermore, while the project would remove/relocate some palms and trees, with the proposed landscaping plan palms and trees would remain a prominent visual resource in this viewshed.

Since the project is in an urban area and would be required to comply with these local regulations governing scenic quality, impacts would be less than significant.

View D (Project Site looking North from Central Park, across Dayton Street)

This viewing location is from within Central Park looking north towards the project site and located about 230 feet from the project site. The south elevations of the Green Hotel Apartments and Castle Green are currently visible and located to the north and east of the project site, respectively. However, the current views to both buildings are slightly obscured by trees from within the park as well as the project's adjacent properties.

The project, once built, would be similar in height and massing as the portions of the Green Hotel Apartments and Castle Green that are currently visible from this vantage point. Some of the western edge of the Green Hotel Apartments would be obscured by the project; however, the terracing of the project would ensure that much of the Green Hotel Apartments would still be visible. Furthermore, as reflected in the visual simulations, the design, colors, and finish materials would be similar to the Green Hotel Apartments and Castle Green. As discussed above for View A, the proposed project would be consistent with the site's development standards, the City Trees and Tree Protection Ordinance, and regulations governing the existing conditions of the site and the site's historic significance. The project's compliance with regulations governing scenic quality would ensure impacts would be less than significant.

View E (Project Site looking North from Central Park, across Dayton Street)

This view is similar in location and distance to the view above, but from an angle with fewer trees from within the park obscuring current views of the project site. The Green Hotel Apartments are still slightly obscured by trees located on the project site.

From this vantage point, the visual simulations demonstrate that the proposed building would be more clearly seen as there would not be as much obstruction from trees within the park. The project would cover the western edge of the Green Hotel Apartments, but the terracing of the project would ensure much of the building is still visible from this angle. Furthermore, the building height and massing would be similar to the Green Hotel Apartments and design, colors, and finish materials would also be similar. As discussed above for View A, the proposed project would be consistent with the site's development standards, the City Trees and Tree Protection Ordinance, and regulations governing the existing conditions of the site and the site's historic significance. As the project is within the urban center of the City, compliance with regulations governing scenic quality would ensure that impacts are less than significant.

View F (Project Site looking North from Central Park, across Dayton Street)

This viewing location is located within Central Park, about 385 feet from the project site. Since this vantage point is from further within the park, trees from within the park obscure current views of much of the project site as well as the Green Hotel Apartments. Castle Green is virtually completely obscured by trees from this angle.

Construction of the project would obscure the portions of the Green Hotel Apartments that are visible from this vantage point. However, as noted above, much of the project site and Green Hotel Apartments would still be obstructed from view by trees within the park. While the project would obscure the Green Hotel Apartments located to the north of the project site, the project would be similar in height and massing. Therefore, the project would be compatible with the surrounding visual character and scenic quality. As discussed above for View A, the proposed project would be consistent with the site's development standards, the City Trees and Tree Protection Ordinance, and regulations governing the existing conditions of the site and the site's historic significance. Compliance with regulations regarding scenic quality, since the project is within the urban core of the City, would ensure that impacts are less than significant.

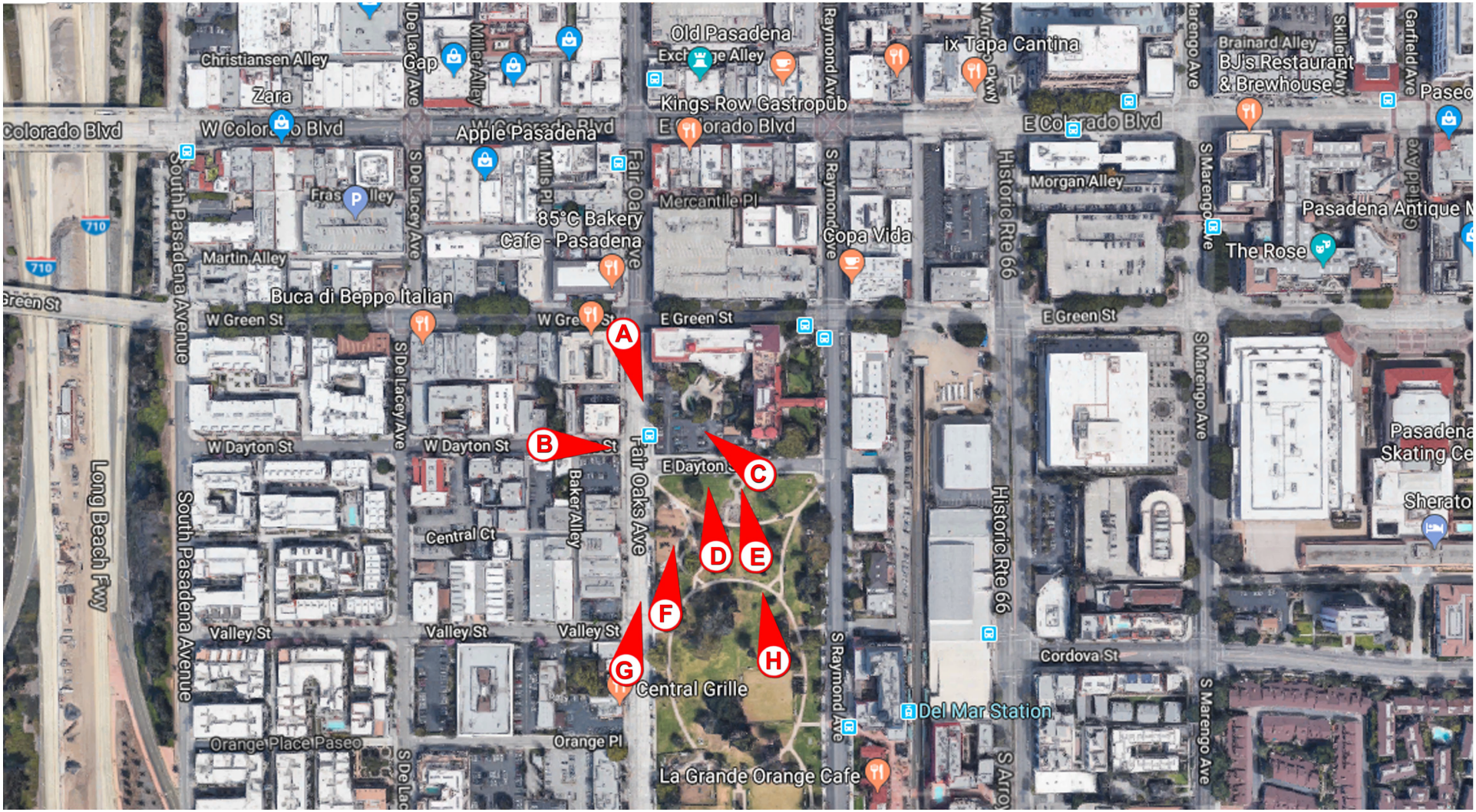
View G (Project Site looking North along Fair Oaks Avenue)

This viewing location is located along Fair Oaks Avenue south of Valley Street, approximately 500 feet from the project site and at an elevated angle. As with the view above, the project site and the Green Hotel Apartments are largely obscured by trees from within both Central Park and the project site.

The project, once built, would further obscure currently visible portions of the Green Hotel Apartments. However, the western portion of the Green Hotel Apartments would still be visible. The project's building height and massing would be similar to the Green Hotel Apartments and the design, color, and finish materials would be compatible with the surrounding area. As discussed above for View A, the proposed project would be consistent with the site's development standards, the City Trees and Tree Protection Ordinance, and regulations governing the existing conditions of the site and the site's historic significance. The project would comply with local regulations governing scenic quality and impacts would be less than significant.

View H (Project Site looking North from Central Park, across Dayton Street)

The view is located within Central Park, approximately 515 feet from the project site. The project site and Green Hotel Apartments are currently partially obscured by trees from within the park as well as trees on their respective lots. The Castle Green is virtually obscured from view by trees from this vantage point.



SOURCE: VisionScape, 2020

FIGURE **4.1-1**

View Key Map

IMPACT SCIENCES

1136.004•03/2020



Existing View



Proposed View

SOURCE: VisionScape, 2020

FIGURE **4.1-2**

View A

IMPACT SCIENCES

1136.004•03/2020



Existing View



Proposed View

SOURCE: VisionScape, 2020

FIGURE **4.1-3**

View B

IMPACT SCIENCES

1136.004•03/2020



Existing View



Proposed View

SOURCE: VisionScape, 2020

FIGURE **4.1-4**

View C

IMPACT SCIENCES

1136.004•03/2020



Existing View



Proposed View

SOURCE: VisionScape, 2020

FIGURE **4.1-5**

View D

IMPACT SCIENCES

1136.004•03/2020



Existing View



Proposed View

SOURCE: VisionScape, 2020

FIGURE **4.1-6**

View E

IMPACT SCIENCES

1136.004•03/2020



Existing View



Proposed View

SOURCE: VisionScape, 2020

FIGURE **4.1-7**

View F

IMPACT SCIENCES



Existing View



Proposed View

SOURCE: VisionScape, 2020

FIGURE **4.1-8**

View G

IMPACT SCIENCES

1136.004•03/2020



Existing View



Proposed View

SOURCE: VisionScape, 2020

FIGURE **4.1-9**

View H

IMPACT SCIENCES

1136.004•03/2020

With construction of the project, some of the western portions of the Green Hotel Apartments that are currently visible would be obscured. However, the project would be similar to the Green Hotel Apartments in building height and massing. Furthermore, the design, color, and finish materials would be compatible with the surrounding visual character and scenic quality. As discussed above for View A, the proposed project would be consistent with the site's development standards, the City Trees and Tree Protection Ordinance, and regulations governing the existing conditions of the site and the site's historic significance. The project would comply with regulations governing scenic quality within urban areas and impacts would be less than significant.

As required by section 17.61.030 of the Pasadena Municipal Code, the design of this project will be reviewed for design review approval by the Design Commission. This regulatory procedure was established to ensure that the design, colors, and finish materials of development projects comply with adopted design guidelines and achieve compatibility with the surrounding area. Although the project would not substantially degrade the visual character of the site and surroundings, this regulatory procedure provides the City with additional layer of review for aesthetics, and an opportunity to incorporate additional conditions to increase the aesthetic value of the project.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

☐ ☐ ☒ ☐

WHY? The project would not have a significant impact on light and glare because it will be required to comply with the standards in the zoning code that regulate glare and outdoor lighting. Height and direction of any outdoor lighting and the screening of mechanical equipment must conform to the requirements of Zoning Code Section 17.40.080 which requires lighting to be energy efficient; to be confined to the maximum extent feasible within the boundaries of the site, and directed downward and away from adjoining properties and public rights-of-way; to not blink, flash or be of unusually high intensity or brightness as determined by the Zoning Administrator, and lighting fixtures to be appropriate in scale, intensity, and height to the use they are serving. The project does not propose any lighting for nighttime events or sporting activities. The only outdoor lighting included in the project are pedestrian safety lighting, landscaping lights, and four streetlights, as required by the Department of Public Works. The project is in an older, developed commercial/mixed-use urban area with streetlights in place, and the proposed exterior lighting would be consistent with the surrounding area. These lights are not substantial sources of glare and are an aide to public safety.

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

In addition, the project will be subject to design review, which provides the City with an additional layer of review for aesthetics including light and glare, and an opportunity to incorporate additional conditions to improve the project's building materials and lighting plans.

Pursuant to regulations provided in SB 743, which applies to residential, mixed-use residential, and employment center projects on infill sites within Transit Priority Areas (TPAs), aesthetic impacts cannot be considered significant. A TPA is defined as an area within one-half mile of a main transit stop that is existing or planned. As noted in Chapter 3, SCEA Eligibility, the proposed project qualifies as a Transit Priority Project (TPP). Therefore, impacts would be less than significant.

4.2 AGRICULTURAL RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

☐ ☐ ☐ ☒

WHY? The City of Pasadena is a developed urban area surrounded by hillsides to the north and northwest. The western portion of the City contains the Arroyo Seco, which runs from north to south through the City. It has commercial recreation, a public park, and natural open space. The City contains no prime farmland, unique farmland, or farmland of statewide importance, as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

☐ ☐ ☐ ☒

WHY? The City of Pasadena has no land zoned for agricultural use other than commercial growing areas. Commercial Growing Area/Grounds is permitted in the CG (General Commercial), CL (Limited

Commercial), and IG (General Industrial) zones and conditionally in the RS (Residential Single-Family),and RM (Residential Multi-Family) districts The use is also permitted within certain specific plan areas. The project site is located in a developed urban area, zoned CD-1 (Central District Specific Plan, Sub-district 1). The City has no Williamson Act contract land. No agricultural uses exist within the proposed project area; therefore, no impacts would occur with regard to existing zoning for agricultural use or Williamson Act contract lands.

c. *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220 (g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104 (g))?*

☐ ☐ ☐ ☒

WHY? There is no timberland or Timberland Production zone in the City of Pasadena; therefore the proposed project would not result in the loss of forest land, timberland or Timberland Production areas.

d. *Result in the loss of forest land or conversion of forest land to a non-forest use?*

☐ ☐ ☐ ☒

WHY? There is no forest land in the City of Pasadena; therefore, the proposed project would not result in the conversion or loss of forest land.

e. *Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?*

☐ ☐ ☐ ☒

WHY? There is no known farmland in the City of Pasadena; therefore, the proposed project would not result in the conversion of farmland to a non-agricultural use.

4.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

This section is based on the information provided in the California Emissions Estimator Model (CalEEMod) 2016.3.2 model using assumptions from the Project Applicant for project construction and operational emissions. The CalEEMod output report is incorporated herein by this reference and provided in Appendix B to this Draft SCEA.

The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make the above determinations. According to the SCAQMD, an air quality

impact is considered significant if the proposed project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality for construction and operational activities of land use development projects, shown in **Table 4.3-1, South Coast Air Quality Management District Regional Significance Thresholds – Pounds per Day**.

Table 4.3-1
South Coast Air Quality Management District Regional Significance Thresholds – Pounds per Day

Mass Daily Thresholds [a]		
Pollutant	**Construction [b]**	**Operation [c]**
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to South Coast AQMD Rule 402	
GHG	10,000 MT/yr CO_2eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants [d]		
NO_2 1-hour average annual arithmetic mean	South coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM10 24-hour average annual average	10.4 µg/m^3 (construction) [e] & 2.5 µg/m^3 (operation) 1.0 µg/m3	
PM2.5 24-hour average	10.4 µg/m^3 (construction) [e] & 2.5 µg/m^3 (operation)	
SO_2 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal - 99th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 µg/m^3 (state)	
CO 1-hour average 8-hour average	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
Lead 30-day Average Rolling 3-month average		1.5 µg/m^3 (state) 0.15 µg/m^3 (federal)		

[a] ***SOURCE:*** *South Coast AQMD CEQA Handbook (South Coast AQMD, 1993)*
[b] *Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).*
[c] *For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.*
[d] *Ambient air quality thresholds for criteria pollutants based on South Coast AQMD Rule 1303, Table A-2 unless otherwise stated.*
[e] *Ambient air quality threshold based on South Coast AQMD Rule 403.*

CO Hotspot Analysis

In addition to the daily thresholds listed above, development associated with the proposed project would also be subject to the ambient air quality standards. These are addressed through an analysis of localized CO impacts. The California 1-hour and 8-hour CO standards are:

- 1-hour = 20 parts per million
- 8-hour = 9 parts per million

The significance of localized impacts depends on whether ambient CO levels in the vicinity of the project site are above state and federal CO standards. Carbon monoxide concentrations in Pasadena no longer exceed either the CAAQS or the NAAQS criteria. Additionally, the SCAB region is designated as attainment under the 1-hour and 8-hour standards (see **Table 4**).

Localized Significance Thresholds

In addition to regional emissions and the CO hotspot analysis, the SCAQMD has developed a set of mass emissions rate look-up tables called localized significance thresholds (LSTs) that can be used to evaluate localized impacts that may result from construction and operational-period emissions. If the on-site emissions from proposed construction activities are below the emission levels found in the LST mass rate look-up tables for the project site receptor area (SRA), then emissions would not have the potential to cause a significant localized air quality impact. When quantifying mass emissions for LST analysis, only emissions that occur on site are considered. Consistent with SCAQMD LST guidance, emissions from offsite delivery hauling trucks, or employee trips are not considered in the evaluation of localized impacts.

The City of Pasadena lies within SCAQMD SRA 8 and the project site is approximately 0.74-acres. Therefore, **Table 4.3-2, Local Significance Thresholds – Pounds per Day,** shows the LST screening threshold for a 1-acre project site in SRA 8 with sensitive receptors located within 25 meters of the project site.

Table 4.3-2
Local Significance Thresholds – Pounds per Day

Phase	Nitrogen Oxide (NO_x)	Carbon Monoxide (CO)	Coarse Particulate Matter (PM10)	Fine Particulate Matter (PM2.5)
Construction	69	535	4	3
Operation	69	535	1	1

Source:
SCAQMD. 2009. Appendix C Mass Rate Look Up Table. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2.

Toxic Air Contaminant Thresholds

Certain groups of people are more affected by air pollution than others. The California Air Resources Board (CARB) has identified the following persons who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. The closest sensitive receptors to the site are residences located adjacent to the Project. However, due to the limited scale and the short duration of construction, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations during construction. Additionally, the proposed Project would not include any operational sources of TACs, and operational emissions were estimated to be far below significance thresholds. Therefore, the proposed Project would not expose sensitive receptors to a potential health risk during operation.

Methodology

Air quality impacts were evaluated in accordance with the methodologies recommended by CARB and the SCAQMD. Where criteria air pollutant quantification was required, emissions modeled using the California Emissions Estimator Model version 2016.3.2 (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects.

Regional Construction Significance Analysis

Construction associated with the proposed project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the project area include ozone-precursor

pollutants (i.e., ROG and NOx), PM10, and PM2.5. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Construction results in the temporary generation of emissions resulting from site grading and excavation, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water.

The duration of construction activities associated with the proposed project is estimated to last approximately 28 months, beginning in 2022. Construction-generated emissions associated with the proposed project were calculated using the SCAQMD and CARB-approved California Emissions Estimator Model (CalEEMod) model. CalEEMod is designed to model construction and operational emissions for land use development projects. The model incorporates typical construction requirements such as construction equipment, demolition debris, and hauling trips. The CalEEMod model assumed that construction of the proposed project would include approximately 45,500 cubic yards of grading soil export and construction equipment was based on information provided by the project applicant, including the use of Tier 3 construction equipment. Predicted maximum daily construction-generated emissions for the proposed project are summarized in **Table 4.3-3, Construction-Related Criteria Pollutant and Precursor Emissions – Maximum Pounds per Day.**

Table 4.3-3
Construction-Related Criteria Pollutant and Precursor Emissions – Maximum Pounds per Day

Construction Year	ROG	NOx	CO	SO2	PM10	PM2.5
2022	3.3	60.1	68.7	0.2	4.6	3.3
2023	1.3	20.3	26.7	0.1	2.2	1.5
2024	15.1	21.6	28.9	0.1	2.5	1.6
Regional Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed?	*No*	*No*	*No*	*No*	*No*	*No*

*Source: Impact Sciences, CalEEMod modeling, 2020. See **Appendix A.***
The emissions include measures within CalEEMod and as required by the SCAQMD through Rule 403. This includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hours. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Consistent with CARB fleet requirements, construction equipment was assumed to meet minimum Tier 3 standards.

During construction, the contractors are required to comply with SCAQMD Rule 402 (Nuisance) and Rule 403 (Fugitive Dust), among others, which assist in reducing short-term construction-related air pollutant emissions. Rule 402 prohibits emissions that would cause a public nuisance and Rule 403 requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. As shown below, all criteria pollutant emissions would remain below their respective thresholds. The proposed project would be subject to Rules 402, 403, and 113, described in the Regulatory Framework subsection above. In addition, the project would utilize Tier 3 construction equipment (or better) which would reduce NOx and particulate matter.

Regional Operational Significance Analysis

Project-generated emissions would be associated with motor vehicle use and area sources, such as the use of natural-gas-fired appliances, landscape maintenance equipment, and architectural coatings associated with the operation of an 84-unit apartment building with 6,200 square feet of retail space and 4 work/live units. Long-term operational emissions attributable to the proposed project are summarized in **Table 4.3-4, Long-Term Operational Emissions – Maximum Pounds per Day**.

As shown in **Table 4.3-2** and **Table 4.3-4**, neither the project's construction nor operational emissions would exceed the SCAQMD's thresholds for any criteria air pollutants. Therefore, regional construction and operation operational emissions would not result in a significant long-term regional air quality impact.

Table 4.3-4
Long-Term Operational Emissions – Maximum Pounds per Day

Source	ROG	NOx	CO	SO2	PM10	PM2.5
Area Source	24.2	1.8	49.7	0.11	6.5	6.46
Energy Use	0.03	0.24	0.10	.002	0.02	0.02
Mobile Source	1.23	5.3	15.5	0.06	5.4	1.49
Total	25.5	7.4	65.3	0.17	11.92	7.96
Regional Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed?	*No*	*No*	*No*	*No*	*No*	*No*

*Source: Impact Sciences, CalEEMod modeling, 2020. See **Appendix B**.*

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., background and cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individuals [e.g., age, gender]). In particular, O_3 precursors, VOCs, and NOx affect air quality on a regional scale. Health effects related to O_3

are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the project's less than significant increases in regional air pollution from criteria air pollutants would not have a measurable effect on the human health implications of the Basin's ambient air quality.

As noted in the Brief of Amicus Curiae by the SCAQMD (April 6, 2015) for the *Sierra Club vs. County of Fresno*, the SCAMQD acknowledged it would be extremely difficult, if not impossible to quantify health impact of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Further, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD) (April 13, 2015) for the *Sierra Club vs. County of Fresno*, SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

The SCAQMD acknowledges that quantifying the health impacts from O_3 is difficult. The health impacts an individual may face from O_3 depends on the ambient levels of O_3 that an individual person breathes. However, measuring changes in ambient levels of O_3 presents a challenge. SCAQMD's Brief of Amicus Curiae states that it would take a large amount of additional emissions to cause a modeled increase in ambient O_3 levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's *2012 Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NOx and a reduction of 187 tons (374,000 pounds) per day of VOC would reduce O3 levels at the highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify O_3-related health impacts caused by NOx or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. Thus, as the project would not exceed SCAQMD thresholds for construction and operational air emissions, the project would have a less than significant impact for air quality health impacts.

a. Conflict with or obstruct implementation of the applicable air quality plan?

☐ ☐ ☐ ☒

WHY? The City of Pasadena is within the South Coast Air Basin (SCAB), which is bounded by the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the Pacific Ocean to the south and west. The air quality in the SCAB is managed by the South Coast Air Quality Management District (SCAQMD).

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

The SCAB has a history of recorded air quality violations and is an area where both state and federal ambient air quality standards are exceeded. Because of the violations of the California Ambient Air Quality Standards (CAAQS), the California Clean Air Act (CCAA) requires triennial preparation of an Air Quality Management Plan (AQMP). The AQMP analyzes air quality on a regional level and identifies region-wide attenuation methods to achieve the air quality standards. These region-wide attenuation methods include regulations for stationary-source polluters; facilitation of new transportation technologies, such as low-emission vehicles; and capital improvements, such as park-and-ride facilities and public transit improvements.

The most recently adopted plan is the 2016 AQMP, adopted on March 3, 2017. This plan is the South Coast Air Basin's portion of the State Implementation Plan (SIP). This plan is designed to achieve the five percent annual reduction goal of the CCAA.

The SCAQMD understands that southern California is growing. As such, the AQMP accommodates population growth and transportation projections based on the predictions made by the Southern California Association of Governments (SCAG). Thus, projects that are consistent with employment and population forecasts are consistent with the AQMP.

The proposed project is consistent with the Zoning and General Plan Land Use designations for the site. As a result, the project is consistent with the growth expectations for the region. The proposed project is therefore consistent with the AQMP and would have no associated impacts.

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

☐ ☐ ☒ ☐

The SCAQMD's approach to assessing cumulative impacts is based on the 2016 AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the Clean Air Act (CAA) of 1970, and the CCAA. The SCAQMD neither recommends quantified analyses of cumulative construction or operational emissions, nor does it provide separate methodologies or thresholds of significance to be used to assess cumulative construction or operational impacts. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed using the same significance criteria as those for project-specific impacts. Therefore, individual development projects that generate construction-related or operational emissions that exceed the SCAQMD recommended daily thresholds for project-specific impacts would also cause a cumulative considerable increase in emissions for those pollutants for which the Basin is nonattainment.

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

As discussed in threshold question (a), the proposed project would be consistent with the 2016 AQMP, which is intended to bring the SCAB into attainment for all criteria pollutants. Furthermore, operational and construction emissions calculated for the proposed project do not exceed the applicable SCAQMD daily significance thresholds that are designed to assist the region in attaining the applicable ambient air quality standards (see **Table 4.3-3, Construction-Related Criteria Pollutant and Precursor Emissions** and **Table 4.3-4, Long-Term Operational Emissions**).

Additionally, with respect to the proposed project's construction-related air quality emissions and cumulative basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the 2016 AQMP pursuant to federal CAA mandates. As such, the proposed project would comply with SCAQMD Rule 403 requirements and with adopted 2016 AQMP emissions control measures. Per SCAQMD rules and mandates, these same requirements (i.e., Rule 403 compliance and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects throughout the SCAB, which would include related projects.

The proposed project would also not result in cumulative operational air quality impacts because emissions would not exceed the SCAQMD-adopted operational thresholds and the project's contribution is not a significant proportion of the cumulative total emissions. Cumulative projects would likewise be required to reduce their emissions per SCAQMD rules and mandates. The project's emissions would not considerably contribute to an exceedance of the National Ambient Air Quality Standards (NAAQS) or CAAQS and would, therefore, comply with the goals of the 2016 AQMP. Therefore, the project's contribution to regional pollutant concentrations would not be cumulatively considerable and cumulative impacts would not be significant.

c. Expose sensitive receptors to substantial pollutant concentrations?

☐ ☐ ☒ ☐

WHY? Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiovascular diseases.

Residential areas are considered to be sensitive receptors to air pollutions because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Children are considered more susceptible to health effects of air pollution due to their immature immune systems and developing organs (OEHHA 2007). As such, schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although

exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation.

Localized Significance Thresholds

Localized Construction Significance Analysis

The nearest receptors to the project site are residents located adjacent to the north and east of the project site. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing Localized Significance Thresholds (LSTs) for construction.

LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAMQD provided the *Final Localized Significance Threshold Methodology* for guidance (SCAQMD 2008). The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific analysis.

The SRA for the LST is the West San Gabriel Valley area (SRA 8) since this area includes the project site. LSTs apply to CO, NO_2, PM10, and PM2.5. The SCAMQD produced look-up tables for projects that disturb areas less than or equal to 5 acres in size. The project site is approximately 0.74-acres, therefore, the LST screening thresholds for one acre were utilized for the construction LST analysis.

The SCAQMD's methodology clearly states that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered. The nearest sensitive receptors to the project site are the residents adjacent to the north and east. LST screening thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. According to SCAQMD methodology, "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters." Therefore, LSTs for receptors located at 25 meters were utilized in this analysis.

Table 4.3-5, Localized Significance of Construction Emissions – Maximum Pounds per Day, presents the results of the localized emissions during construction activity of the proposed project. As shown in **Table 4.3-5**, the on-site air pollutant emissions on the peak day of construction would not exceed the applicable LST screening thresholds. Therefore, impacts would be less than significant.

Table 4.3-5
Localized Significance of Construction Emissions – Maximum Pounds per Day

Construction Year	NOx	CO	PM10	PM2.5
2022	31.02	38.49	1.44	1.42
2023	18.48	23.20	0.95	0.95
2024	18.47	23.20	0.95	0.95
LST Screening Threshold	**69**	**535**	**4**	**3**
Exceed?	***No***	***No***	***No***	***No***

Localized Operational Significance Analysis

According to the SCAQMD LST methodology, LSTs would apply to operational phase of a proposed project only if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The project is proposing a mixed-use residential and commercial development and, therefore, does not include such land uses. Thus, due to the lack of queuing and idling emissions, no long-term localized significance threshold analysis is needed. Operational LST impacts would be less than significant in this regard.

Localized Air Quality Health Impacts

As evaluated above, the project's air emissions would not exceed the SCAQMD's LST thresholds. Therefore, the project would not cause or contribute to an exceedance of the most stringent applicable NAAQS or CAAQS for emissions of CO, NOx, PM10, or PM2.5. It should be noted that the ambient air quality standards are developed and represent levels at which the most susceptible persons are protected. In other words, the ambient air quality standards are purposely set in a stringent manner to protect children, the elderly, and those with existing respiratory problems. Thus, air quality health impacts would be less than significant in this regard.

Carbon Monoxide Hotspots

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near congested roadways or intersections may reach unhealthful levels (i.e., adversely affecting residents, school children, hospital patients, the elderly, etc.).

The SCAB is designated as an attainment/maintenance area for the federal CO standards and an attainment area for state standards. There has been a decline in CO emissions even though vehicle miles

traveled (VMT) on U.S. urban and rural roads have increased nationwide; estimated anthropogenic CO emissions have decreased 68 percent between 1990 and 2014. In 2014, mobile sources accounted for 82 percent of the nation's total anthropogenic CO emissions (EPA 2018). Three major control programs have contributed to the reduced per-vehicle CO emissions: exhaust standards, cleaner burner fuels, and motor vehicle inspection/maintenance programs.

According to the SCAQMD CEQA Air Quality Handbook, a potential CO hotspot may occur at any location where the background CO concentration already exceeds 9.0 ppm, the CAAQS for 8-hour ozone. The SCAQMD prepared a detailed CO analysis in the *Federal Attainment Plan for Carbon Monoxide* as part of the 2003 AQMP. The 2003 AQMP is the most recent AQMP that addresses CO concentrations. The CO analysis included microscale modeling of CO at the worst-case intersections in SCAB. Of these locations, the Wilshire Boulevard and Veteran Avenue intersection in Los Angeles experienced the highest CO concentration of 4.6 ppm. At the time of analysis, the Wilshire Boulevard and Veteran Avenue intersection was the most congested intersection in Los Angeles County with an average daily traffic volume of approximately 100,000 vehicles per day. As CO impacts at the Wilshire Boulevard and Veteran Avenue intersection did not exceed the 8-hour CAAQS, it can be inferred that the intersections near the project site would not create any CO hotspots. Furthermore, as previously discussed, the site is located in SRA 8, West San Gabriel Valley. Communities within SRAs are expected to have similar climatology and ambient air pollutant concentrations. The monitoring station representative of SRA 8 is the Pasadena-South Wilson Avenue air quality monitoring station located approximately 1.5 miles southeast of the site. According to data obtained from the EPA's AirData database for CO pollutants, the highest eight-hour concentration reported for the Pasadena station in 2018 was 1.4 ppm. As such, the background CO concentration in combination with the CO concentration at worst-case scenario intersection in SCAB do not exceed 9.0 ppm and a CO hotspot would not occur. Therefore, CO hotspot impacts would be less than significant in this regard.

Diesel Particulate Matter

Construction would result in the generation of diesel particulate matter (diesel PM) emissions from the use of off-road diesel equipment required for grading and excavation, paving, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short and exhaust from construction equipment dissipates rapidly. Current methodology for conducting health risk assessments are associated with long term exposure periods (9, 30, and 70 years). Therefore, short-term construction activities would not generate a significant health risk.

Additionally, the project site is approximately 0.74-acres and, as a result, construction activities would occur in an area of less than 5 acres. CARB generally considers construction projects contained in a site of such size to represent less than significant health risk impacts due to limitations of the off-road diesel equipment able to operate and thus a reduced amount of generated diesel particulate matter (DPM), the reduced amount of dust-generating ground-disturbance possible compared to larger construction sites, and the reduced duration of construction activities compared to the development of larger sites. Furthermore, construction would be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than 5 minutes, which would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. For these reasons, DPM generated by construction activities, in and of itself, would not be expected to expose sensitive receptors to substantial amounts of air toxics and the project would have a less than significant impact.

d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

☐ ☐ ☒ ☐

WHY? The SCAQMD *CEQA Air Quality Handbook* (1993) identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed project would not include any of the land uses that have been identified by the SCAQMD as odor sources.

Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon project completion. In addition, the project would be required to comply with the California Code of Regulations, Title 13, sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would reduce the detectable odors from heavy-duty equipment exhaust. The project would also be required to comply with the SCAQMD Rule 1113 – Architectural Coating, which would minimize odor impacts from ROG emissions during architectural coating. Any odor impacts to existing adjacent land uses would be short-term and not substantial. As such, the project would not result in other

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

4.4 BIOLOGICAL RESOURCES

Would the project:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

☐ ☐ ☐ ☒

WHY? The project is in a developed urban area. There are no known unique, rare or endangered plant or animal species or habitats on or near the site.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

☐ ☐ ☐ ☒

WHY? There are no designated natural communities in the City. The Final EIR for the 2015 Land Use and Mobility Elements contains the best available City-wide documented biological resources. This EIR identifies the natural habitat areas within the City's boundaries to be the upper and lower portions of the Arroyo Seco, the City's western hillside area, and Eaton Canyon. The project is not located near any of these natural habitat areas. The project is located in a developed urban area. The only vegetation present onsite is ornamental landscaping. The project site and surrounding area do not include any vegetation that constitutes a plant community.

c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

☐ ☐ ☐ ☒

WHY? Drainage courses with definable bed and bank and their adjacent wetlands are "waters of the United States" and fall under the jurisdiction of the U.S. Army Corps of Engineers (USACE) in accordance with Section 404 of the Clean Water Act. Jurisdictional wetlands, as defined by the USACE are lands that, during normal conditions, possess hydric soils, are dominated by wetland vegetation, and are inundated with water for a portion of the growing season.

The project is located in a developed urban area. There is no naturally occurring wetland habitat. The project site does not include any discernable drainage courses, inundated areas, wetland vegetation, or

hydric soils, and thus does not include USACE jurisdictional drainages or wetlands. Therefore, the proposed project would have no impact to federally protected wetlands as defined by Section 404 of the Clean Water Act.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

☐ ☐ ☒ ☐

WHY? The project is located in a developed urban area and does not involve the dispersal of wildlife nor would the project result in a barrier to migration or movement. However, the project includes the removal of trees that have the potential to be nesting sites for birds. The Migratory Bird Treaty Act of 1918 (MBTA) implements the United States' commitment to four treaties with Canada, Japan, Mexico, and Russia for the protection of shared migratory bird resources. The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. The US Fish and Wildlife Service administers permits to take migratory birds in accordance with the MBTA. The proposed project would comply with all applicable regulation of the MBTA. Therefore, project impacts to wildlife movement would be less than significant.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

☐ ☐ ☒ ☐

WHY? The City of Pasadena Ordinance No. 6896 "City Trees and Tree Protection Ordinance" is in place to:

A. Preserve and grow Pasadena's canopy cover by protecting landmark, native and specimen trees on specified areas of private property and expanding the protection of street trees and trees on public property.

B. Safeguard the City's urban forest by providing for the regulation of the protection, planting, maintenance and removal of trees in the city.

C. Protect the visual and aesthetic character of the city.

D. Improve and enhance property values by conserving and adding to the distinctive and unique aesthetic character of the many areas of Pasadena.

E. Improve the quality of life for residents, visitors and wildlife.

F. Create favorable conditions for the protection of designated landmark, native and specimen trees, for the benefit of current and future residents of Pasadena.

G. Maintain and enhance the general health, safety and welfare of the city and its residents by assisting in counteracting air pollution and in minimizing soil erosion and other related environmental damage.

H. Protect and maintain healthy trees in the land use planning processes as set forth herein.

I. Establish procedures and practices for fulfilling the purposes of this city tree and tree protection ordinance.

A tree survey was completed in ~~July 2017~~ May 2018 by Carlberg Associates to identify the existing on-site trees, evaluate the size and condition of each tree, and note whether or not the tree could remain in place, be relocated, or would need to be removed entirely. Refer to Appendix C, Biological Resources.

As listed below in **Table 4.4-1, Summary of On-Site Protected Trees,** and shown on **Figure 4.4-1, Existing On-Site Tree Locations**, the Project Site contains 31 trees. Seven of the trees onsite and all of the adjacent street trees, a total of 15 trees, were noted as being protected under Ordinance 6896. As detailed in **Table 4.4-1**, the seven on-site protected trees consisted of two California fan palms, one Canary Island date palm, three Camphor trees, and one Indian laurel fig tree. Subsequent to the ~~2017~~ 2018 tree survey, Tree #24, a protected Indian laurel fig (*Ficus microcarpa*), failed from the root plate during one of the rain storms in January 2019 ~~2018~~ and was subsequently removed (refer to Appendix C, Biological Resources for photographs). Based on the prior documented presence of fungal fruiting bodies and the nature of the failure, this tree failure appears to have occurred due to storm-related pressure on a significantly compromised root structure. These are natural causes and not related to any project-related activity.

Table 4.4-1
Summary of On-Site Protected Trees

Tree ID #	Botanical Name	Common Name	DBH / *BTH*[1]	Height	Health & Structure Grades	Disposition	Protected?
ST1	*Lagerstroemia indica*	Crape myrtle	3”	20	B B	**Retain**	**Yes**
ST2	*Lagerstroemia indica*	Crape myrtle	3”	15	A A	**Retain**	**Yes**
ST3	*Lagerstroemia indica*	Crape myrtle	2”	13	A- B	**Retain**	**Yes**

		Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact	

Tree ID #	Botanical Name	Common Name	DBH / *BTH*[1]	Height	Health & Structure Grades	Disposition	Protected?
ST4	*Lagerstroemia indica*	Crape myrtle	1”	10	F F	**Retain**	**Yes**
ST5	*Lagerstroemia indica*	Crape myrtle	1”	10	B B	**Retain**	**Yes**
ST6	*Lagerstroemia indica*	Crape myrtle	stump sprouts	4	A- C	**Retain**	**Yes**
ST7	*Syagrus romanzoffiana*	Queen palm	*20’*	30	A A	***Relocate***	**Yes**
ST8	*Syagrus romanzoffiana*	Queen palm	*15’*	20	A B	**Retain**	**Yes**
12	*Ailanthus altissima*	Tree of Heaven	8.5”	30	A B	Remove	No
13	*Washingtonia robusta*	Mexican fan palm	*50’*	58	A A	Remove	No
14	*Washingtonia robusta*	Mexican fan palm	*65’*	73	A A	Remove	No
15	*Pinus canariensis*	Canary Island pine	21”	80	B B	Remove	No
16	*Pinus canariensis*	Canary Island pine	18.5”	75	A B-	Remove	No
17	*Washingtonia robusta*	Mexican fan palm	*42’*	50	A A	Remove	No
18	*Cinnamomum camphora*	Camphor tree	19, 21,31”	45	B C	Remove	**Yes**
19	*Cinnamomum camphora*	Camphor tree	16,16.5”	45	B B	Remove	**Yes**
20	*Cinnamomum camphora*	Camphor tree	18.5, 23.5”	45	B B	Remove	**Yes**
21	*Ulmus parvifolia*	Chinese elm	15”	25	B C	Remove	No
22	*Washingtonia robusta*	Mexican fan palm	*50’*	57	A A-	Remove	No
23	*Washingtonia filifera*	California fan palm	*45’*	55	A A-	***Relocate***	**Yes**
24	*Ficus microcarpa*[1]	Indian laurel fig	40.5”	45	B C	***Failed***[1]	**Yes**
25	*Washingtonia robusta*	Mexican fan palm	*50’*	58	A A-	Remove	No
26	*Phoenix canariensis*	Canary Island date palm	*50’*	58	A A	***Relocate***	**Yes**
27	*Washingtonia robusta*	Mexican fan palm	*55’*	62	A A	Remove	No

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

Tree ID #	Botanical Name	Common Name	DBH / *BTH*[1]	Height	Health & Structure Grades	Disposition	Protected?
28	*Washingtonia robusta*	Mexican fan palm	*55'*	62	A A	Remove	No
29	*Washingtonia robusta*	Mexican fan palm	*60'*	68	A A	Remove	No
30	*Magnolia grandiflora*	Southern magnolia	15"	30	B B	Remove	No
31	*Washingtonia filifera*	California fan palm	*50'*	60	A B	***Relocate***	**Yes**

DBH = diameter at breast height BTH = brown trunk height

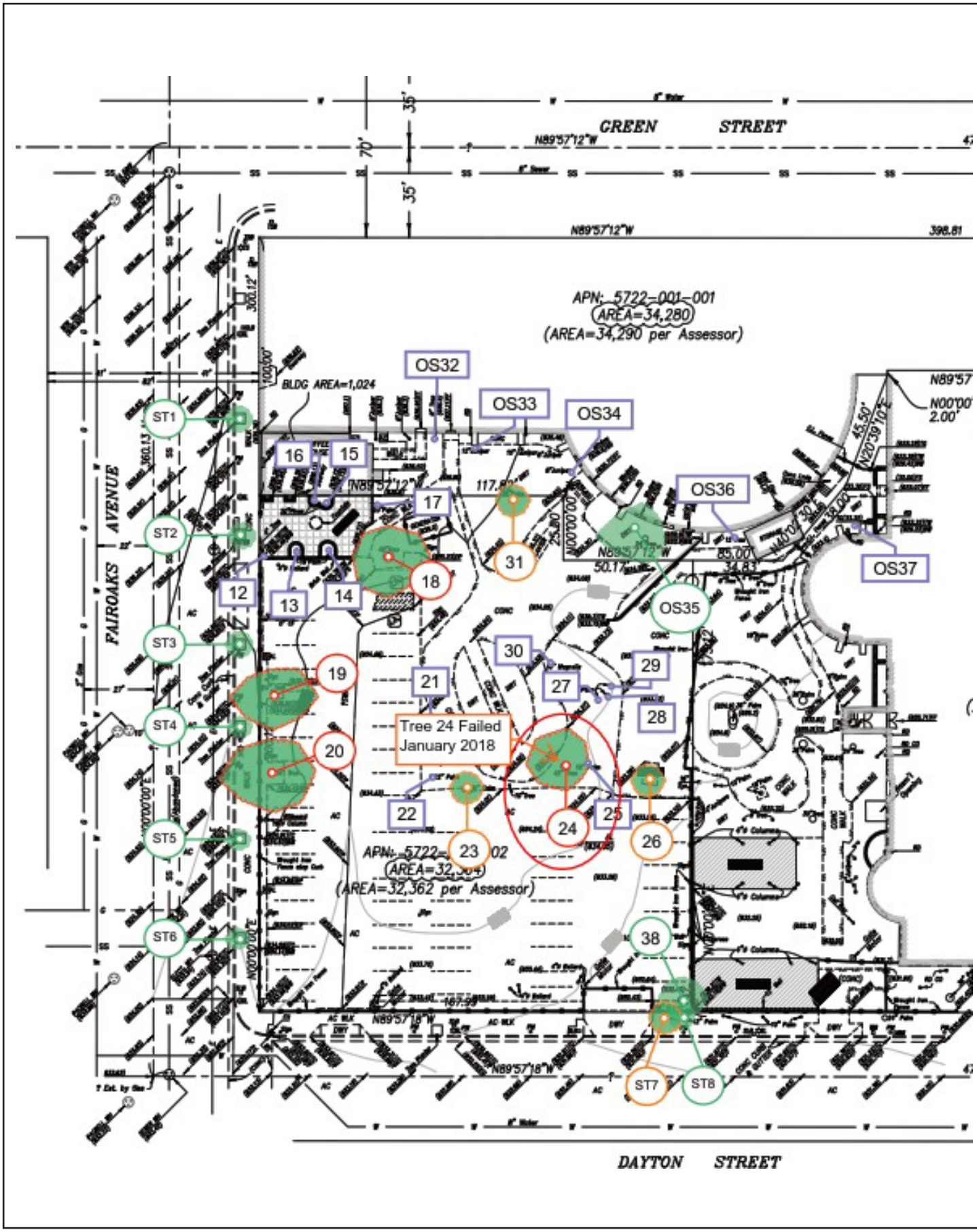
1 – Tree #24 failed in January 2019 and is no longer on-site

Source: Carlberg Associates, Horticulturalists and Registered Consulting Arborists, ~~July 10, 2017~~ May 2018 and March 2019

Applications for Private Tree Removal and a landscape plan for the proposed project are required to be prepared and submitted for approval by the Design Commission in conjunction with the design review process. The applications for Private Tree Removal will be required to provide information and documentation to substantiate one or more of the findings for removal of protected trees listed in PMC Section 8.52.075(A). In addition, for any trees that are permitted to be removed using Tree Protection Ordinance finding #6, the required landscape plan will be required to demonstrate the minimum replacement ratio noted in the adopted Tree Replacement Matrix for the existing, protected trees and meet the requirements of the City of Pasadena City Trees and Tree Protection Ordinance No. 6896. Further, removal of any tree in the public right-of-way requires review by the Urban Forestry Advisory Committee and approval by the City Manager (none are proposed to be removed) and the planting of any tree in the public right-of-way requires approval of the staff of the Department of Public Works.

In accordance with City Tree Replacement Requirements, as shown on **Figure 2.0-32, Ground Level Landscape Plan**, the Proposed Project would plant 17 36" box (or larger) trees, and 21 24" box trees, for a total of 38 new trees. Following the planting of these new trees, there would be a net gain of 21 new trees on the Project Site, and the Proposed Project would exceed the City's Replacement Tree Requirement for the trees removed.

Following the implementation of the City's standard policies and procedures described above, impacts would be less than significant, and no further analysis is required.



SOURCE: Carlberg Associates, Horticulturalists and Registered Consulting Arborists, December 2019

FIGURE **4.4-1**

IMPACT SCIENCES

Existing On-Site Tree Locations

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

f. Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan?

☐ ☐ ☐ ☒

WHY? Currently, there are no adopted Habitat Conservation or Natural Community Conservation Plans within the City of Pasadena. There are also no approved local, regional or state habitat conservation plans.

4.5 CULTURAL RESOURCES

Would the project:

a. Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

☐ ☐ ☒ ☐

WHY? The following analysis is based on the *86 Fair Oaks Avenue Historic Resources Technical Report (*Historic Resources Report*),* prepared by Historic Resources Group, dated ~~September~~ October 2020, incorporated herein by reference and included as **Appendix E** to this SCEA.

EXISTING CONDITIONS

The Project Site is located within the Old Pasadena Historic District which is listed in the National Register of Historic Places (1983; revised 2008). In addition, the Project Site is located within the boundary of the Hotel Green/Castle Green property, which was listed individually in the National Register of Historic Places in 1982. By virtue of being listed in the National Register, both the Old Pasadena Historic District and the Hotel Green/Castle Green property are also listed in the California Register of Historical Resources. At the local level in the City of Pasadena, the Hotel Green/Castle Green was designated as a Historic Monument in 1997.[1]

The boundaries of the Hotel Green/Castle Green as defined in the original National Register registration form are: "The square block bounded by Raymond Avenue on the east, Green Street on the north, Fair Oaks [A]venue on the west and Dayton Street on the south."[2] Thus, the entire block, which includes the Project Site, is listed as a historic property in the National Register and California Register.

Across Dayton Street to the south is Central Park, a 9.2-acre park which is also a contributing resource to the Old Pasadena Historic District. Across Fair Oaks Avenue to the west are three- to four-story mixed-use

1 When the Hotel Green/Castle Green was designated locally in 1997 it was as a Historic Treasure. The Pasadena Municipal Code was subsequently modified in 2005 and all Historic Treasure designations became Historic Monuments.

2 "Hotel Green" National Register of Historic Places Inventory – Nomination Form, 1982.

buildings and parking lots, and across Raymond Avenue to the east are one- and two-story commercial buildings. A more detailed description of adjacent structures that are contributing and non-contributing to the Old Pasadena Historic District is provided in the Historic Resources Report (**Appendix E**).

REGULATORY REVIEW

Historic Resources under CEQA

In accordance with Section 15064.5(b) of the *CEQA Guidelines*, a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.

When the California Register of Historical Resources was established in 1992, the Legislature amended CEQA to clarify which cultural resources are significant, as well as which project impacts are considered to be significantly adverse. A "substantial adverse change" means "physical demolition, destruction, relocation, or alteration…such that the significance of an historical resource would be materially impaired."[3]

Section 15064.5 of the *State CEQA Guidelines* defines a historical resource as (1) a resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources; (2) a resource listed in a local register of historical resources or identified as significant in an historical resource survey meeting certain state guidelines; or (3) an object, building, structure, site, area, place, record or manuscript that a lead agency determines to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided that the lead agency's determination is supported by substantial evidence in light of the whole record.

The courts have interpreted CEQA to create three categories of historical resources:

- *Mandatory historical resources* are resources "listed in, or determined to be eligible for listing in, the California Register of Historical Resources."
- *Presumptive historical resources* are resources "included in a local register of historical resources, as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1" of the Public Resources Code, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant.

3 *State CEQA Guidelines*, Section 15064.5(b)(1).

- *Discretionary historical resources* are those resources that are not listed but determined to be eligible under the criteria for the California Register of Historical Resources.[4]

Historic Designations

A property may be designated as historic by National, State, and local authorities. In order for a building to qualify for listing in the National Register or the California Register, it must meet one or more identified criteria of significance. The property must also retain sufficient architectural integrity to continue to evoke the sense of place and time with which it is historically associated.

National Register of Historic Places

The National Register of Historic Places is an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment.[5] The National Park Service administers the National Register program. Listing in the National Register assists in preservation of historic properties in several ways including: recognition that a property is of significance to the nation, the state, or the community; consideration in the planning for federal or federally assisted projects; eligibility for federal tax benefits; and qualification for Federal assistance for historic preservation, when funds are available.

To be eligible for listing and/or listed in the National Register, a resource must possess significance in American history and culture, architecture, or archaeology. Listing in the National Register is primarily honorary and does not in and of itself provide protection of an historic resource. The primary effect of listing in the National Register on private owners of historic buildings is the availability of financial and tax incentives. In addition, for projects that receive Federal funding, a clearance process must be completed in accordance with Section 106 of the National Historic Preservation Act. Furthermore, state and local regulations may apply to properties listed in the National Register.

The criteria for listing in the National Register follow established guidelines for determining the significance of properties. The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects:

---

4 *League for the Protection of Oakland's Architectural and Historic Resources vs. City of Oakland*, 52 Cal. App. 4th 896, 906-7 (1997).

5 36CFR60, Section 60.2.

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, information important in prehistory or history.[6]

In addition to meeting any or all of the criteria listed above, properties nominated must also possess integrity of *location, design, setting, materials, workmanship, feeling,* and *association.*

Historic Districts

Standard preservation practice evaluates collections of buildings from similar time periods and historic contexts as historic *districts*. The National Park Service defines a historic district as "a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development."[7] A historic district derives its significance as a single unified entity.

According to the National Park Service, "a district can comprise both features that lack individual distinction and individually distinctive features that serve as focal points. It may even be considered eligible if all of the components lack individual distinction, provided that the grouping achieves significance as a whole within its historic context. In either case, the majority of the components that add to the district's historic character, even if they are individually undistinguished, must possess integrity, as must the district as a whole." Some examples of districts include business districts, college campuses, large estates, farms, industrial complexes, residential areas and rural villages.[8]

Resources that have been found to contribute to the historic identity of a district are referred to as *district contributors*. Properties located within the district boundaries that do not contribute to its significance are identified as *non-contributors*.

---

6 36CFR60, Section 60.3.

7 National Register Bulletin 15. How to Apply the National Register Criteria for Evaluation. Washington D.C.: National Park Service, U. S. Department of the Interior, 1997.

8 Ibid.

California Register of Historical Resources

The California Register is an authoritative guide in California used by State and local agencies, private groups, and citizens to identify the State's historic resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change.[9]

The criteria for eligibility for listing in the California Register are based upon National Register criteria. These criteria are:

1. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.

2. Associated with the lives of persons important to local, California or national history.

3. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.

4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register includes the following:

- California properties formally determined eligible for (Category 2 in the State Inventory of Historical Resources), or listed in (Category 1 in the State Inventory), the National Register of Historic Places.

- State Historical Landmarks No. 770 and all consecutively numbered state historical landmarks following No. 770. For state historical landmarks preceding No. 770, the Office of Historic Preservation (OHP) shall review their eligibility for the California Register in accordance with procedures to be adopted by the State Historical Resources Commission (commission).

- Points of historical interest which have been reviewed by the OHP and recommended for listing by the commission for inclusion in the California Register in accordance with criteria adopted by the commission.[10]

9 California PRC, Section 5023.1(a).

10 California PRC, Section 5023.1(d).

Other resources which may be nominated for listing in the California Register include:

- Individual historical resources.
- Historic resources contributing to the significance of an historic district.
- Historic resources identified as significant in historic resources surveys, if the survey meets the criteria listed in subdivision (g).
- Historic resources and historic districts designated or listed as city or county landmarks or historic properties or districts pursuant to any city or county ordinance, if the criteria for designation or listing under the ordinance have been determined by the office to be consistent with California Register criteria.
- Local landmarks or historic properties designated under any municipal or county ordinance.[11]

Local Designation Programs

The City of Pasadena has established an historic preservation program in order to promote "the identification, evaluation, rehabilitation, adaptive use, and restoration of historic structures." The criteria for the designation of historic monuments, landmarks, historic signs, landmark trees, or landmark districts are applied "according to applicable National Register of Historic Places Bulletins for evaluating historic properties." These criteria are excerpted below from Section 17.62.40 of the Pasadena Zoning Code.[12]

Historic Monuments

A historic monument shall include all historic resources previously designated as historic treasures before adoption of Pasadena Zoning Code Section 17.62.040 - Criteria for Designation of Historic Resources in 2005 (Criteria), historic resources that are listed in the National Register at the State-wide or Federal level of significance (including National Historic Landmarks) and any historic resource that is significant at a regional, State, or Federal level, and is an exemplary representation of a particular type of historic resource and meets one or more of the following criteria:

---

11 California PRC, Section 5023.1(e).

12 City of Pasadena Online Zoning Code Title 17. 17.62.040 - Criteria for Designation of Historic Resources https://library.municode.com/ca/pasadena/codes/code_of_ordinances?nodeId=TIT17_ZONING_CODE_ART6LAUSDEPEPR_CH17.62HIPR_17.62.040CRDEHIRE.

a) It is associated with events that have made a significant contribution to the broad patterns of the history of the region, State, or nation.

b) It is associated with the lives of persons who are significant in the history of the region, State, or nation.

c) It is exceptional in the embodiment of the distinctive characteristics of a historic resource property type, period, architectural style, or method of construction, or that is an exceptional representation of the work of an architect, designer, engineer, or builder whose work is significant to the region, State, or nation, or that possesses high artistic values that are of regional, State-wide or national significance.

d) It has yielded, or may be likely to yield, information important in prehistory or history of the region, State, or nation.

A historic monument designation may include significant public or semi-public interior spaces and features.

Landmarks

A landmark shall include all properties previously designated a landmark before adoption of the Criteria and any historic resource that is of a local level of significance and meets one or more of the criteria listed below.

A landmark may be the best representation in the City of a type of historic resource or it may be one of several historic resources in the City that have common architectural attributes that represent a particular type of historic resource. A landmark shall meet one or more of the following criteria:

a) It is associated with events that have made a significant contribution to the broad patterns of the history of the City, region, or State.

b) It is associated with the lives of persons who are significant in the history of the City, region, or State.

c) It embodies the distinctive characteristics of a type, architectural style, period, or method of construction, or represents the work of an architect, designer, engineer, or builder whose work is of significance to the City or, to the region or possesses artistic values of significance to the City or to the region.

d) It has yielded, or may be likely to yield, information important locally in prehistory or history.

Historic Signs

A historic sign shall include all signs in the sign inventory as of the date of adoption of this Zoning Code and any sign subsequently designated historically significant by the Historic Preservation Commission that possesses high artistic values. A historic sign shall meet one or more or the following criteria:

a) The sign is exemplary of technology, craftsmanship or design of the period when it was constructed, uses historic sign materials and means of illumination, and is not significantly altered from its historic period. Historic sign materials shall include metal or wood facings, or paint directly on the façade of a building. Historic means of illumination shall include incandescent light fixtures or neon tubing on the exterior of the sign. If the sign has been altered, it must be restorable to its historic function and appearance.

b) The sign is integrated with the architecture of the building.

c) A sign not meeting criteria a or b above may be considered for inclusion in the inventory if it demonstrates extraordinary aesthetic quality, creativity, or innovation.

All other regulations relating to signs shall comply with Chapter 17.48 (Signs).

Landmark Trees

A tree shall qualify to be of historic or cultural significance and of importance to the community if it meets any one of the following criteria:

1. It is one of the largest or oldest trees of the species located in the City;
2. It has historical significance due to an association with a historic event, person, site, street, or structure; or
3. It is a defining landmark or significant outstanding feature of a neighborhood.

Landmark Districts

A landmark district shall include all landmark districts previously designated before adoption of the Criteria and any grouping of contiguous properties that also meet the following criteria:

a) Within its boundaries, a minimum of 60 percent of the properties qualify as contributing; and

b) The grouping represents a significant and distinguishable entity of Citywide importance and one or more of a defined historic, cultural, development and/or architectural context(s) (e.g., 1991 Citywide historic context, as amended, historic context prepared in an intensive-level survey or historic context prepared specifically for the nominated landmark district).

When considering applications to designate a landmark district, the Historic Preservation Commission shall use the National Register of Historic Places Bulletin #21: "Defining Boundaries for National Register Properties".

Central District Specific Plan

Development in central Pasadena is governed by the Central District Specific Plan which contains detailed development standards, distribution of land uses, infrastructure requirements, and implementation measures. Area Specific Plans are designed to implement the goals and policies of the City's General Plan.

The Central District Specific Plan divides the area into several sub-districts. The Project Site is located within the Old Pasadena Sub-district. The objective of the Old Pasadena Sub-district is to protect the numerous historic resources in the area, and to support the long-term viability of its core as a regional retail and entertainment destination through the development of nearby complementary uses, including urban housing near light rail stations and parks.[13] The Central District Specific Plan Area is shown in **Figure 2.0-9**.

Historic Significance and Integrity

Significance

The definition of historic significance used by the California Office of Historic Preservation (OHP) in its administration of the California Register is based upon the definition used by the National Park Service for the National Register:

Historic significance is defined as the importance of a property to the history, architecture, archaeology, engineering, or culture of a community, state, or the nation.[14] It is achieved in several ways:

- Association with important events, activities or patterns

---

13 Central District Specific Plan, Section 7.

14 *National Register Bulletin 16A. How to Complete the National Register Registration Form*. Washington D.C.: National Park Service, U.S. Department of the Interior, 1997, p. 3.

- Association with important persons
- Distinctive physical characteristics of design, construction, or form
- Potential to yield important information

A property may be significant individually or as part of a grouping of properties.

Historic Integrity

Historic integrity is the ability of a property to convey its significance and is defined as the "authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic period."[15] The National Park Service defines seven aspects of integrity: *location*, *design*, *setting*, *materials*, *workmanship*, *feeling*, and *association*. These qualities are defined as follows:

- *Location is the place where the historic property was constructed or the place where the historic event took place.*
- *Design* is the combination of elements that create the form, plan, space, structure, and style of a property.
- *Setting* is the physical environment of a historic property.
- *Materials* are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- *Workmanship* is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- *Feeling* is a property's expression of the aesthetic or historic sense of a particular period of time.
- *Association* is the direct link between an important historic event or person and a historic property.[16]

IDENTIFICATION OF HISTORICAL RESOURCES

Resources located both within and immediately outside the Project Site are examined in the following analysis for the purposes of identifying potential historical resources. The context of their previous evaluations, criteria for significance and integrity issues are explored.

---

15 Ibid., p. 3.

16 *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*. Washington D.C.: National Park Service, U.S. Department of Interior, 1995.

The Project Site is located within the boundary of the Old Pasadena Historic District (refer to **Figure 4.5-1, Old Pasadena Historic District Map)** and on the site of one individual resource, the Hotel Green/Castle Green, as identified in the nomination form for individual listing in the National Register of Historic Places.[17]

No additional historical resources, besides those listed as contributors to the Old Pasadena Historic District, were identified in the Project Site vicinity.

Site Development History

The Project Site is within the boundary of the Hotel Green/Castle Green property, as identified in the nomination form for individual listing in the National Register of Historic Places.[18] The Project Site occupies the southwest parcel of the block that contained the western annex of the Hotel Green. The Project Site was never developed with the typical commercial blocks that were constructed in Old Pasadena at the turn of the twentieth century, and it has been surface parking and/or recreation space for much of its history.

The 1887 Sanborn map shows a one-story retail grocery store on the site facing Fair Oaks Avenue. By 1888, it was no longer on the site and the site appears vacant until 1903 when a one-story bungalow appears on the parcel facing Vineyard Street (later Dayton Street). This house was built by Colonel George G. Green (owner of the Hotel Green) for his daughter Lotta.[19]

The Hotel Green/Castle Green was originally developed as a luxury resort hotel. By the late 19th century, Pasadena had become a popular destination for well-to-do patrons escaping the severe winter weather of the mid-west and eastern seaboard; the Hotel Green/Castle Green was one of several major resort hotels constructed in the area. Located just north of The Atchison, Topeka, and Santa Fe railroad station on South Raymond Avenue, the Hotel Green/Castle Green occupied a prime location in central Pasadena.

The Hotel Green/Castle Green complex was built in four phases with each phase represented by a separate building or wing. A fifth wing, intended to be constructed on the current Project site was never constructed. The first building of the Hotel Green was constructed in 1887 by developer Edward C. Webster and originally referred to as the "Hotel Webster." It was located on the east side of Raymond Avenue at the southeast corner of Raymond Avenue and Green Street. Webster overextended himself financially and was forced into insolvency before his hotel was completed. Colonel George G. Green purchased the property in 1891.

---

17 The Hotel Green/Castle Green are also identified as contributors to the Old Pasadena Historic District; the District is discussed in further detail in the next section.

18 The Hotel Green/Castle Green are also identified as contributors to the Old Pasadena Historic District; the District is discussed in further detail in the next section.

19 "Hotel Green Bungalow" drawing archived at Pasadena Museum of History Research Library and Archives.

In 1894 he constructed an addition on the north end of the former “Hotel Webster” that continued along the remaining length of Raymond Avenue to Green Street. The hotel was re-named “Hotel Green.”

The hotel was successful, and plans were soon developed for an expansion of the hotel on the west side of Raymond Avenue. The expansion of the Hotel Green onto the block west of Raymond Avenue began in the late 1890s. From accounts in the *Los Angeles Times* in 1901, it appears Colonel Green had purchased the remaining parcels of the block, including a building at the southeast corner of Fair Oaks Avenue and Green Street which was built in 1887 and was known as the Wooster Block, with plans for expansion onto the western portion.



SOURCE: Historic Resouces Group, September 2018

FIGURE **4.5-1**

IMPACT SCIENCES

Old Pasadena Historic District Map

> *"Now that Col. G.G. Green has acquired the Wooster Block and other property on Fair Oaks avenue, making him the owner of the entire frontage on that avenue from Green to Vineyard street, he will begin at once the long-contemplated additions to Hotel Green. Manager Holmes says the plan is to add another story to the Wooster Block, to be used as the main dining room of the hotel, and south of this building to erect another structure which shall be in conformity with the present west annex of the large hotel. The main entrance is to be on Green Street. Parts of the lot not occupied by buildings will be laid out in parks and flower beds. It is hoped to have the work done on the opening of next season."* [20]

The expansion of the Hotel Green onto the block west of Raymond Avenue began in the late 1890s. The "West Annex" (today's Castle Green) was designed by architect Frederick Louis Roehrig and opened in January of 1899. Construction of the West Annex represented the third phase of development for the complex. The West Annex was connected to the original Hotel Green building by way of an enclosed bridge over Raymond Avenue, which remained until 1929; a portion of it survives today from the east facade of the Castle Green to the Raymond Avenue sidewalk.

In the early 1900's, further expansion plans were developed to extend the hotel along Green Street to connect to the existing Wooster Block building and along Fair Oaks Avenue. The Fair Oaks Avenue façade of the planned expansion was described by the *Pasadena Evening Star* in 1902 as having ground floor shops with a long balcony above.

> *"The ground floors on South Fair Oaks avenue, with the exception of the Fair Oaks entrance, which will be in and about the center of the block, will be divided into stores and rented to persons who conduct businesses that would in their nature attract tourists and the class of persons who patronize a hotel of the character of the Green.*
>
> *For the width of sixteen feet, more or less, as the working out of the plans may determine, there will be a long balcony ranging along the tops of the portions of these stores to Vineyard street, and overlooking South Fair Oaks avenue. The designs for this balcony will be exquisite, and it is intended that it shall be one of the most beautiful as well as one of the longest balconies of solid masonry in the world. Above this will rise the other five stories of the great west wing of the new hotel."* [21]

20 "Hotel Green Additions," *Los Angeles Times*, May 8, 1901.

21 "A Greater Hotel Green," *Pasadena Evening Star*, February 11, 1902.

The *Pasadena Daily News* added further detail in January of 1903.

> *"For weeks Col. Green and Architect F.L.O. Roehrig have been working out plans and designs for the addition which is to cost more than a half million dollars. …*
>
> *The new building will face north on Green street and west on Fair Oaks avenue. It will be of the Moorish and Colonial style mingled. The building will be six stories high. …*
>
> *The Wooster Block so substantially built will be wholly remodeled to conform with the new structure and will be the corner section of the two mighty wings. The lower floor facing Fair Oaks avenue from Green street to Vineyard street across the whole block as owned by Col Green will be divided into store rooms fitted up with modern style for rent. These store rooms will be very deep and light.*
>
> *From Green street the guests will enter an elaborate lobby just north of the present Annex.*
>
> *The open space between the Annex and the new addition will contain a great court, where guests will promenade and while away the evenings amid a semi-tropic foliage covered with glass and brilliantly lighted. South of this the two wings open out on Central Park, of 9.2 acres, recently acquired by Pasadena, and which is to be immediately planted in accordance with the most advanced ideas of the landscape gardener."*[22]

The proposed design would have created a U-shaped building with a landscaped central courtyard with greenhouse and connecting arcade along Dayton Street. A portion of the announced expansion was completed in 1903 with construction of the "North Annex" along Green Street, incorporating the existing Wooster Block. Construction of the North Annex represents the fourth phase of development for complex. The proposed fifth wing fronting Fair Oaks Avenue, the arcade and greenhouse, all of which would have occupied the site of the currently proposed project, were never built.

It appears the southwest parcel (the Project Site) was then landscaped and used for recreation by hotel guests.[23] The landscaping, which consisted of trees, shrubs and winding paths, complemented the Hotel Green Park (1894) which was on the eastern portion of the block prior to the Hotel Green expansion west of Raymond Avenue. The park became the front yard of the hotel in 1898 and is still evident today in front of the Castle Green. Central Park, just south of the hotel, was similarly designed in 1903 and became a seamless continuum of landscaping and a recreation ground for the tourists staying at the neighboring Hotel

22 "Greater Hotel Green," *Pasadena Daily News*, January 1, 1903.

23 The parcel was labeled as "park" on the 1903 Sanborn Map.

Green. The front yard of the Castle Green is now fenced with a locked gate, whereas Central Park is open to the public.

The decline of the Hotel Green led to the break-up of the hotel property beginning in 1920. The eastern portion (east side of Raymond Avenue) was sold in 1920 and became the Hotel Pasadena. The L-shaped western portion was split, and the West Annex became the Castle Green Apartments in 1924. The North Annex remained the last vestige of the Hotel Green until the early 1970s when the Hotel was converted into low-income senior apartments.

Circa 1914, a tennis court was added to the southwest parcel. The previously described bungalow was removed at some point between 1931 and 1951.[24] The 1951 Sanborn map shows the parcel as being used for auto parking. A swimming pool was added in the south gardens near the outdoor dining terrace of the Hotel Green in 1953.[25] It was infilled and paved over in the early 1970s when the Hotel was converted into low-income senior apartments. The oval shape is still present on the site and is currently covered with grass and a shuffleboard court. The 1982 National Register nomination form characterized the area created by the junction of the two buildings as having "…parking lots, garages, and other service facilities."[26]

Currently, there are 31 mature trees on the Project Site and it appears a few of the trees may date to the early Hotel era when it was initially landscaped as they match locations identified in a photograph from ca. 1903 (refer to **Section 4.4, Biological Resources**). Additionally, according to the arborist's Tree Aging report completed by Jan C. Scow Consulting Arborists, LLC, on June 3, 2013, two trees are 100 years old or older and are conceivably remnants from the early landscape scheme. The next oldest trees identified, four from the late 1920s and early 1930s, post-date the planned landscape of the early Hotel era.[27] It should be noted that Tree #24, a protected Indian laurel fig (*Ficus microcarpa*), failed from the root plate during one of the rain storms in January 2018.

The site is currently used as a surface parking lot with asphaltic concrete paving. The paving creates a U-shape in plan around a landscaped area with picnic tables, benches and a shuffleboard court marked by a hedge. This recreational area appears to have been developed in the 1950s when the pool was installed.

---

24 Sanborn maps for Pasadena. The bungalow appears on the 1903, 1910 and the 1931 maps, but not on the 1951 map.

25 William W. Ellinger III, AIA "Chronology for the Hotel Green (1887-1973), the Castle Green Apartments (1924-), the Hotel Green Apartments (1973-), and Related Events of Interest," August 1993.

26 "Hotel Green" National Register of Historic Places Inventory – Nomination Form, 1982.

27 "Tree Aging for 86 S. Fair Oaks," Jan C. Scow Consulting Arborists, LLC, June 3, 2013. The two trees include a Canary Island Date Palm (~1908) and a Camphor tree (~1913). See Appendix C Biological Resources of this SCEA.

The recreational uses associated with the period of the Hotel Green are no longer extant on the Project Site.

Old Pasadena National Register Historic District[28]

The Old Pasadena Historic District (the District) was listed in the National Register of Historic Places in 1983 and amended in 2008. The nomination form for the District specifies that it is significant in local history under National Register Criteria A and C. As the historic commercial center of Pasadena, the District documents the economic development of the city and its various phases of growth between 1886 and 1936. The District also contains an important record of the evolution of architectural design in southern California as well as the work of many prominent regional architects.

The District boundaries are irregular and incorporate Fair Oaks and Raymond Avenues, the main north-south streets, and Colorado Boulevard, the main east-west street. It is generally bound on the north by Chestnut Street, on the west by Pasadena Avenue, on the south by Del Mar Boulevard and on the east by the MTA Gold Line/L Line tracks. The District contains 154 contributing and 40 noncontributing resources, which form the historic downtown of the City of Pasadena. Dating from 1886 through 1936, the buildings visually document the District's economic and social booms. Predominantly commercial in nature, the District also includes a few residential buildings, a train station, some light industrial buildings, several churches, and a park. The strong stylistic eras of Old Pasadena can be discussed using three streets within the District as examples: Fair Oaks Avenue (1880s), Raymond Avenue (1890-1915), and Colorado Boulevard (1929-30). Surrounding streets, especially Union Street and Green Street, offer small-scale buildings, which reflect their industrial and service support to businesses along the major commercial streets. Since the District was originally listed in 1983, many of the contributing buildings have been extensively rehabilitated in a manner consistent with the Secretary of the Interior's Standards. A few contributing buildings have been demolished, and several new noncontributing buildings have been constructed. Most of the new construction occurred on vacant and surface parking lots and is generally compatible with the historic architecture of the District. Overall, the District retains a high-level of integrity and continues to convey its historic significance.

Due to the changes that occurred within the District since it was first designated in 1983, it was re-evaluated in 2008. At that time, the boundaries were expanded, and individual buildings within the District were re-classified as necessary.

28 United States Department of the Interior, National Park Service, "Old Pasadena Historic District (Additional Documentation/Boundary Change)" National Register of Historic Places Registration Form, 2008.

The District is formally listed in the National Register and is listed in the California Register. Because it is listed in the National and California Registers, the District is considered a mandatory historical resource under CEQA.

There are several contributors to the District adjacent to the Project Site. These include the following buildings (numbers below are keyed to their locations on the map provided in **Figure 4.5-2, Nearby Historical Resources Map**). Site and building photographs are included in the Historic Resources Report, **Appendices A** and **B**.

1-2. 99 South Raymond Avenue,
50 East Green Street
(Hotel Green/Castle Green)

Adjacent to the Project Site on the same block is the Hotel Green/Castle Green. In addition to being a contributor to the Old Pasadena Historic District, the Hotel Green/Castle Green is individually listed in the National Register along with the Project site. The nomination form for the property indicates that it is significant in local history under National Register Criteria A and C as one of the few grand nineteenth century hotel buildings in California to survive to the present day. Instrumental in the settlement of Pasadena in the 1890s and early 1900s, the hotel also fostered the social, cultural and economic development of the city. It is architecturally significant as a work of historic eclecticism, by architect Frederick L. Roehrig, popular in the late nineteenth century.

Although not directly stated in the National Register nomination, the period of significance can be established for the Hotel Green/Castle Green as beginning in 1898 when the hotel expanded across Raymond Avenue and the West Annex (Castle Green) was constructed and ends in 1924 when the West Annex was sold and converted into cooperative apartments and renamed the Castle Green, thus ending the resort era of the hotel.

The Hotel Green/Castle Green occupies the block between Fair Oaks and Raymond Avenues on the west and east and Green and Dayton Streets on the north and south, which is the same block as the Project Site. The entire block is included as the boundary in the individual nomination for the Hotel Green/Castle Green.

The Castle Green, then called the West Annex, was constructed in 1898 and was connected to the original portion of the Hotel Green at the second story by a pedestrian bridge over Raymond Avenue. In 1903, an addition, then called the North Annex was constructed along the length of Green Street and connected to

the Wooster Block, which was constructed in 1887. This portion of the building is now referred to as the Hotel Green.

The Castle Green (1898, Frederick L. Roehrig, architect) has a north-south orientation and sits approximately 100 feet from Raymond Avenue and 30 feet from Dayton Street, which provides space for a large garden along Raymond Avenue. It is a six- and seven-story building that is eclectic in design with references to Spanish Colonial Revival and Islamic architecture. The steel-framed and brick building has a dash coat cement-plaster finish. The large scale of the building is relieved by a variety of treatments to its massing, roofline, fenestration, and exterior ornamentation.

The Hotel Green (1887, C.L. Strange, architect; 1903, Frederick L. Roehrig, architect), originally the Wooster Block and the North Annex, extends along Green Street from Raymond to Fair Oaks Avenues. Although they were constructed at different times by different architects, they were joined internally and are both steel-framed structures sheathed in cement plaster.

The seven-story North Annex is covered by a low-pitched hipped roof with corbelled supporting brackets, while the six-story middle section has a shed roof carried on overhanging eaves. The window and door openings have little detailing. There is a large buttressed brick chimney on the most eastern point. The south facade has a prominent one-story semicircular projection of what was originally the hotel's dining room with square towers at both ends.

The six-story Wooster Block is distinct from the North Annex. The building's wealth of detail recalls Romanesque characteristics. It has a low-pitched shed roof with overhanging eaves, exposed rafters, and clay tiles. The street-facing elevations are articulated by numerous bays and arches.

3. 84 South Fair Oaks Avenue

This one-story commercial brick vernacular building was constructed circa 1925. It is immediately south of the Wooster Block of the Hotel Green. The building is finished with roughly textured cement plaster. The west facade on Fair Oaks Avenue has a single storefront with vertically proportioned openings and a decorative cornice.

Resources Located in the Immediate Vicinity of the Project Site

Resources located in the immediate vicinity of the Project Site include contributors to the Old Pasadena Historic District. The contributors within the immediate vicinity of the Project Site are identified in this section.

Contributing resources in the immediate vicinity include:

1. Central Park

Central Park is located south of the project site. It is a 9.2-acre site and is bounded by South Raymond Avenue on the east, Dayton Street on the north, South Fair Oaks Avenue on the west, and East Del Mar Boulevard on the south. The Castle Green and Project Site are to the north and the Santa Fe Train Station is to the east. Central Park and Memorial Park (in the Pasadena Civic Center National Register District) are the oldest parks in the city, the land for both parks having been purchased in 1902. Many mature trees, broad lawns, and a few small buildings connected by winding paths form the general plan of the park. The park became a recreation ground for the tourists staying at the neighboring Hotel Green.

The park was originally designed by Thomas Chisholm, but mainly reflects a redesign by Cook, Hall and Ralph Cornell in 1927. Most of the original footpath configuration of intersecting circles and oval still exists, notably the large oval in the center.

2. 150 South Raymond Avenue

Constructed in 1920, this two-story industrial brick building located on the east side of Raymond Avenue across from Central Park was originally designed as a factory. The utilitarian design features large window openings stacked vertically and spaced evenly on all four sides. The arched openings have divided-light wood sash windows.

3. 80-82 South Raymond Avenue (remnant of Hotel Green)

This one-story building at the southeast corner of Raymond Avenue and Green Street is all that remains of the original portion of the Hotel Green on the east side of Raymond Avenue. Ed Webster sold his hotel to Colonel Green in 1891, who proceeded to build the annex across the street. In 1935, the original four-story hotel was demolished except for this remnant.

4. 62-70 South Raymond Avenue

Constructed in 1902, this three-story, plaster-over-brick building, located at the northeast corner of Raymond Avenue and Green Street, was originally constructed as a hotel, perhaps as a residence for employees of the Hotel Green. The widening of Green Street in 1926 caused the 20 feet of the south end of the building to be demolished. The ensuing remodeling included the South Raymond Avenue facade.

5. 103-115 South Fair Oaks Avenue (Doty Block)

This large three-story red brick building, constructed in 1887, is located to the west of the Project Site. The principal facade (along Fair Oaks Avenue) has eight bays defined by brick pilasters, accented at each story by massive blocks of grey rusticated stone tied together by narrow projecting bands of molding above the first and second stories. Built during the boom of the late 1880s for James E. Doty, the Doty Block was one of the earliest substantial brick buildings in the city. Doty's carriage business was one of the largest in the San Gabriel Valley during the 1890s. The building originally had a corner tower and projecting bays, which were removed in 1924. In 1998 the building was rehabilitated. The work included the replacement of brickwork that had been damage by abrasive cleaning and the replacement of the storefronts, except for the original cast-iron columns.

6. 155 South Fair Oaks Avenue
(Star Saddle Livery)

Constructed in 1906 to the design of Hunt & Grey, this two-story cement plaster-over-brick building is in the Mission Revival style. This building is located on the west side of Fair Oaks Avenue across from Central Park. A three-story tower on the north side and a two-story bay with a wide garage entrance on the south dominates the building. This southern bay, a 1910 addition was built on the site of a former corral. Built for Charles N. Post, a local banker, the livery served guests of the Hotel Green who were interested in pleasure riding. Similar to many liveries, the building became an auto repair shop in the 1930s. Original architectural elements include the pitched roofs finished with red clay tile, arched window headers, divided-light wood sash casement windows, and original hayloft doors on the rear. The storefronts replaced what were originally barn-style doors. The building was rehabilitated in 1991 and again in 1999.

FRAMEWORK FOR ANALYSIS

The following analysis is informed by National, State and local guidelines.

CEQA Thresholds of Significance

The *CEQA Guidelines* indicate that a project would have a significant impact on a historical resource if it would result in a substantial adverse change in the significance of a historical resource as defined in § 15064.5.

As defined in § 15064.5(b)(1), a substantial adverse change in the significance of a historic resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.[29]

Section 15064.5(b)(2) further states that "[t]he significance of an historic resource is materially impaired when a project… [d]emolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources… local register of historic resources… or its identification in a historic resources survey."[30]

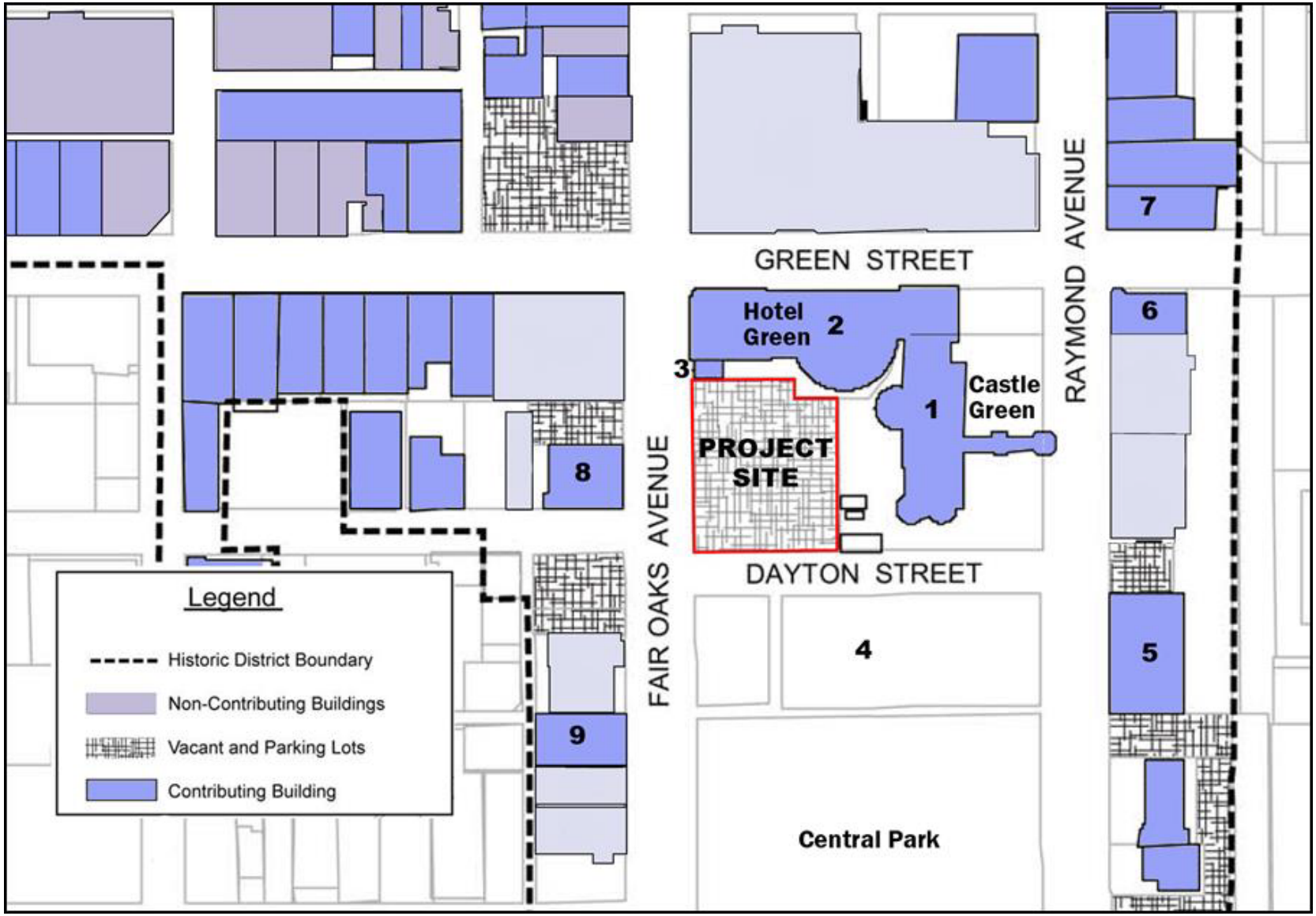
Additional Guidance

Secretary of the Interior's Standards

The Secretary of the Interior's Standards for the Treatment of Historic Properties (the "Standards") provide guidance for reviewing proposed projects that may affect historic resources.

29 *CEQA Guidelines*, section 15064.5(b)(1). https://govt.westlaw.com/calregs/Document/IA0E0C760D48811DEBC02831C6D6C108E?transitionType=Default&contextData=(sc.Default).

30 *CEQA Guidelines*, section 15064.5(b)(2). https://govt.westlaw.com/calregs/Document/IA0E0C760D48811DEBC02831C6D6C108E?transitionType=Default&contextData=(sc.Default).



SOURCE: Historic Resouces Group, September 2018

FIGURE **4.5-2**

Nearby Historical Resources Map

IMPACT SCIENCES

1136.004•03/2020

The intent of the Standards is to assist the long-term preservation of a property's significance through the preservation, rehabilitation, and maintenance of historic materials and features. The Standards pertain to historic buildings of all materials, construction types, sizes, and occupancy and encompass the exterior and interior of the buildings. The Standards also encompass related landscape features and the building's site and environment, as well as attached, adjacent, or related new construction.

From a practical perspective, the Standards have guided agencies in carrying out their historic preservation responsibilities including State and local officials when reviewing projects that may impact historic resources. The Standards have also been adopted by State and local jurisdictions across the country.

In addition, the Standards are a useful analytic tool for understanding and describing the potential impacts of substantial changes to historic resources. However, these Guidelines and Regulations are not part of the CEQA process. CEQA requires analysis of physical impacts to the environment and the only relationship of the Secretary of the Interior Standards to the CEQA process are discussed under *CEQA Guidelines* Section 15064.5(b)(3):

> *"Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource."*

While not a threshold of significance, the analysis herein evaluates the project against the Secretary of the Interior's Standards as an additional analytical tool to provide further context of the project's potential impacts on historical resources. A project that conforms to the Secretary of the Interior's Standards would clearly not have a significant impact on historical resources. However, inconsistency with the Secretary of the Interior's Standards does not, itself, render a project's impact on historical resources significant pursuant to CEQA.

The statutory language above references the Secretary of the Interior's Standards and Guidelines for four distinct historic "treatments," including: (1) preservation; (2) rehabilitation; (3) restoration; and (4) reconstruction. The specific standards and guidelines associated with each of these possible treatments are provided on the National Park Service's website regarding the treatment of historic resources.

For analytical purposes, a decision must be made regarding which “treatment” standards should be used to analyze a project’s potential effect on historic resources. “Preservation” refers to the straightforward stabilization and maintenance of a historic property. “Restoration” addresses the return of a property to a specific time period and includes reconstruction of features missing from that time period. “Reconstruction” addresses the depiction of a no longer extant historic property through new construction.

The use of the Secretary of the Interior’s “rehabilitation” standards (the Rehabilitation Standards) addresses the most prevalent and widely used treatment. "Rehabilitation" is defined as "the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values." “Rehabilitation” recognizes necessary alteration for contemporary use and therefore provides a more appropriate impact analysis than the other treatment standards, and accounts for the fact that the adjacent properties will likely require some form of protection during construction activities and ongoing maintenance over the term of the construction.

Rehabilitation Standards

The National Park Service encourages maintaining the integrity of a historic resource through the appropriate design of infill buildings at sites adjacent to historic resources. The Standards are intended as general guidance for work on any historic building. The Rehabilitation Standards expand the discussion to sites and neighborhoods.

Rehabilitation Standards #9 and #10 address related new construction. Standard 9 in part states: “New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.”[31] Standard 10 states: “New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.”[32]

As written in the Rehabilitation Standards, there is a distinction, but not a fundamental difference, between the concerns for additions to historic buildings and new construction, or “infill” adjacent to historic buildings

31 http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm

32 Ibid.

on a property or within a historic district. As with most matters of design and planning, the differences are defined by the scale, site, setting, and project.

Following are quotations from the National Park Service guidance that relate to the proposed Project.

> *"…a modern addition should be readily distinguishable from the older work; however, the new work should be harmonious with the old in scale, proportion, materials, and color."*
>
> *"Plan the new addition in a manner that provides some differentiation in material, color, and detailing so that the new work does not appear to be part of the historic building. The character of the historic resource should be identifiable after the addition is constructed."*[33]

National Park Service: Preservation Brief 14

In addition to the Standards and Guidelines for Rehabilitation, the National Park Service publishes a series of briefs that includes "Preservation Brief 14, New Exterior Additions to Historic Buildings: Preservation Concerns," as revised and republished in 2010. Among the concepts presented are a balance between differentiation and compatibility, and subordination of the new to the old.

Preservation Brief 14 states:

1. There is no formula or prescription for designing a new addition that meets the Standards. A new addition to a historic building that meets the Standards can be any architectural style -- traditional, contemporary or a simplified version of the historic building. However, there must be a balance between differentiation and compatibility in order to maintain the historic character and the identity of the building being enlarged. New additions that too closely resemble the historic building or are in extreme contrast to it fall short of this balance. Inherent in all of the guidance is the concept that an addition needs to be subordinate to the historic building.

2. The intent of the Preservation Briefs is to provide guidance to owners, architects, and developers on how to design a compatible new addition…. A new addition to a historic building should preserve the building's historic character. To accomplish this and meet the Secretary of the Interior's Standards for Rehabilitation, a new addition should:

    - Preserve significant historic materials, features and form;

33 Anne E. Grimmer and Kay D. Weeks, "Preservation Briefs 14, New Exterior Additions to Historic Buildings: Preservation Concerns," (Washington D.C.: National Park Service, U.S. Department of the Interior) 2010.

- Be compatible; and
- Be differentiated from the historic building.

IMPACT ANALYSIS

The following analysis uses the thresholds provided above.

Potential Impacts from Demolition

The Project proposes new construction that would occupy a parcel currently used primarily as a surface parking lot. The Project proposes to demolish the existing surface parking lot, landscaped area, and shuffleboard court. It also proposes to remove one billboard and up to 18 mature trees (refer to **Section 4.4, Biological Resources**).

The Project Site is located within the boundary identified in the Hotel Green/Castle Green National Register nomination. The existing condition of the Project Site was established after the period of significance for the Hotel Green/Castle Green (1898-1924). Because they were developed after the period of significance, the surface parking, landscaped area, and shuffleboard court located on the site are not considered character-defining features of the Hotel Green/Castle Green.

The mature trees scheduled for removal, one of which dates closest to the early landscape design (1903) for the Hotel Green era, are remnants of an earlier landscape design that no longer exists on the site, and the context of the original landscape in which the trees were meaningful is no longer extant. Therefore, the trees are also not considered character-defining features of the Hotel Green/Castle Green. As applicable, removal of any protected trees would otherwise occur consistent with the requirements of the City's Trees and Tree Protection Ordinance.

Because the existing condition of the site no longer reflects the landscape and recreational uses associated with the Hotel's period of significance, demolition of the billboard, surface parking lot, landscaped picnic area, shuffleboard court, and removal of the mature trees would not alter the property's integrity. The historic character of the property as a whole would be retained after demolition, and the site would retain both its National Register and CRHR eligibility. The proposed demolition would not result in a significant direct impact to historic resources on the Project Site.

The Project does not propose to demolish or alter the existing adjacent resources including the Hotel Green/Castle Green or the building at 84 South Fair Oaks Avenue or alter any existing resources in the

immediate vicinity. Therefore, the proposed demolition would not result in a significant direct impact on the existing adjacent resources or the existing resources in the immediate vicinity.

Potential Impacts from New Construction

The proposed new construction would replace an existing surface parking lot and landscaped area. New construction would be located within the Old Pasadena Historic District and immediately adjacent to District contributors Hotel Green/Castle Green and the commercial building at 84 South Fair Oaks Avenue. The proposed new construction would also be located within the boundaries of the Hotel Green/Castle Green, an individually listed historic resource. The proposed Project would be located directly north of District contributor Central Park and in the immediate vicinity of contributing buildings at 150 South Raymond Avenue, 80-82 South Raymond Avenue, 62-70 South Raymond Avenue, 103-115 South Fair Oaks Avenue, and 155 South Fair Oaks Avenue.

The Project proposes new construction of a six-story building plus penthouse that would reach a maximum roof height of 90 feet, which is 21 feet shorter than the maximum roof height of the Green Hotel Apartments Dome, and ~~3~~ 15 feet and 6 inches shorter than the 105-foot and ~~6~~8-inch maximum roof height of ~~tallest portions of the adjacent Hotel Green/~~the Castle Green Dome. The new building would be situated at the far southwest portion of the parcel and would maintain grade-level open space between the existing historic buildings and the new building. A distance of approximately 3~~4~~8 feet of ground-level open space would separate the south façade of the Hotel Green building and the new construction. A distance of approximately ~~76 feet~~ 101 feet and 8 inches of ground-level open space would be maintained between the east façade of the new building and the west façade of the Castle Green building at its closest point. The new building would be located approximately ~~13~~ 10 feet from the existing one-story building at 84 South Fair Oaks Avenue. Refer to **Figures 7.13a** and **7.13b**, **Height Study**, and **Figures 7.13a** and **7.13b**, **Distance Study**.

Impacts to Surrounding Historic Resources

The Project would not demolish or alter any historic building on the Project Site or in the near vicinity of the Project site. However, because the Project would construct a six-story plus penthouse building on a parcel largely used as surface parking under current conditions, the immediate surroundings of the adjacent historic resources discussed above would be altered. The analysis below evaluates whether these alterations would materially impair any of the surrounding historical resources and thus result in a substantial adverse change in the significance of a historical resource(s).

The additional guidance provided by the National Park Service for reviewing proposed new construction that may affect an historic resource, as stated above, be it an addition to an existing building or an infill building within an historic district, strive for the same outcome: a balance between compatibility and differentiation, and the retention of integrity.

Standard 9 in part states: "New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.[34] Standard 10 states: "New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired."[35]

An analysis of the alteration to the immediate surroundings of each of the potentially affected historic resources follows below.

Potential Impacts to the Hotel Green/Castle Green from New Construction

The Hotel Green/Castle Green is significant as one of the few 19th century resort hotel buildings in California to survive to the present day. Instrumental in the settlement of Pasadena in the 1890s and early 1900s, the hotel also helped foster the social, cultural and economic development of the City. Designed by noted regional architect Frederick L. Roehrig, the Hotel Green/Castle Green is also architecturally significant as an outstanding example of historic eclecticism popular in the late nineteenth century.

The historic significance of the Hotel Green/Castle Green is largely conveyed by the public-facing primary facades oriented towards the adjoining public streets. These include the east façade of the Castle Green portion of the building facing east to Raymond Avenue, the south end of Castle Green facing Dayton Street, and the north façade of the Hotel Green portion of the building facing Green Street. Typically, these facades are considered "primary" because they were designed to directly address and communicate with the public right-of-way forming the "front" of the two buildings. It is these facades that contain public entrances and the highest level of design articulation, exterior ornamentation, and variations in massing and rooflines.

In contrast, the west-facing façade of the Castle Green portion and south-facing façade of the Hotel Green were somewhat less concerned with engaging the public as they front interior park and patio spaces.

34 http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm
35 http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm

Anticipated development fronting Fair Oaks Avenue (never realized) would have further enclosed the interior of the block. Although also public facing in that they look onto park space and are visible from the park and Dayton Street, comparatively, these facades represent the "rear" elevations of the two buildings in that they did not provide primary entrance into the two buildings. As such, they are generally considered "secondary." While still carefully articulated, these facades display less of the variation and exterior ornamentation seen on the facades facing Raymond Avenue and Green Street.

The primary (east) façade of the Castle Green portion of the building faces east towards Raymond Avenue. This façade was historically, and remains today, the primary entrance to the Castle Green. The building was set back approximately 100 feet from the street to create a landscaped park-like area fronting the main entrance. This garden was the only park-like feature in Pasadena at the time. Extending from the center of this façade to the curb of Raymond Avenue is the remaining section of an enclosed pedestrian bridge that once spanned the street and linked to the original Hotel Green building (no longer extant) across the street. The design articulation of east façade, the remnant pedestrian bridge and the front garden all combine to create the primary public face of the building.

The primary (north) façade of the Hotel Green portion of the building faces north along Green Street. This section was an addition to the Castle Green building at the northeast corner, spanned Green Street and adjoined the existing Wooster Block at the northwest corner. Articulated with numerous bays and arched openings at street level, the north façade is oriented to the public with street-facing shops and entrances.

Development of the Project Site would be confined to the southwest parcel of the block, and therefore important street views from the north and south along Raymond Avenue and from the east along Green Street to the Hotel Green/Castle Green would remain unaltered. The building's primary east- and north-facing façades would not be obscured by the proposed Project.

The Project would block certain views and obscure certain currently available public sight lines to the secondary west façade of the Castle Green and the south façade of the Hotel Green. Both facades are oriented toward the interior of the block and display less of the distinctive design articulation characteristic of the primary facades which were designed to directly engage the public right-of-way. The proposed building would obscure the west façade of the Castle Green building, particularly from the west along Fair Oaks Avenue and from the southwest along Dayton Street. The west façade would remain visible when viewed northeast from the central portions of Dayton Street and Central Park, where landscaped open space would remain between the two buildings. The proposed new building would also partially block the Hotel Green's south façade from public view when viewed from the west and southwest. Both facades have historically been unobstructed.

The Project conforms to Standard 9 as the current configuration of the open space is not a contributing factor to the historic significance of the Hotel Green/Castle Green. Instead, it is the location, massing and architectural detailing of the Hotel Green/Castle Green buildings which convey its historic significance. After implementation of the Project the L-shaped configuration and orientation of the historic buildings would remain discernible after construction and the primary east- and west-facing facades would remain unobstructed. The Project includes grade-level open space to provide a spatial buffer between the existing buildings and the new construction so that the west façade of the Castle Green and south façade of the Hotel Green would remain discernable despite visual obstruction from the street. Although spatial relationships would be altered by the proposed new construction, the historic buildings would remain in their original locations and would not be physically altered by the new construction. The Castle Green/Hotel Green would continue to convey its historic significance after Project construction.

As noted in above, *historic integrity* is the ability of a historic resource to convey its significance. The National Park Service defines seven aspects of integrity: *location*, *design*, *setting*, *materials*, *workmanship*, *feeling*, and *association*. The Project would not affect the integrity of *location, design, materials, or workmanship* of the Castle Green/Hotel Green. The building would remain intact in its current location and would not be materially altered by new construction to the south and west. Therefore, integrity of *feeling* would also remain unaffected because all the existing physical elements that characterize the Castle Green/Hotel Green would continue to convey the property's historic significance. Because the Castle Green/Hotel Green would retain integrity of *location, design, materials, workmanship*, and *feeling*, it would continue to reflect its historic significance as a late-19th and early 20th century resort hotel in Pasadena, therefore integrity of *association* would also remain unaffected by the Project.

The only aspect of integrity that would be affected by the Project is *setting*. The Project would alter the setting of the Castle Green/Hotel Green by constructing a new building in an area that has historically been devoid of buildings. As noted earlier, this area has been substantially altered since the period of significance and today contains a surface parking lot with landscaping, outdoor furniture and an advertising billboard. Setting features important to the historic significance of the Castle Green/Hotel Green include the configuration of street and sidewalk fronting the building's north- and east-facing façades, and the spatial relationships with buildings to the north, east and west that are also included within the District boundary. All of these would remain unchanged by the Project. The Castle Green/Hotel Green would retain integrity of *location*, *design*, *materials*, *workmanship*, *feeling*, and *association.* Integrity of *setting* would be compromised by the new construction associated with the Project but the setting features most important to conveying the historic significance of the property would remain unchanged. All but one of the seven aspects of integrity will be entirely retained after implementation of the Project (and the one aspect affected,

setting, would be partially retained) and the Castle Green/Hotel Green would retain sufficient integrity to convey its historic significance.

The proposed new construction would also include substantial foundation work and the construction of subterranean parking. The required excavation, general construction procedures and associated vibration has the potential to de-stabilize the Castle Green/Hotel Green property. Vibration issues are examined in **Section 4.13, Noise**, below, to address potential impacts from vibration to adjacent buildings and ensure that the historic buildings are protected. The Noise analysis determined that with mitigation to reduce potential vibration impacts associated with construction activities to a less than significant level, the Project would avoid significant impacts to the Castle Green/Hotel Green.

In summary, the integrity and significance of the Hotel Green/Castle Green would not be materially impaired by alterations to its surroundings caused by the Project, and it would maintain its eligibility for listing in the National Register and California Register. The proposed new construction would not result in significant impacts to the Hotel Green/Castle Green.

Alteration to the Old Pasadena Historic District

The Project Site is located within the Old Pasadena Historic District. New construction would be within the District boundaries and within the vicinity of several buildings that are district contributors. In addition to the Hotel Green/Castle Green, the closest District contributor is the single-story commercial building at 84 South Fair Oaks Avenue, a small-scale commercial storefront from the mid-1920s located immediately north of the Project Site. Other contributing buildings are located on the opposite side of South Fair Oaks Avenue.

The Old Pasadena Historic District is significant as the historic commercial center of Pasadena. The District documents the economic development of the city and its various phases of growth between 1886 and 1936. The District is composed of a variety of property types and architectural styles that are largely commercial in nature.

Characteristic of pre-World War II commercial areas, the District is scaled to the pedestrian. Contributing properties to the District are oriented toward the street with architectural articulation largely confined to street-facing façades. The side- and rear-facing facades were constructed with minimal articulation in reaction to and in anticipation of the construction of neighboring buildings. The District's historic significance is experienced primarily from the street either by pedestrians or passing vehicles. The significance of the

District contributors in the immediate vicinity is largely conveyed by their street-facing facades along Fair Oaks and Raymond Avenues, and these facades would not be obscured by the new construction.

The Old Pasadena Historic District is characterized by a diverse collection of buildings of varying heights and densities, with heights ranging from one story up to eight stories. The majority of buildings are built to the sidewalk with little or no setback. The proposed new construction would maintain the prevailing setback and would have a similar street orientation to the contributing buildings in the District, including ground-floor retail. At six stories plus penthouse, the proposed new building would be taller than most of the nearby contributing buildings, including the one-story commercial brick vernacular building at 84 South Fair Oaks Avenue immediately north of the Project site, and the three-story red brick building (Doty Block) located across the street at 103-115 South Fair Oaks Avenue.. This contrast in scale, however, is in keeping with the overall character of the District which contains contributing buildings ranging from one to seven stories in height.

Central Park, a contributor to the Old Pasadena Historic District, is significant as one of Pasadena's oldest parks. Many mature trees, broad lawns, and a few small buildings connected by winding paths form the general plan of the park. The park became a recreation ground for the tourists staying at the neighboring Hotel Green.

As noted earlier in this report, when the planned Fair Oaks Avenue wing of the Hotel Green was not built, the southwest parcel was landscaped to complement Central Park. By 1951, the parcel was no longer used strictly for recreation and partially became a surface parking lot. A pool was added to the site in 1953 to service the Hotel Green and removed in the early 1970s when the building became low-income residential apartments. Even though one remnant tree would remain on the parcel from the period of the hotel, the historic landscape is no longer discernible, and the Project parcel no longer conveys its past use as a designed landscaped area or its visual association with Central Park. Additionally, the Project would not significantly impact views or obscure public sight lines of Central Park.

Overall, the proposed new construction is compatible with the overall character of the Old Pasadena Historic District, and the integrity of the District would not be materially impaired by alterations to its setting caused by the Project. The proposed new construction would not diminish the ability of any District contributor, including the adjacent building at 84 South Fair Oaks Avenue, to convey its significance as a contributor to the Historic District. All contributors' primary facades would remain intact and fully visible from the street.

The Project will include substantial foundation work and the construction of subterranean parking. The required excavation, general construction procedures and associated vibration has the potential to de-stabilize nearby contributing buildings including the 84 South Fair Oaks property. Vibration issues are examined in the Noise sections of the CEQA document to address potential impacts from vibration to adjacent buildings. The Noise analysis determined that with mitigation to reduce potential vibration impacts associated with construction activities to a less than significant level, the Project would avoid significant impacts to adjacent historic buildings.

Although the Project would construct a new building within the Old Pasadena Historic District boundaries, all but one of the seven aspects of integrity would be unaffected by the Project. The Project would not affect the integrity of *location, design, materials, or workmanship* for the District or any of its component contributing buildings. All contributing buildings would remain intact in their current locations and would not be materially altered by new construction associated with the Project. Therefore, integrity of *feeling* would also remain unaffected because all the existing physical elements that characterize the District and contributing buildings would remain and continue to convey their historic significance. Because all the important physical characteristics of the District would remain, they would continue to reflect their important associations with the commercial development of Pasadena during the late 19th- and early 20th centuries, therefore integrity of *association* would also remain unaffected by the Project. The only aspect of integrity that could possibly be affected by the Project is *setting*.

Setting features important to the Old Pasadena Historic District include the configuration of streets and sidewalks fronting District buildings, the pattern of tightly spaced buildings defining a central business district, and the public circulation space delineated by uniform building street walls. Adding a new building of compatible size and scale that maintains the prevailing building and set-back pattern characteristic of the District would not adversely alter the setting of the District such that its listing on the National Register would be threatened.

Despite the construction of a new building within the District boundaries and on land currently developed with surface parking and landscaping, the Old Pasadena Historic District would continue to convey its historic significance after implementation of the Project.

Compatibility

As stated previously, while compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties is not a significance threshold, Section 15064.5(b)(3) of the *CEQA Guidelines* states:

"Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource."

These Standards and additional guidance provided by the National Park Service for reviewing proposed new construction that may affect an historic resource, as stated above, be it an addition to an existing building or an infill building within an historic district, strive for the same outcome: a balance between compatibility and differentiation, and the retention of integrity.

Standard 9 in part states: "The new work shall be differentiated from the old and would be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment."[36]

The proposed new construction would be differentiated from adjacent historic resources. It would be a contemporary design with balanced symmetrical proportions and would recall historic features that complement the eclectic design of the Hotel Green/Castle Green. As demonstrated in renderings presented in **Figure 2.0-34** through **Figure 2.0-38**, and **Figure 4.1** through **Figure 4.9** presenting visual simulations of the proposed project, the Project is compatible with the adjacent historic resources and the historic character of the District in terms of materials, features, size, scale and proportion. The new building is L-shaped in plan and has massing similar to the Hotel Green/Castle Green. It also recalls traditional historic architectural design details including an emphasized base level, tower feature, arched windows, similarly proportioned fenestration, punched windows, cement plaster finishes, and a low-pitched roof with supporting brackets. The new building would also maintain the prevailing setback of the adjacent and nearby District contributors, continuing the street wall that defines and contains the immediate blocks of Fair Oaks Avenue.

The Project conforms to Standard 9 because it would be differentiated from the historic resources adjacent to the site and would be compatible with the size, scale, proportion, and massing to protect the integrity of the site and its surroundings.

36 http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm

Standard 10 states: “New additions and adjacent or related new construction would be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.”[37]

The Project would not be an addition to the adjacent historic resources. It would be a new building separate and apart from the existing buildings. As such, if the new construction is removed in the future the form and integrity of the adjacent historic resources, and the historic district, would be preserved. The Project conforms to Standard 10.

In summary, the design of the proposed new construction would be differentiated from the immediately surrounding buildings, would be compatible in size, scale and massing, and would be a new building separate and apart from the adjacent existing buildings. The new construction would not result in a substantial adverse impact on the site or on existing adjacent resources and is, further, consistent with the Secretary of the Interior’s Standards.

Summary of Potential Impacts on Historical Resources

Analysis of the potential impacts to historical resources has found that with the implementation of mitigation measures regarding potential vibration impacts, and the recommendations of an approved Geotechnical Report, the Project would not result in significant adverse impacts on the identified historical resources located within and adjacent to the Project Site. The Project would not result in a substantial adverse change in the significance of the Old Pasadena Historic District or the Hotel Green/Castle Green or the building at 84 South Fair Oaks Avenue. Impacts on historical resources are less than significant and no further mitigation measures are required.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

☐ ☒ ☐ ☐

WHY? There are no known prehistoric or historic archeological sites on the project site. However, the project involves grading into previously undisturbed soils and it is not known if the project site itself has archeological resources. Thus, construction of the project could encounter previously undiscovered archeological resources. In the unlikely event that archaeological resources are discovered during construction, Mitigation Measure 4-1 from the City of Pasadena General Plan EIR, as reiterated below, would apply as implemented by the General Plan’s Mitigation Monitoring and Report Program (MMRP). As required by Mitigation Measure 4-1 of the City’s General Plan EIR, in the event that an unanticipated

37 http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm

discovery is encountered, the find must be assessed by a professionally qualified archaeologist to determine if the find may be significant. If determined to be of significance, the materials would be recovered, evaluated, documented, and reposited with a reputable research institution or museum, consistent with General Plan EIR Mitigation Measure 4-1 and the corresponding MMRP. With the implementation of General Plan EIR Mitigation Measure 4-1 the proposed project would not significantly impact archaeological resources.

If archaeological resources are discovered during construction, Mitigation Measure 4-1 from the City's General Plan EIR would apply as follows:

General Plan EIR Mitigation Measure 4-1: If cultural resources are discovered during construction of land development projects in Pasadena that may be eligible for listing in the California Register for Historic Resources, all ground disturbing activities in the immediate vicinity of the find shall be halted until the find is evaluated by a Registered Professional Archaeologist. If testing determines that significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates as applicable, and other special studies; and provide a comprehensive final report including site record to the City and the South Central Coastal Information Center at California State University Fullerton. No further grading shall occur in the area of the discovery until Planning Department approves the report.

c. Disturb any human remains, including those interred outside of formal ceremonies?

☐ ☐ ☒ ☐

WHY? There are no known human remains on the site. The project site is not part of a formal cemetery and is not known to have been used for disposal of historic or prehistoric human remains. Thus, human remains are not expected to be encountered during construction of the proposed project. In the unlikely event that human remains are encountered during project construction, State Health and Safety Code Section 7050.5 requires the project to halt until the County Coroner has made the necessary findings as to the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98. Compliance with these regulations would ensure the proposed project would not result in significant impacts due to disturbing human remains.

4.6 ENERGY

Would the project:

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

☐ ☐ ☒ ☐

Vehicle and Equipment Fuel Consumption. Construction of the proposed project would result in a short-term consumption of petroleum-based fuels to power construction vehicles and equipment. During project operations, motor vehicle travel and building maintenance equipment would consume petroleum-based fuels. Fuel consumption of motor vehicles in California is regulated by both the U.S. Department of Transportation's Corporate Average Fuel Economy standards and the CARB's Clean Car Standards. The proposed project would not create a high enough demand for energy to require development of new energy sources. During construction, energy would be consumed in the form of petroleum-based fuels (i.e., gasoline and diesel) used to power off-road construction vehicles and equipment on the project site, for construction worker travel to and from the project site, as well as for delivery truck trips; and to operate generators to provide temporary power for lighting and electronic equipment.. However, the additional amount of resources used would not cause a significant reduction in available supplies.

Building Energy Use. In order to promote energy conservation, the City has adopted an amended California Green Building Standards Code (14.04.500). In conformance with the City's building code the project would be designed to comply with the performance levels of an amended California Green Building Standards Code, which would reduce energy consumption compared to standard building practices. The following are requirements of the amended California Green Building Standards Code that are applicable to the project:

- All non-residential buildings of 50,000 square feet or more of new gross square footage, including medical projects, must meet California Green Building Standards Code Tier 2 Requirements (14.04.504, Section 307.2)). In addition to the mandatory measures of Tier 2, compliance with specific prerequisites and as many additional elective measures to achieve an equivalent 50 LEED® points is also required to achieve Tier 2 status (14.04.558).

The long-term impact from increased energy use by this project is not expected to be significant in relationship to the number of customers currently served by the electrical and gas utility companies. Supplies are available from existing mains, lines and substations in the area. Occupation associated with the project is not expected to significantly increase consumption of natural gas, particularly in light of redeveloped areas that would need to conform to the current performance standards of Pasadena Amended California Green Building Standards. Furthermore, in light of these requirements, the project is likely to include high efficiency Heating Ventilation and Air Conditioning (HVAC) and hot water storage tank equipment, lighting conservation features, higher than required rated insulation and double-glazed windows. The energy conservation measures would be prepared by the developer and shown on building plan(s) submitted to the Water and Power Department and Building Official for review and approval prior to the issuance of a building permit. Installation of energy-saving features would be inspected by a Building

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

Inspector prior to issuance of a Certificate of Occupancy. In addition, the project would be designed to meet the requirements of California Green Building Standards Code Tier 2 requirements which would further reduce energy demand. Therefore, impacts related to consumption of energy would be less than significant.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

☐ ☐ ☒ ☐

Why? As noted in the analysis above, the City has adopted an amended California Green Building Standards Code. In conformance with the City's building code the project would be designed to comply with the performance levels of an amended California Green Building Standards Code, which would reduce energy consumption compared to standard building practices. The project would be designed to meet the requirements of California Green Building Standards Code Tier 2 requirements.

The proposed project would also be required to comply with the energy standards in the California Energy Code, Part 6 of the California Building Standards Code (Title 24). Measures to meet these energy standards may include low-flow plumbing fixtures, water-efficient irrigation systems, high-efficiency heating, ventilation, and air conditioning (HVAC) and hot water storage tank equipment, and lighting conservation features.

Installation of energy-saving features would be inspected by a Building Inspector prior to issuance of a Certificate of Occupancy. Therefore, the project would be consistent with applicable renewable energy or energy efficiency plans and this impact would be less than significant.

4.7 GEOLOGY AND SOILS

Would the project:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

☐ ☐ ☒ ☐

WHY? According to the 2002 adopted Safety Element of the City of Pasadena's General Plan, the San Andreas Fault is a "master" active fault and controls seismic hazards in Southern California. This fault is located approximately 21 miles north of Pasadena.

The County of Los Angeles and the City of Pasadena are both affected by Alquist-Priolo Earthquake Fault Zones. Pasadena is in four USGS Quadrants, the Los Angeles, and the Mt. Wilson quadrants were mapped

for earthquake fault zones under the Alquist-Priolo Act in 1977. The Pasadena and Condor Peak USGS Quadrangles have not yet been mapped per the Alquist-Priolo Act.

These Alquist-Priolo maps show only one Fault Zone in or adjacent to the City of Pasadena, the Raymond (Hill) Fault Alquist-Priolo Earthquake Fault Zone. This fault is located primarily south of City limits, however, the southernmost portions of the City lie within the fault's mapped Fault Zone. The 2002 Safety Element of the City's General Plan identifies the following three additional zones of potential fault rupture in the City:

- The Eagle Rock Fault Hazard Management Zone, which traverses the southwestern portion of the City;
- The Sierra Madre Fault Hazard Management Zone, which includes the Tujunga Fault, the North Sawpit Fault, and the South Branch of the San Gabriel Fault. This Fault Zone is primarily north of the City, and only the very northeast portion of the City and portions of the Upper Arroyo lie within the mapped fault zone.
- A Possible Active Strand of the Sierra Madre Fault, which appears to join a continuation of the Sycamore Canyon Fault. This fault area traverses the northern portion of the City as is identified as a Fault Hazard Management Zone for Critical Facilities Only.

The project site is not within any of these potential fault rupture zones. Geotechnologies, Inc. prepared the *Geotechnical Engineering Investigation (included in Appendix E)* for the proposed project in July 2019. The report reviewed the City of Pasadena's 2002 Safety Element and concluded that the potential for surface ground rupture at the subject site is considered low.

ii. Strong seismic ground shaking?

☐ ☐ ☒ ☐

WHY? Since the City of Pasadena is within a larger area traversed by active fault systems, such as the San Andreas and Newport-Inglewood Faults, any major earthquake along these systems would cause seismic ground shaking in Pasadena. Much of the City is on sandy, stony or gravelly loam formed on the alluvial fan adjacent to the San Gabriel Mountains. This soil is more porous and loosely compacted than bedrock, and thus subject to greater impacts from seismic ground shaking than bedrock. Therefore, the *GeoTechnical Engineering Investigation* (included as Appendix A to Appendix D) conducted by Geotechnologies, Inc. in July 2019 concluded that the primary geologic hazard at the site is moderate to strong ground motion cause by earthquake. However, the risk of earthquake damage is minimized because new structures shall be built according to the California Uniform Building Code and other applicable codes and are subject to inspection during construction. Structures for human habitation must be designed to meet or exceed California Uniform Building Code standards for Seismic Zone 4. Conforming to these

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

required standards will ensure the proposed project would not result in significant impacts due to strong seismic ground shaking.

iii. Seismic-related ground failure, including liquefaction?

☐ ☐ ☐ ☒

WHY? Liquefaction typically occurs where the ground water is less than 30 feet from the surface and the soils are predominately of poorly compacted sand. The most likely places for liquefaction in Pasadena are the streambed area of the Arroyo Seco and Eaton Canyon Wash. Nearly everywhere else in the City the groundwater is 200 to 400 feet below the surface. Refer to Plate 1-3 in the in the Adopted 2002 Safety Element Technical Background Report for additional information.

The project site is not within a Liquefaction Hazard Zone or Landslide Hazard Zone as shown on Plate 1-3 of the Technical Background Report to the 2002 Safety Element of the General Plan. This Plate was developed considering the Liquefaction and Earthquake-Induced Landslide areas as shown on the State of California Seismic Hazard Zone maps for the City. Therefore, the project will have no impacts from seismic related ground failure.

iv. Landslides?

☐ ☐ ☐ ☒

WHY? The project site is not within a Landslide Hazard Zone as shown on Plate 1-3 of the Technical Background Report to the 2002 Safety Element of the General Plan. This Plate was developed considering the Earthquake-Induced Landslide areas as shown on the State of California Seismic Hazard Zone maps for the City. Therefore, the project will have no impacts from seismic induced landslides.

b. Result in substantial soil erosion or the loss of topsoil?

☐ ☐ ☒ ☐

WHY? The natural water erosion potential of soils in Pasadena is low, unless these soils are disturbed during the wet season. Both the Ramona and Hanford soils associations, which underlay much of the City, have high permeability, low surface runoff and slight erosion hazard due to the gravelly surface layer and low topographic relief away from the steeper foothill areas of the San Gabriel Mountains.

Construction may temporarily expose the soil to wind and/or water erosion. As required by SCAQMD Rule 403, erosion caused by strong wind, excavation and earth moving operations would be minimized by watering during construction and by covering earth to be transported in trucks to or from the site.

Since the proposed project site is less than one acre in size (0.74 acres), it would not require the preparation of a General Construction Activity Stormwater Permit (GCASWP) or Storm Water Pollution Prevention Plan

(SWPPP). However, per City code and regulations, all projects under construction must contain all sediment and spills on-site. The following standard best management practices would be implemented by the project:

1. Every effort should be made to eliminate the discharge of non-stormwater from the project site at all times.

2. Eroded sediments and other pollutants must be retained on site and may not be transported from the site via sheet-flow, swales, area drains, natural drainage courses, or wind.

3. Stockpiles of earth and other construction-related materials must be protected from being transported from the site by the forces of wind or water.

4. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soil and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.

5. Excess or waste concrete may not be washed into the public right-of-way or any other drainage system. Provisions shall be made to retain concrete wastes on site until they can be disposed of as solid waste.

6. Trash and construction-related solid waste must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.

7. Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public right-of-way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.

Water erosion during construction would further be minimized by covering exposed excavated dirt during periods of rain and protecting excavated areas from flooding with temporary berms.

Soil erosion after construction will be controlled by implementation of an approved landscape and irrigation plan. This plan shall be submitted to the Zoning Administrator (or the appropriate staff) for review and approval prior to the issuance of a building permit. With implementation of these erosion control features, potential impacts associated with erosion during project construction and operation would be less than significant.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

c. *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

☐ ☐ ☒ ☐

WHY? The City of Pasadena rests primarily on an alluvial plain. To the north, the San Gabriel Mountains are relatively new in geological time. These mountains run generally east-west and have the San Andreas Fault on the north and the Sierra Madre Fault to the south. The action of these two faults in conjunction with the north-south compression of the San Andreas tectonic plate is pushing up the San Gabriel Mountains. This uplifting combined with erosion has helped form the alluvial plain. As shown on Plate 2-4 of the Technical Background Report to the 2002 Safety Element, the majority of the City lies on the flat portion of the alluvial fan, which is expected to be stable.

The proposed project is not located on known unstable soils or geologic units, and therefore, would not likely cause on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse. Modern engineering practices and compliance with established building standards, including the California Building Code, would ensure the project would not cause any significant impacts from unstable geologic units or soils.

d. *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

☐ ☐ ☒ ☐

WHY? According to the 2002 adopted Safety Element of the City's General Plan the project site is underlain by alluvial material from the San Gabriel Mountains. This soil consists primarily of sand and gravel and is in the low to moderate range for expansion potential. Modern engineering practices and compliance with established building standards, including the California Building Code, will ensure the project will not cause any significant impacts from unstable geologic units or expansive soils.

e. *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

☐ ☐ ☒ ☐

WHY? The project will be required to connect to the existing sewer system. Therefore, soil suitability for septic tanks or alternative wastewater disposal systems is not applicable in this case, and the proposed project would have no associated impacts.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

☐ ☐ ☒ ☐

WHY? The project site lies on the valley floor in an urbanized portion of the City of Pasadena. This portion of the City does not contain any unique geologic features and is not known or expected to contain paleontological resources. As shown in Figure 5.4-2 *Paleontological Sensitivity* of the Pasadena General Plan EIR, the project site is within an area of "No Sensitivity" for the paleontological resources. Plate 2-1 of the Technical Background Report to the Safety Element of the Technical Background Report to the Safety Element of the General Plan identifies the project area with Pleistocene alluvial fan gravel and sand (non-marine) derived from the San Gabriel Mountains. This portion of the City does not contain any unique geologic features and is not known or expected to contain paleontological resources. As discussed in the City's General Plan EIR, although Quaternary old alluvial deposits (such as those underlying the project area) in general have the potential to yield fossils, the paleontological sensitivity in these areas of the City is considered low due to their proximity to the mountains to the north. Since the older Quaternary alluvial sediments are close to the sediment source, the uppermost layers of these deposits are likely too coarse grained to preserve fossils. Therefore, the project is not expected to encounter a unique paleontological resource or unique geologic feature.

4.8 GREENHOUSE GAS EMISSIONS

Would the project:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

☐ ☐ ☒ ☐

WHY? The project will generate Carbon Dioxide, which is the primary component of Greenhouse gases (GHG). Thus, the project will contribute to global warming as described by the Intergovernmental Panel on Climate Change. In total, the project will generate 1,667.47 metric tons of CO_2 during construction[38] and 1,641.60 metric tons per year for operations, refer to Appendix B, Combined CalEEMod Output Files.

The City of Pasadena developed the Climate Action Plan (CAP) as a qualified greenhouse gas (GHG) emissions reduction plan in accordance with *CEQA Guidelines* Section 15183.5. The project applicant submitted a *Climate Action Plan Consistency Checklist Application Form* in order to demonstrate that the proposed project is consistent with the Pasadena CAP by incorporating applicable actions intended to ensure that the project contributes its fair share to the City's cumulative GHG reduction goals. Proposed

38 Construction emissions amortized over thirty years is approximately 55.57 MT CO2e/year.

sustainable development actions from the submitted *CAP Consistency Checklist* are listed and explained below in Tables **4.8-1** and **4.8-2**. Review of the Checklist demonstrates that the proposed project would have a less than significant GHG impact.

b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

☐ ☐ ☐ ☒

WHY? The project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. The project is consistent with the General Plan and Zoning Code and is not a use that is a significant source of GHG emissions because it is consistent with the City's CAP, as set forth below. The project would not conflict with AB 32, SB32, or the Final 2017 Scoping Plan; therefore, there would be no impacts related to conflict with applicable plans.

CITY OF PASADENA'S CLIMATE ACTION PLAN

The City's CAP requires projects to meet at least 11 GHG Reduction Strategies, including six mandatory measures, one action in Energy Efficiency and Conservation, one action in the Sustainable Mobility and Land Use category, and three additional measures. The proposed project will implement 13 actions from the City's CAP, see **Table 4.8-1, CAP Action Measures**.

Table 4.8-1
CAP Action Measures

GHG Reduction Strategy	Sustainable Development Actions	Yes	N/A
Mandatory Measures			
T-1.2: Continue to improve bicycle and pedestrian safety	**Bicycle Storage:** Does the project provide bicycle storage lockers, racks, or other bicycle storage facilities for residents/employees? Check "N/A" only if the project does not include residents or employees.	**X**	
T-3.1: Decrease annual commuter miles traveled by single occupancy vehicles	**Transportation Demand Management (TDM):** Does the project include a TDM plan? A TDM plan is required for the following projects: multifamily residential development that are 100 or more units; mixed-use developments with 50 or more residential units or 50,000 square feet or more of non-residential development; or non-residential projects which exceed 75,000 square feet. If applicable, please submit the TDM plan for review.	**X**	
T-4.1: Expand the availability and use of alternative fuel vehicles and fueling infrastructure	**Alternative Vehicle Fueling Wiring:** For projects with more than three parking spaces, does the project provide wiring for at least one 240V Type II electric car charger? Please include specifications on the project plans. Check "N/A' only if the project does not include more than three parking spaces.	**X**	
E-1.2: Encourage the use of energy conservation devices and passive design concepts that make use of the natural climate to increase energy efficiency	**Passive Design Features**: Does the project utilize passive design techniques such as awnings or overhands on the east, west, and south facing windows which block the high summer sun but allow in low winter sun? Please include specifications on the project plans.	**X**	

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

GHG Reduction Strategy	Sustainable Development Actions	Yes	N/A
WC-1.1: Reduce potable water usage throughout Pasadena	**Irrigation Efficiency:** Will the project utilize drought tolerant landscaping and/or drip irrigation and/or weather controllers to reduce outdoor water use? Please include specifications on the project plans. Check "N/A" only if the project does not include any landscaping.	X	
WR-1.1: Continue to reduce solid waste and landfill GHG emissions	**Facilitate Recycling:** Does the project include a space for separate trash and recycling bins as well as provide information signage/handouts for residents/employees outlining materials to be recycled? Please include specifications on the project plans.	X	
Energy Efficiency and Conservation (select a minimum of one action)			
E-1.1: Increase energy efficiency requirements of new buildings to perform better than 2016 Title 24 Standards	**Zero-Net Energy (ZNE):** Does the project generate 100% of electricity required on site? ZNE calculations must be provided.		X
E-1.1: Increase energy efficiency requirements of new buildings to perform better than 2016 Title 24 Standards	**Energy Efficiency (Exceed 2016 Title 24):** Does the project exceed the 2016 Title 24 Efficiency Standards by at least 5%? Please include Title 24 energy model.	X	
E-4.1: Increase city-wide use of carbon-neutral energy by encouraging and/or supporting carbon-neutral technologies	**Renewable Energy:** Does the project generate at least 60% of the building's projected electricity needs through renewable energy? Please include specifications on the project plans.		X
Sustainable Mobility and Land Use (select a minimum of one action)			
T-1.1: Continue to expand Pasadena's bicycle and pedestrian network	**End-of-Trip Bicycle Facilities (Commercial Development):** Does the project provide at least one shower for every 50 employees? Please include these specifications on the project plans.	X	
T-1.1: Continue to expand Pasadena's bicycle and pedestrian network	**Bike Share:** Does the project include a bike share station? Please include these specifications on the project plans.		X
T-3.1: Decrease annual commuter miles traveled by single occupancy vehicles	**Car Sharing:** Does the project provide/facilitate car sharing by providing a designated car share space on or within the immediate vicinity of the project site? Examples of car share options include ZipCar, PitCarz, and Getaround. Please include these specifications on the project plans.		X
T-3.1: Decrease annual commuter miles traveled by single occupancy vehicles	**Park De-Coupling:** Does the project separate the cost of parking from the cost of commercial space and/or residential housing by charging for each individually? Please include these specifications on the project plans.	X	
T-4.1: Expand the availability and use of alternative fuel vehicles and fueling infrastructure	**Alternative Vehicle Fueling Infrastructure:** Does the proposed project include functioning 240V Type II electric car chargers at 3% of parking spaces (at least one charger) AND conduit to allow for future charger installation to 25% of spaces?	X	
T-5.1: Facilitate high density, mixed-use, transit-oriented, and infill development	**Transit Oriented Development:** Is the project located within 0.25 mile of a major transit stop as defined in the Zoning Code. Please include a map outlining the nearest transit stop.	X	
T-6.1: Reduce GHG emissions from heavy-duty construction equipment and vehicles	**Reduce GHG emissions from heavy-construction equipment:** Will the project utilize at least 30% alternative fueled construction equipment (by pieces of equipment) and implement an equipment idling limit of 3 minutes? Please provide idling limit plan including implementation strategies aligning with the total pieces of equipment and those utilizing alternative fuels.		X
Water Conservation			
WC-1.1: Reduce potable water usage throughout Pasadena	**Indoor Water Efficiency:** Will the project achieve at least a 35% reduction in indoor water use per the LEED V4 Indoor Water Use Reduction Calculator? Please attach the calculator output.		X

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

GHG Reduction Strategy	Sustainable Development Actions	Yes	N/A
WC-2.1: Increase access to and use of non-potable water	**Rainwater Capture and Reuse:** Does the project utilize a rainwater capture and reuse system to reduce the amount of potable water consumed on site? Please include these specifications on the project plans.		X
WC-2.1: Increase access to and use of non-potable water	**Indoor & Outdoor Recycled Water:** Will the project be plumbed to utilize recycled water for either indoor or outdoor water use? Please include these specifications on the project plans.		X
WC-2.1: Increase access to and use of non-potable water	**Greywater:** Will the project be plumbed to take advantage of greywater produced on site such as a laundry to landscape system or another on-site water reuse system? Please include these specifications on project plans.		X
WC-3.1: Improve storm water to slow, sink, and treat water run-off, recharge groundwater, and improve water quality	**Permeable Surfaces:** Is at least 30% of the hardscape (e.g., surface parking lots, walkways, patios, etc.) permeable to allow infiltration? Please include these specifications on the project plans.		X
WC-3.1: Improve storm water to slow, sink, and treat water run-off, recharge groundwater, and improve water quality	**Stormwater Capture:** Is the project designed to retain stormwater resulting from the 95th percentile, 24-hour rain event as defined by the Los Angeles County 95th percentile precipitation isohyetal map? Please provide the engineered stormwater retention plan with the project plans.	X	
Waste Conservation			
WR-1.1: Continue to reduce solid waste and landfill GHG emissions	**Recycled Materials:** Does the project utilize building materials and furnishings with at least 50% ([re- or post-consumer) recycled content or products which are designed for reuse? At a minimum, project must show at least 10% of the material by cost meets the recycled content requirements? Please submit the plan for review.		X
WR-3.1: Implement a city-wide composting program to limit the amount of organic material entering landfills	**On-Site Composting:** Does the project include an area specifically designated for on-site composting? Please include these specifications on the project plans.		X
Urban Greening			
UG-1.1: Continue to preserve, enhance, and acquire additional green space throughout Pasadena to improve carbon sequestration, reduce the urban heat-island effect, and increase opportunities for active recreation	**Greenspace:** Does the project include at least 500 sq. ft. of public use greenspace (landscaped yards, parklets, rooftop garden, etc.)? At a minimum, 50% of the required greenspace must include softscape landscaping (e.g., trees, plants, grass, etc.).		X
UG-2.1: Continue to protect existing trees and plant new ones to improve and ensure viability of Pasadena's urban forest	**Trees:** Does the project result in a net gain of trees? Please include these specifications on the project plans.	X	

Source: Architectural Resources Group, Central Park Apartments 86 S. Fair Oaks, Pasadena, CA. Climate Action Plan Consistency Submittal.

The City's CAP requires the proposed project to provide supporting information describing how each selected Sustainable Development Action would be implemented in the proposed project. **Table 4.8-2, Project Implementation of the CAP Actions,** details project consistency with the thirteen actions identified within **Table 4.8-1**. The *CAP Consistency Submittal* prepared by the Architectural Resources Group, included in **Appendix D** of this SCEA, provides additional information regarding project consistency with these measures.

Table 4.8-2
Project Implementation of the CAP Actions

Sustainable Development Action	Description of Project Implementation
Mandatory Measures	
T-1.2: Bicycle Storage	The project provides bicycle storage facilities for residents and employees. A Class 1 Bicycle Facility (i.e., weather-protected) is located within the building and is accessible to residents. A Class 2 Bicycle Facility (standard bike rack) is provided for non-residents and employees.
T-3.1: Transportation Demand Management	Since the project is a mixed-use development with 84 residential units, a Transportation Demand Management (TDM) plan is required to be prepared and implemented pursuant to Section 10.64.020 of the Pasadena Municipal Code. A TDM plan has been drafted and submitted to the City for review.
T-4.1: Alternative Vehicle Fueling Wiring	Three percent of on-site parking spaces (approximately six spaces) will accommodate 240V Type II electric car chargers for alternative vehicle fueling (AVF). Up to 25 percent of spaces (Approximately 49 spaces) will be capable of supporting such charging in the future.
E-1.2: Passive Design Features	The project utilizes a number of passive design techniques to increase energy efficiency. Residential units will have operable, dual-pane windows that provide both daylighting and ventilation. Every unit will also have its own occupiable exterior balcony; these balconies will typically be stacked to shade apartment glazing from excessive solar exposure. Additional fixed canopies and facade overhangs will further mitigate solar heat gain on the east, west, and south facades. Retail spaces will be provided with extensive storefront glazing, also shaded by canopies. Building surface materials are generally to be light-colored to reduce heat absorption. Paved site surfaces will be offset with significant planted areas; new and relocated existing site trees will provide extensive shading.
WC-1.1: Irrigation Efficiency	More than 75 percent of planting material utilized in this project is identified by Water Use Classification of Landscape Species (WUCOLS) as needing "Low" or "Very Low" amounts of irrigation water, indicating that an overwhelming majority of plants will be drought tolerant. The project will use a drip irrigation system with a weather-based irrigation controller.
WR-1.1: Facilitate Recycling	The project includes separate trash and recycling bins. The first parking level (P1) features two rooms that include space for separate trash and recycling bins. Informational signage will be displayed to clearly indicate which materials can be recycled to educate residents, employees, and visitors to the building about proper refuse disposal procedures.
Selective Actions	
E-1.1: Energy Efficiency (Exceed 2016 Title 24)	The project is projected to exceed the 2016 Title 24 Efficiency Standards by 11.3 percent. A Title 24 energy model has been prepared to demonstrate the project's energy efficiency features. (Included in **Appendix E** of this SCEA)
E-1.1: End-of-Trip Bicycle Facilities	Shower facilities for bicyclists will be located inside of the building, in proximity to the Class 1 Bicycle Facility that is described in the response for Sustainable Development Action T-1.2 (Bicycle Storage). Approximately 30 employees are projected based upon the commercial program. Two showers will be available for employees of the ground floor restaurant and retail tenants. The project also includes four live-work units with bathroom facilities. The project thus exceeds the one shower per 50 employees standards.
T-3.1: Parking De-Coupling	On-site parking for residential tenants at the Central Park Apartments will be de-coupled from the lease agreements to remove an incentive for single-occupancy vehicle usage. Parking spaces will be licensed or leased via separate agreements with building management, and a fee charged per parking space. Approximately 53 parking spaces will be available to tenants of the Hotel Green located next door as "joint parking". Those parking spaces will likely not be de-coupled due to existing lease agreements.
T-3.1: Transportation Demand Management	A Transportation Demand Management (TDM) plan is required by the City of Pasadena as the mixed-use project exceeds 50 dwelling units. This feature is not being added to the total number of selective actions that are associated with this project. A TDM plan has been drafted and submitted to the City for review.
T-4.1: Alternative Vehicle Fueling Infrastructure	The project includes six parking spaces with functioning 240V Type II wiring for alternative vehicle fueling (AVF), which is equivalent to 3 percent of on-site parking spaces. The project also includes an estimated 49 parking spaces with conduit to support future alternative vehicle parking (F-AVF) spaces, which is equivalent to 25 percent of on-site parking spaces.
T-5.1: Transit Oriented Development	The project site is located within a 0.25-mile radius of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station, which are both identified in the Zoning Code as major transit stops.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

Sustainable Development Action	Description of Project Implementation
WC-3.1 Stormwater Capture	The project is designed to retain stormwater resulting from the 95th percentile, 24-hour rain event per the Los Angeles County 95th percentile precipitation isohyetal map. Two infiltration drywells are proposed below the structure to capture and infiltrate the 95th percentile storm volume generated onsite. Roof drainage and runoff from all site areas will be collected and routed to the drywells, where it will infiltrate into the soil to promote groundwater recharge. Additional storage upstream of proposed drywells will be required for 95th percentile storm. Solids will be removed from stormwater run-off through settlement in the proposed drywell chambers.
UG-2.1: Trees	The project results in a net gain of trees. Nineteen trees are currently located on the property, and 38 trees are identified on the proposed landscape plan associated with the project, resulting in a net gain of 19 trees.

Source: Architectural Resources Group, Central Park Apartments 86 S. Fair Oaks, Pasadena, CA. Climate Action Plan Consistency Submittal.

FINAL 2017 SCOPING PLAN UPDATE

CARB issued the Final 2017 Scoping Plan Update in November 2017 and establishes emissions reductions strategies necessary to meet SB 32's 2030 reduction goals. **Table 4.8-3, Project Consistency with Applicable 2017 Scoping Plan Measures,** identifies the Scoping Plan policies that are applicable to the proposed project, demonstrating project consistency.

Table 4.8-3
Project Consistency with Applicable 2017 Scoping Plan Measures

Measures	Project Consistency
Implement SB 350 by 2030: Increase the Renewables Portfolio Standard to 50 percent of retail sales by 2030 and grid reliability	**Not Applicable.** The measure is not related to development projects but intended for energy providers.
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.	**Not Applicable.** This measure is directed towards policymakers, not development projects.
Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in the IRPs to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly-owned utilities meet GHG emissions planning targets through a combination of measures as described in IRPs.	**Consistent.** The project is required to meet CALGreen building standards by including measures designed to reduce energy consumption.
Implement Mobile Source Strategy (Cleaner Technology and Fuels): Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document "Potential VMT Reduction Strategies for Discussion."	**Consistent.** The project site is located within a 0.25-mile radius of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station. Thus, this would reduce VMT traveled, promote alternatives to driving, and aim to reduce GHG emissions.
By 2019, develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road use, parking pricing, transit discounts).	**Not Applicable.** This measure is directed towards policymakers, not development projects. However, the project is within 0.25-miles of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station, which would lead to a reduction in VMT.

Measures	Project Consistency
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	**Not Applicable.** This measure is directed towards CARB, CalRecycle, CDFA, SWRCB, and local air districts. However, the statewide policy goals of 75 percent of solid waste generated be source reduce, recycled, or composted by 2020 under AB 341. Since the project would be operational after this year, the project's waste collection service would be required to be compliant with this waste reduction.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	**Consistent**. The project incorporates measures that will reduce GHG emissions from project energy, indoor water, and outdoor water use. Additionally, due to project proximity to the Del Mar and Memorial Park Metro stations, the project will reduce VMT and associated transportation emissions.

Source: CARB. California's 2017 Climate Change Scoping Plan.

SCAG RTP/SCS

2016-2040 RTP/SCS

At the regional level, the 2016-2040 RTP/SCS defines strategies for reducing GHGs. In order to assess the project's potential to conflict with the RTP/SCS, this section analyzes the project's land use profile for consistency with those in the Sustainable Communities Strategy. Generally, projects are considered consistent with the provisions and general policies of applicable City and regional land use plans and regulations, such as SCAG's Sustainable Communities Strategy, if they are compatible with the general intent of the plan and would not preclude the attainment of their primary goals. **Table 4.8-4, Project Consistency with SCAG 2016-2040 RTP/SCS** demonstrates the project's consistency with the Actions and Strategies set forth in the 2016-2040 RTP/SCS. Therefore, the project would be consistent with the GHG reduction related actions and strategies contained in the 2016-2040 RTP/SCS.

Table 4.8-4
Project Consistency with SCAG 2016-2040 RTP/SCS

Actions and Strategies	Responsible Party	Consistency Analysis
Land Use Strategies		
Reflect the changing population and demands, including combatting gentrification and displacement, by increasing housing supply at a variety of affordability levels.	Local jurisdictions	**Consistent.** The proposed project includes the development of a mixed-use development on a site with an existing surface parking lot. The project would increase the housing supply, and would not displace any existing residents.
Focus new growth around transit.	Local Jurisdictions	**Consistent.** The project site is located within a 0.25-mile radius of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station.
Plan for growth around livable corridors, including growth on the Livable Corridors network.	SCAG Local Jurisdictions	**Consistent.** The project site is located within a 0.25-mile radius of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

Actions and Strategies	Responsible Party	Consistency Analysis
Support local sustainability planning, including developing sustainable planning and design policies, sustainable zoning codes, and Climate Action Plans.	Local Jurisdictions	**Not Applicable.** While this strategy calls on local governments to adopt General Plan updates, zoning codes, and Climate Action Plans to further sustainable communities, the proposed project would not interfere with such policymaking and would be consistent with those policy objectives.
Protect natural and farm lands, including developing conservation strategies.	SCAG Local Jurisdictions	**Consistent.** The project site is currently developed with a surface parking lot; therefore, the proposed project would not be constructed on any natural or farm lands.
Transportation Strategies		
Preserve our existing transportation system.	SCAG County Transportation Commissions Local Jurisdictions	**Not Applicable.** While this strategy calls on investing in the maintenance of our existing transportation system, the proposed project would not interfere with such policymaking.
Manage congestion through programs like the Congestion Management Program, Transportation Demand Management, and Transportation Systems Management strategies.	County Transportation Commissions Local Jurisdictions	**Consistent.** The proposed project will minimize congestion impacts on the region because of its proximity to public transit and the implementation of a transportation demand management (TDM) program.
Promote safety and security in the transportation system.	SCAG County Transportation Commissions Local Jurisdictions	**Not Applicable.** While this strategy aims to improve the safety of the transportation system and protect users from security threats, the proposed project would not interfere with such policymaking.
Complete our transit, passenger rail, active transportation, highways and arterials, regional express lanes, goods movement, and airport ground transportation systems.	SCAG County Transportation Commissions Local Jurisdictions	**Not Applicable.** This strategy calls for transportation planning partners to implement major capital and operational projects that are designed to address regional growth. The proposed project would not interfere with this larger goal of investing in the transportation system.
Technological Innovation and 21st Century Transportation		
Promote zero-emissions vehicles.	SCAG Local Jurisdictions	**Consistent.** While this action/strategy is not necessarily applicable on a project-specific basis, the project would include electric vehicle charging infrastructure.
Promote neighborhood electric vehicles.	SCAG Local Jurisdictions	**Consistent.** While this action/strategy is not necessarily applicable on a project-specific basis, the project would include electric vehicle charging infrastructure.
Implement shared mobility programs.	SCAG Local Jurisdictions	**Not Applicable.** While this strategy is designed to integrate new technologies for last-mile and alternative transportation programs, the proposed project would not interfere with these programs.

Source: *Southern California Association of Governments; 2016–2040 RTP/SCS, Chapter 5: The Road to Greater Mobility and Sustainable Growth; and Impact Sciences, 2019.*

CONNECT SOCAL PLAN

On May 7, 2020, SCAG's Regional Council adopted Connect SoCal (2020-2045 RTP/SCS) for federal transportation conformity purposes only. On September 3, 2020, the Regional Council formally adopted the Connect SoCal plan to provide a roadmap to expand transportation options, improve air quality and bolster Southern California's long-term economic viability.

Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians. **Table 4.8-5, Project Consistency with SCAG Connect SoCal,** demonstrates the project's consistency with the major goals set forth in Connect SoCal Plan. Therefore, the project would be consistent with the GHG reduction related actions and strategies contained in Connect SoCal.

Table 4.8-5
Project Consistency with SCAG Connect SoCal

Measures	Consistency Analysis
Encourage regional economic prosperity and global competitiveness.	**Not Applicable.** This strategy calls on encouraging regional economic prosperity and global competitiveness. The proposed project would not interfere with such policymaking.
Improve mobility, accessibility, reliability, and travel safety for people and goods.	**Consistent.** The project site is located within 0.25-mile radius of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station.
Enhance the preservation, security, and resilience of the transportation system.	**Not Applicable.** While this strategy calls on enhancing the preservation, security, and resilience of the transportation system, the proposed project would not interfere with such policymaking.
Increase person and goods movements and travel choices within the transportation system.	**Not Applicable.** This strategy calls on SCAG to increase person and goods movement and travel choices across the transportation system. The proposed project would not interfere with this goal.
Reduce greenhouse gas emissions and improve air quality.	**Consistent.** The Project would result in criteria air pollutant and GHG emissions during construction and operation. However, emissions would not exceed the SCAQMD significance thresholds and would be consistent with the City's CAP.
Support healthy and equitable communities.	**Not Applicable.** This strategy calls on supporting healthy and equitable communities. The proposed project would not interfere with this goal.
Adapt to a changing climate and support an integrated regional development pattern and transportation network.	**Not Applicable.** This goal is directed towards SCAG and does not apply to individual development projects. The proposed project would minimize congestion impacts on the region because of its proximity to public transit and the implementation of a transportation demand management (TDM) program.
Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	**Not Applicable.** This strategy calls on SCAG to use new transportation technologies and data-driven solutions to increase travel efficiency. The proposed project would not interfere with this goal.
Encourage development of diverse housing types in areas that are supported by multiple transportation options.	**Consistent.** The proposed project would construct 84 apartment units and 4 work/live units within a 0.25-mile radius of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station.
Promote conservation of natural and agricultural lands and restoration of habitats.	**Not Applicable.** This strategy calls on SCAG to promote the conservation of natural and agricultural land and the restoration of habitats. The proposed project site currently serves as a surface parking lot. Therefore, the proposed project would not interfere with this goal.

Source: Southern California Association of Governments; Connect SoCal; and Impact Sciences, 2020.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

4.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

☐ ☐ ☒ ☐

WHY? The project does not involve the use or storage of hazardous substances other than the small amounts of pesticides, fertilizers and cleaning agents required for normal maintenance of the structure and landscaping. The project must adhere to applicable zoning and fire regulations regarding the use and storage of any hazardous substances. Further, there are no records of the site having been used for storage of hazardous materials.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?)

☐ ☐ ☒ ☐

WHY? The project does not involve hazardous materials. Therefore, there is no significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions, which could release hazardous material.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

☐ ☐ ☒ ☐

WHY? The project does not involve hazardous emissions or the handling of hazardous materials, substance, or waste and is not within one-quarter mile of an existing or proposed school; the closest schools are the Waverly School and St. Andrews Elementary School, both of which are approximately one-half mile away. Therefore, the proposed project would have no hazardous material related impacts to schools.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

☐ ☐ ☒ ☐

WHY? The project site is not located on the State of California Hazardous Waste and Substances Sites List of sites published by California Environmental Protection Agency (CAL/EPA). The site was formerly used as a surface parking lot for the adjacent hotel, which is not a land use associated with hazardous materials. Searches conducted using the California State Water Resources Control Board Geotracker and the Department of Toxic Substances Control EnviroStor did not reveal any potentially hazardous sites within

1000 feet of the project site. The site is not known or anticipated to have been contaminated with hazardous materials and no hazardous material storage facilities are known to exist onsite.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

☐ ☐ ☒ ☐

WHY? The project site is not within an airport land use plan or within two miles of a public airport or public use airport. The nearest public use airport is the Hollywood/Burbank (Bob Hope) Airport in Burbank, which is operated by a Joint Powers Authority with representatives from the Cities of Burbank, Glendale and Pasadena. Therefore, the proposed project would not result in a safety hazard for people residing or working in the vicinity of an airport and would have no associated impacts.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

☐ ☐ ☒ ☐

WHY? The City of Pasadena maintains a citywide emergency response plan, which goes into effect at the onset of a major disaster (e.g., a major earthquake). The Pasadena Fire Department maintains the disaster plan. In case of a disaster, the Fire Department is responsible for implementing the plan, and the Pasadena Police Department devises evacuation routes based on the specific circumstance of the emergency. The City has pre-planned evacuation routes for dam inundation areas associated with Devil's Gate Dam, Eaton Wash, and the Jones Reservoir.

The construction and operation of the proposed project would not place any permanent or temporary physical barriers on any existing public streets. To ensure compliance with zoning, building and fire codes, the applicant is required to submit appropriate plans for plan review prior to the issuance of a building permit. Adherence to these requirements ensures that the project will not have a significant impact on emergency response and evacuation plans.

g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

☐ ☐ ☒ ☐

WHY? As shown on Plate P-2 of the 2002 Safety Element, the project site is not in an area of moderate or very high fire hazard. In addition, the project site is surrounded by urban development and not adjacent to any wildlands. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury or death involving wild land fires, and the project would have no associated impacts.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

4.10 HYDROLOGY AND WATER QUALITY

Would the project:

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

☐ ☐ ☒ ☐

WHY? Section 303 of the federal Clean Water Act requires states to develop water quality standards to protect the beneficial uses of receiving waters. In accordance with California's Porter/Cologne Act, the Regional Water Quality Control Boards (RWQCBs) of the State Water Resources Control Board (SWRCB) are required to develop water quality objectives that ensure their region meets the requirements of Section 303 of the Clean Water Act.

Pasadena is within the greater Los Angeles River watershed, and thus, within the jurisdiction of the Los Angeles RWQCB. The Los Angeles RWQCB adopted water quality objectives in its Stormwater Quality Management Plan (SQMP). This SQMP is designed to ensure stormwater achieves compliance with receiving water limitations. Thus, stormwater generated by a development that complies with the SQMP does not exceed the limitations of receiving waters, and thus does not exceed water quality standards.

Compliance with the SQMP is ensured by Section 402 of the Clean Water Act, which is known as the National Pollution Discharge Elimination System (NPDES). Under this section, municipalities are required to obtain permits for the water pollution generated by stormwater in their jurisdiction. These permits are known as Municipal Separate Storm Sewer Systems (MS4) permits. Los Angeles County and 85 incorporated Cities therein, including the City of Pasadena, obtained an MS4 from the Los Angeles RWQCB, adopted in 2012 and most recently amended in 2018. Under this MS4, each permitted municipality is required to implement the SQMP.

In accordance with the County-wide MS4 permit, the permit establishes new LID requirements for new development and redevelopment projects. Development projects which require the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of a project. The MS4 Permit requires for projects to retain on-site the Stormwater Quality Design Volume (SWQDv) defined as the runoff from:

- The 0.75-inch, 24-hour rain event (not applicable for Pasadena); or
- The 85th percentile, 24-hour rain event, as determined from the Los Angeles County 85th percentile precipitation isohyetal map. Pasadena has a range of 1.0-1.2 inch per hour according to the map.

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

Activities associated with operation of the proposed project would generate substances that could degrade the quality of water runoff. The deposition of certain chemicals by cars in the parking garage could have the potential to contribute metals, oil and grease, solvents, phosphates, hydrocarbons, and suspended solids to the storm drain system. However, impacts to water quality would be reduced since the proposed project must comply with water quality standards and wastewater discharge BMPs set forth by the City, the SWRCB, and the proposed project's approved USMP. Compliance with existing regulations and the approved USMP would reduce the potential for the proposed project to exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff impacts, and operational water quality impacts would therefore be less than significant.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

☐ ☐ ☒ ☐

WHY? The project would not install any groundwater wells, and would not otherwise directly withdraw any groundwater. In addition, there are no known aquifer conditions at the project site or in the surrounding area, which could be intercepted by excavation or development of the project. Therefore, the proposed project would not physically interfere with any groundwater supplies.

The project would use the existing water supply system provided by the Pasadena Department of Water and Power. The source of some of this water supply is ground water, stored in the Raymond Basin. Thus, the project could indirectly withdraw groundwater. However, the proposed water usage would be negligible in comparison to the overall water service provided by the Department of Water and Power. Furthermore, the Pasadena Department of Water and Power, since 2014, has water rights to pump 10,304 Acre-feet per year (AFY).[39] Therefore, the sum of all water that is pumped from the Raymond Basin is regulated so as not to exceed the total operating yield of the basin and not based on demand. The proposed project's minor amount of water use would not result in significant impacts from depletion of groundwater supplies. Under normal operation the project will use approximately 24,261 gallons of water per day (See **Table 4.19-1, Projected Water Use**). The project is designed to retain stormwater resulting from the 95th percentile, 24-hour rain event per the Los Angeles County 95th percentile precipitation isohyetal map. Two infiltration drywells are proposed below the structure to capture and infiltrate the 95th percentile storm volume generated onsite. Roof drainage and runoff from all site areas would be collected and routed to the drywells, where it would infiltrate into the soil to promote groundwater recharge. Additional storage upstream of proposed drywells would be required for 95th percentile storm. Solids would be removed from stormwater

39 City of Pasadena. Pasadena Department of Water and Power. *2015 Urban Water Management Plan*. Available at: https://ww5.cityofpasadena.net/water-and-power/wp-content/uploads/sites/54/2017/08/2015_Final_UWMP.pdf

run-off through settlement in the proposed drywell chambers. Per the City's Water and Power Department, existing entitlements and sources can serve the proposed project.

Over the past several years, Pasadena Water and Power (PWP) has been impacted by several factors that have restricted local and regional water supply. PWP's groundwater rights in the Raymond Basin have been curtailed in order to mitigate groundwater depletion experienced over the last half century. With respect to imported supplies, a decade-long drought has reduced the ability to replenish regional groundwater supplies; drought conditions in the American southwest have reduced deliveries of water from the Colorado River, and legal and environmental issues have resulted in reduced water deliveries through the State Water Project. The City accounted for these conditions in its current Water Integrated Resources Plan (adopted January 2011) and Urban Water Management Plan (adopted June, 2016).

The Pasadena Municipal Code Chapter 13.10 establishes thirteen permanent mandatory restrictions on wasteful water use activities. In addition, the State Legislature passed the Water Conservation Act of 2009 which seeks to achieve a 20% statewide reduction in urban per capita water use by December 31, 2020.

In September 2008, Council directed PWP to develop a Comprehensive Water Conservation Plan (CWCP) with a variety of approaches and recommendations for achieving 10%, 20% and 30% reductions in water consumption as well as an analysis of the financial impacts on the Water Fund if those conservation targets were achieved. On April 13, 2009, Council voted to approve the CWCP presented by PWP and to replace the Water Shortage Procedure Ordinance with a new Water Waste Prohibition and Water Shortage Plan Ordinance (PMC 13.10). As a long-term goal, the CWCP presupposes an initial target of reducing per-capita potable water consumption 10% by 2015 and 20% by 2020.

The new Water Waste Prohibitions and Water Supply Shortage Plan Ordinance (PMC 13.10) became effective on July 4, 2009 and established thirteen permanent mandatory restrictions on wasteful water use activities. In addition, statewide water demand reduction requirements began in 2009, as a result of the State's 20x2020 Water Conservation Plan from April 30, 2009 ("20x2020"), and the current work being done by the California Department of Water Resources, the State Water Resources Control Board, and other state agencies to implement the 20x2020 Water Conservation Initiative Program.

As a result, to meet these water policy goals, the current project must comply with the Water Conservation Plan and the Water Shortage Procedure Ordinance and the City's goal to meet the 20x2020 goals by submitting a water-conservation plan limiting the water consumption to 80% of its originally anticipated amount. With submission of this plan, the project will not have any individual or cumulative impacts on water supply. This plan is subject to review and approval by the City's Water and Power Department and the

Building Division before the issuance of a building permit. The applicant's irrigation and plumbing plans are also required to comply with the approved water-conservation plan and the city's requirements for landscape irrigation.

The project is also required to adhere to the requirements of the Model Water Efficient Landscape Ordinance which was adopted in 2010 and updated in 2018. This ordinance is a result of State Assembly Bill 1881 (SB1881) which mandates that all local jurisdictions follow specific regulations for the efficient use of water in the irrigation of landscapes. The project must adhere to all applicable provisions on this ordinance which are contained in Title 13 (Utilities and Services) of the Pasadena Municipal Code. The ordinance may require design features that include specific plant types, the use of recycled water for irrigation and/or water features etc. Adherence to the requirements will reduce the amount of water used in the project landscaping and will aid the project in complying with all related water reduction provisions.

c. *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner, which would:*

   i. *result in substantial erosion or siltation on-or off-site?*

☐ ☐ ☒ ☐

WHY? The project site is almost entirely covered by impervious surfaces and most of the runoff flows to the local storm drain system during a storm event. The proposed project would decrease the impervious site area. Through the addition of softscape primarily on the ground floor, approximately 87 percent of the site area would be comprised of impervious surfaces. All the runoff associated with the proposed project would be either directed to landscaped areas or directed to the existing storm drain system and would not encounter unprotected soils.

The drainage of surface water from the project would be controlled by building regulations and directed towards the City's existing streets, flood control channels, storm drains and catch basins. Prior to the issuance of a building permit, the applicant is required to submit a site drainage plan to the Building Division and the Department of Public Works for review and approval. This required approval ensures that the proposed drainage plan is appropriately designed and that the proposed runoff does not exceed the capacity of the City's storm drain system. The proposed drainage of the site would not channel runoff on exposed soil, would not direct flows over unvegetated soils, and would not otherwise increase the erosion or siltation potential of the site or any downstream areas. Therefore, the proposed project would not result in significant erosion or siltation impacts from changes to drainage patterns.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
ii. result in flooding on-or off-site?	☐	☐	☒	☐

WHY? The project site is currently developed with a surface parking lot and a commercial billboard. The project would not substantially change the site's drainage patterns and would not alter a discernable drainage course resulting in flooding. The proposed project would be required to submit a drainage plan to the Building Division and the Department of Public Works for review and approval. Compliance with the City's drainage plan review and approval process would reduce the likelihood that the proposed project would lead to on-site or off-site flooding.

Since the project would not involve alteration of a discernable watercourse and post-development runoff discharge rates are required to not exceed predevelopment rates, the proposed project would not have the potential to alter drainage patterns or increase runoff such that flooding would occur. Therefore, impacts would be less than significant.

iii. create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐

WHY? As noted above, the project site is generally flat and is currently occupied by a surface parking lot. Project implementation would result in similar drainage patterns as existing conditions, since the majority of the site would remain impervious. As such, the amount of stormwater runoff from the site is not expected to increase, and the project is, therefore, not expected to exceed the capacity of existing or planned stormwater drainage systems. As discussed above, the proposed project would be required to submit a drainage plan to the Building Division and the Public Works Department for review and approval. The City's drainage plan review and approval process would ensure that the proposed project would not create a new source of runoff such that the capacity of the City's stormwater drainage system would be exceeded.

The project would generate only typical, non-point source, urban stormwater pollutants. These pollutants are covered by the County-wide MS4 permit, and the project would be required to implement best management practices (BMPs), consistent with the City's Stormwater Management and Discharge Control ordinance in P.M.C. Chapter 8.70, to reduce stormwater pollutants to the maximum extent practicable. For these reasons, the proposed project would not create runoff that would exceed the capacity of the storm drain system and would not provide a substantial additional source of polluted runoff. Impacts would be less than significant.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

iv. impede or redirect flood flows?

☐ ☐ ☒ ☐

WHY? The drainage of surface water from the project would be controlled by building regulations and would be directed towards the City's existing streets, storm drains, and catch basins. As discussed above, the project would not increase the amount of impervious land of the site and, therefore, would not increase stormwater runoff from the site. The project would not impede or redirect flood flows.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

☐ ☐ ☐ ☒

WHY? The City is not located near enough to any inland bodies of water or the Pacific Ocean to be inundated by either a seiche or tsunami. No portions of the City of Pasadena are within a 100-year floodplain identified by FEMA. In addition, according to the City's Dam Failure Inundation Map (Plate P-2 of the 2002 Safety Element of the City's General Plan) the project is not located in a dam inundation area. Therefore, no impacts would occur.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

☐ ☐ ☒ ☐

WHY? As discussed above, the proposed project would implement the BMPs recommended by the City's Stormwater Management and Discharge Control ordinance ((P.M.C. Chapter 8.70) in order to ensure stormwater pollutants do not substantially degrade water quality. Further, the City of Pasadena has adjudicated groundwater rights from the Raymond Basin. For this reason, the City does not have a sustainable groundwater management plan as it is not required for adjudicated groundwater basins.

Additionally, the project has the potential to generate short-term water pollutants during construction, including sediment, trash, construction materials, and equipment fluids. The County-wide MS-4 permit requires construction sites to have BMPs in place to reduce the potential for construction-induced water pollutant impacts. These BMPs include methods to prevent contaminated construction site stormwater from entering the drainage system and preventing construction-induced contaminants from entering the drainage system. The MS4 identified the following minimum requirements for construction sites in Los Angeles County:

- Sediment generated on the project site shall be retained using adequate treatment control or structural BMPs.

- Construction-related materials, wastes, spills, or residues shall be retained at the project site to avoid discharge to streets, drainage facilities, receiving waters, or adjacent properties by wind or runoff.

- Non-stormwater runoff from equipment and vehicle washing and any other activity shall be contained at the project site.

- Erosion from slopes and channels shall be controlled by implementing an effective combination of BMPs, such as the limiting of a grading scheduled during the wet season; inspecting graded areas during rain events; planting and maintenance of vegetation on slopes; and covering slopes that may be susceptible to erosion.

As the proposed project site is less than one acre in size (0.74 acres), it would not require the preparation of a General Construction Activity Stormwater Permit (GCASWP) or a Storm Water Pollution Prevention Plan (SWPPP).

However, as per City code and regulations, all projects under construction must contain all sediment and spills on-site. The implementation of the following standard BMPs would minimize any chance that erosive soils, sediment or other construction spills or debris would impact water quality:

1. Every effort should be made to eliminate the discharge of non-stormwater from the project site at all times.

2. Eroded sediments and other pollutants must be retained on site and may not be transported from the site via sheet-flow, swales, area drains, natural drainage courses, or wind.

3. Stockpiles of earth and other construction-related materials must be protected from being transported from the site by the forces of wind or water.

4. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soil and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.

5. Excess or waste concrete may not be washed into the public right-of-way or any other drainage system. Provisions shall be made to retain concrete wastes on site until they can be disposed of as solid waste.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

6. Trash and construction-related solid waste must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.

Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public right-of-way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.

Therefore, the project would comply with applicable water quality control plans. Additionally, the project site would be constructed on a site previously developed with a surface parking lot and would not increase the amount of impervious surface. Therefore, implementation of the proposed project would not conflict with or obstruct implementation of any other water quality control plans or sustainable groundwater management plans.

4.11 LAND USE AND PLANNING

Would the project:

a. Physically divide an established community?

☐ ☐ ☐ ☒

WHY? The project would not physically divide an existing community, as the site is surrounded by similar development on all sides, and the project consists of an infill development within an urbanized area. No adverse impact would result.

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

☐ ☐ ☐ ☒

WHY? The project is consistent with both the CD-1 zoning designation and the High-Mixed Use General Plan Land Use Designation in the adopted 2015 Land Use Element.

4.12 MINERAL RESOURCES

Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

☐ ☐ ☐ ☒

WHY? No active mining operations exist in the City of Pasadena. There are two areas in Pasadena that may contain mineral resources. These two areas are Eaton Wash, which, was formerly mined for sand and

gravel, and Devils Gate Reservoir, which was formerly mined for cement concrete aggregate. The project is not near these areas. Therefore, the project will not result in an impact.

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

☐ ☐ ☐ ☒

WHY? The City's 2015 General Plan Land Use Element does not identify any mineral recovery sites within the City. Furthermore, there are no mineral-resource recovery sites shown in the Hahamongna Watershed Park Master Plan; or the 1999 "Aggregate Resources in the Los Angeles Metropolitan Area" map published by the California Department of Conservation, Division of Mines and Geology. No active mining operations exist in the City of Pasadena and mining is not currently allowed within any of the City's designated land uses. Therefore, the proposed project would not have significant impacts from the loss of a locally-important mineral resource recovery site.

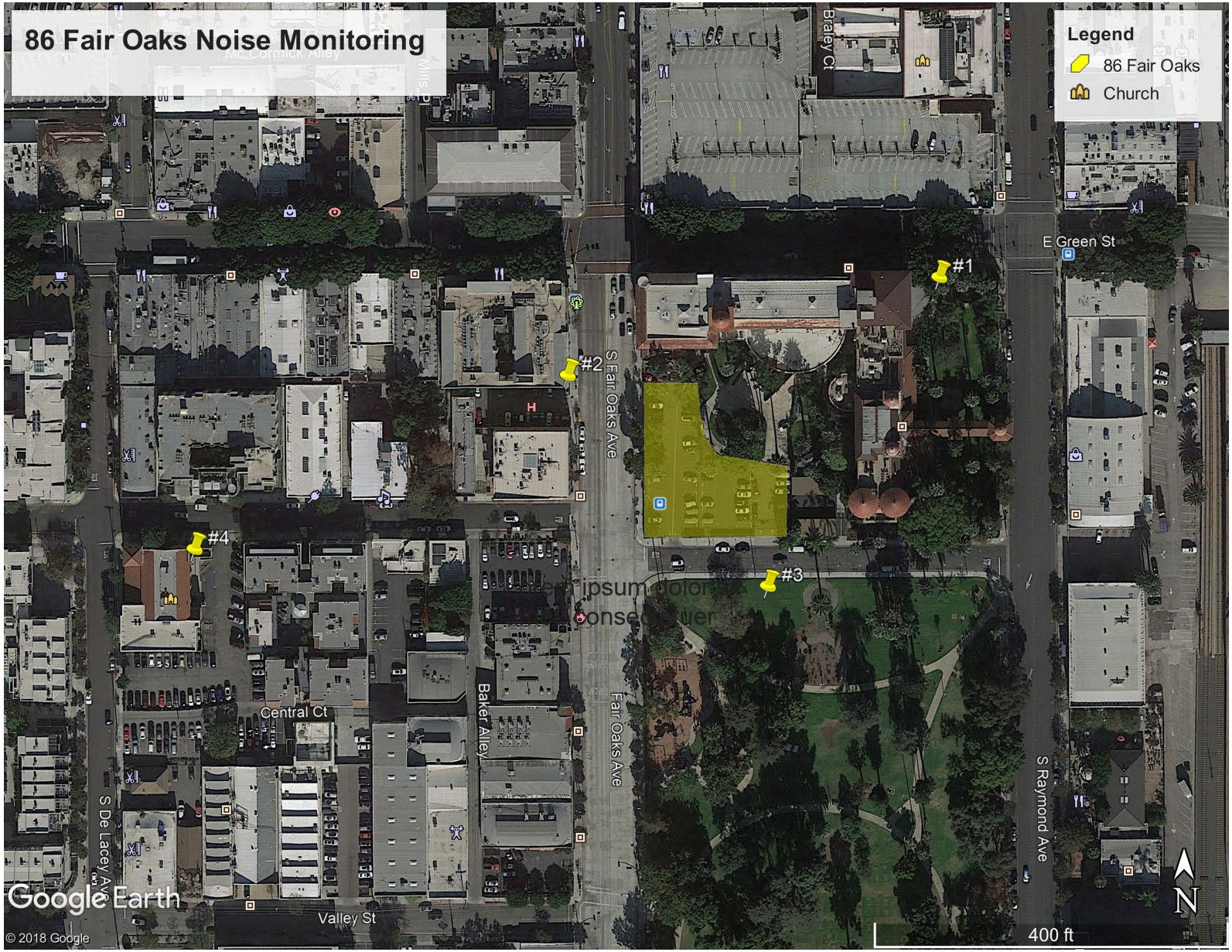
4.13 NOISE

Will the project result in:

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

☐ ☐ ☒ ☐

WHY? Noise measurements were conducted on the project site and in the project vicinity (**Figure 4.13-1, Noise Monitoring Locations**). Four short-term measurements were conducted with a Larson Davis SoundTrack LxT1 sound level meter placed on a tripod with the microphone positioned approximately 5 feet above the ground. Ambient sound levels were generated dominated by street traffic noise. **Table 4.13-1** presents the result of the ambient, short-term noise measurements.



SOURCE: Google Earth, 2018

FIGURE **4.13-1**

IMPACT SCIENCES

Noise Monitoring Location Map

1136.004•03/2020

Table 4.13-1
Ambient, Short-term Noise Measurements

Measurement Location	Date/Time	Leq
Location #1	12/10/2019; 1:23 p.m.	67.9
Location #2	12/10/2019; 1:43 p.m.	68.0
Location #3	12/10/2019; 2:13 p.m.	55.8
Location #4	12/10/2019; 2:31 p.m.	57.3

Source Impact Sciences, December 2019

Based on the results of the ambient noise measurements, it was determined that transportation related noise sources are the primary contributor to the noise environment in each of the monitoring locations.

CONSTRUCTION IMPACTS

The project would generate short-term noise due to construction activities. However, the project would adhere to City regulations governing hours of construction, noise levels generated by construction and mechanical equipment, and the allowed level of ambient noise (Chapter 9.36 of the Pasadena Municipal Code). In accordance with these regulations, construction noise would be limited to normal working hours (7 a.m. to 7 p.m. Monday through Friday, 8 a.m. to 5 p.m. on Saturday, in or within 500 feet of a residential area). A construction related traffic plan is also required to ensure that truck routes for transportation of materials and equipment are established with consideration for sensitive uses in the neighborhood. A traffic and parking plan for the construction phase would be submitted for approval to the Traffic Engineer in the Transportation Department prior to the issuance of any permits. Therefore, adhering to established City regulations would ensure that the project would not generate noise levels in excess of standards.

In this case, construction of the proposed project would involve the use of heavy construction equipment within close proximity of residences, including those on adjacent parcels, and as a result, there would be a potential for adverse impacts in the event of non-compliance with the City's noise regulations.

Construction noise levels vary from hour-to-hour and day-to-day, depending on the equipment in use, the operations being performed, and the distance between the source and receptor. Construction of the proposed project would generate noise that could expose nearby receptors to elevated noise levels that may disrupt communication and routine activities. The magnitude of the impact would depend on the type of construction activity, equipment, duration of the construction, distance between the noise source and receiver, and intervening structures. As noted above, section 9.36.080 of the Pasadena Municipal Code requires that construction equipment noise not exceed 85 dB(A) when measured within a radius of 100 feet

from such equipment ~~at 100 feet~~. **Table 4.13-2** lists the construction equipment that would be used for the project for various construction phases and their noise levels for a reference receptor at 100 feet.

Table 4.13-2
Construction Equipment List Noise Emission Levels

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Spec 721.560 Lmax @ 50 ft (dBA, slow)	Actual Measured Lmax @50ft (dBA, slow)	Calculated Lmax @100 ft (dBA)
Excavator	No	40	n/a	80.7	74.7
Concrete Saw	No	20	n/a	89.6	83.6
All Other Equipment > 5 HP	No	50	85	n/a	79.0
Front End Loader	No	40	n/a	79.1	73.1
Drill Rig Truck	No	20	n/a	79.1	73.1
Tractor	No	40	84		78.0
Backhoe	No	40	n/a	77.6	71.5
Crane	No	16	n/a	80.6	74.5
Dozer	No	40	n/a	81.7	75.6
Paver	No	50	n/a	77.2	71.2
Roller	No	20	n/a	80	74.0

Source: Federal Highway Administration. Construction Noise Handbook. Roadway Construction Noise Model.

As shown above in **Table 4.13-2,** the loudest single piece of construction equipment would be anticipated to have a maximum value of 83.6 dBA at 100 feet. All other anticipated equipment to be used for the project would have a lower noise level. Therefore, the project would comply with section 9.36.080 of the Pasadena Municipal Code and impacts from construction equipment noise would be less than significant.

Construction haul trucks would generate noise off-site during site preparation and construction. This would include removal of materials from the project site, including the export of cut-and-fill materials, removal of asphalt, base materials, and demolished materials. While this vehicle activity would increase ambient noise levels along the haul route, ambient noise levels would not be expected to significantly increase by 3 dB(A) or greater at any noise sensitive land use. Studies have shown that a 3 dB(A) increase in sound level pressure is barely detectable by the human ear. A 3 dB(A) increase in roadway noise levels requires an approximate doubling of roadway traffic volume, assuming that travel speeds and fleet mix remain constant.[40] The City of Pasadena's Transportation Data Management System shows that the street

40 California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Protocol.* September 2013.

segment south of the intersection of Fair Oaks Avenue and Green Street has a traffic volume of approximately 1,354 vehicles during the A.M. peak hour, and 1,400 vehicles during the P.M. peak hour.[41] The grading period would have approximately 5,688 hauling trips (including trips to and from the site) over a 130 day period, averaging about 44 trips per day. Assuming that these hauling trips would take place during an 8-hour work day period., an average of approximately 6 hauling trips per hour would occur. Though the addition of haul trucks would alter the fleet mix of the anticipated haul route, their addition to local roadways would account for 0.44 percent of the A.M. peak hour traffic volume and 0.43 percent of the P.M. peak hour traffic volume. Since it would take a doubling of roadway traffic volume to increase noise levels by 3 dB(A), the addition of haul trucks from the project would not increase traffic to levels capable of producing 3 dB(A) ambient noise increases and there would be no perceptible increase in noise due to the addition of haul trucks. However, trucks accessing the project site, while not significantly increasing ambient traffic noise levels, have the potential to instantaneously increase noise levels as each truck passes nearby sensitive receptors (e.g., an empty truck hitting a pothole, or the application of air brakes near sensitive land uses, etc.). These temporary instantaneous noise level increases may reach a maximum range of approximately 76 to 88 dB(A) at 50 feet from the source.[42,43] At a reference distance of 100 feet, a noise level of 88 dB(A) at 50 feet would drop to approximately 82 dB(A). This would not exceed the requirements specified in Pasadena Municipal Code section 9.36.080. As a result, temporary haul truck construction noise impacts on ambient noise levels would be considered less than significant.

OPERATIONAL IMPACTS

The City of Pasadena's Transportation Data Management System shows that Dayton Street between Fair Oaks Avenue and Raymond Avenue has a traffic volume of approximately 70 vehicles during the A.M. peak hour, and 118 vehicles during the P.M. peak hour.[44] It takes a doubling of traffic volume to increase noise levels by 3 dB(A). The project's addition of approximately 52 A.M. peak hour trips and 73 P.M. peak hour trips would not increase in traffic volumes enough to cause a significant audible increase in traffic noise.

The Pasadena Municipal Code requires that noise generated by mechanical equipment not exceed 5 dB(A) above ambient noise levels at adjacent property lines. HVAC equipment is only anticipated to result in an

41 City of Pasadena, *Transportation Data Management System.* Available at: https://pasadena.ms2soft.com/tcds/tsearch.asp?loc =Pasadena&mod=.

42 Federal Highway Administration, Highway Construction Noise Handbook, 2006.

43 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual. September* 2018.

44 City of Pasadena, *Transportation Data Management System.* Available at: https://pasadena.ms2soft.com/tcds/tsearch.asp?loc =Pasadena&mod=.

increase of 3.1 dB(A). This is below the Pasadena Municipal Code threshold of a 5 dB(A) increase in ambient noise levels. Therefore, on-site HVAC noise would result in a less than significant impact.

Parking noise typically generates noise levels of approximately 60 dB(A) at 50 feet. Parking from the project would occur in subterranean parking. However, as cars enter the subterranean parking from within the project site, noise generated from parking related impacts may occur at nearby receptors. At approximately 60 feet from the subterranean parking entrance, there would be an increase of approximately 4.5 dB(A) when vehicles enter the parking levels of the project and receptors are exposed to parking noise. This is below the Pasadena Municipal Code recommended threshold of a 5 dB(A) increase in ambient noise levels. Therefore, parking noise would result in a less than significant impact.

b. Generation of excessive groundborne vibration or groundborne noise levels?

☐ ☒ ☐ ☐

WHY? The Federal Transit Administration provides ground-borne vibration impact criteria with respect to building damage during construction activities. Peak particle velocity (PPV), expressed in inches per second, is used to measure building vibration damage. Construction vibration damage criteria are assessed based on structural category (e.g., reinforced-concrete, steel, or timber). FTA guidelines consider 0.12 inch/sec PPV to be the significant impact level for buildings extremely susceptible to vibration damage. Structures or buildings constructed of reinforced concrete, steel, or timber have a vibration damage criterion of 0.5 inch/sec PPV pursuant to FTA guidelines.[45]

Groundborne vibration generated by construction activities associated with the proposed project would affect both on- and off-site sensitive uses located in close proximity to the project site. As shown in **Table 4.13-3, Vibration Source Levels for Construction Equipment**, vibration velocities could range from 0.003 to ~~0.644~~ 0.089 inch/sec PPV at 25 feet from the source activity, with corresponding vibration levels (VdB) ranging from 58 VdB to 87 VdB at 25 feet from the source activity, depending on the type of construction equipment in use. It should be noted that pile driving and equivalent methods are prohibited by the Municipal Code; further, jackhammers will not be used during construction of the proposed project.

Table 4.13-3
Vibration Source Levels for Construction Equipment

	Approximate PPV (in/sec)					Approximate RMS (VdB)				
Equipment	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet
Large Bulldozer	0.089	0.031	0.024	0.017	0.011	87	78	76	73	69

[45] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual. September* 2018.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

	Approximate PPV (in/sec)					Approximate RMS (VdB)				
Equipment	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet
Caisson Drilling	0.089	0.031	0.024	0.017	0.011	87	78	76	73	69
Loaded Trucks	0.076	0.027	0.020	0.015	0.010	86	77	75	72	68
~~Jackhammer~~	~~0.035~~	~~0.012~~	~~0.009~~	~~0.007~~	~~0.004~~	~~79~~	~~70~~	~~68~~	~~65~~	~~61~~
Small Bulldozer	0.003	0.001	0.0008	0.0006	0.0004	58	49	47	44	40

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018.

The sensitive receptors in Figure 4.13-1 are sensitive to noise impacts. However, vibrational impacts can potentially damage buildings that are near the construction site. As such, **Table 4.13-4, Vibration Levels at Off-Site Sensitive Uses from Project Construction - Unmitigated**, shows the vibration velocity and levels that would occur at these nearby buildings and structures during construction at the project site. For clarity, the receptors in Table 4.13-3 are listed as "Vibration Receptors." The receptors identified to be assessed for vibration impacts are the Green Hotel Apartments (Vibration Receptor #1) located to the north of the project site, the Castle Green (Vibration Receptor #2) located east of the project, a three-story red brick building located at 103-115 South Fair Oaks Avenue (Vibration Receptor #3) located west of the project, and a restaurant building located at 84 South Fair Oaks Avenue (Vibration Receptor #4). Based on the FTA guidance presented in Table 5 in Appendix F, a vibration level of 0.12 PPV in/sec is used in this analysis as the threshold to determine potential significant vibration impacts to the existing Green Hotel Apartments, Castle Green, and restaurant building located at 84 South Fair Oaks Avenue.

Table 4.13-4
Vibration Levels at Off-Site Sensitive Uses from Project Construction - Unmitigated

Sensitive Uses Off-Site	Distance to Project Site (ft.)	Receptor Significance Threshold PPV (in./sec)	Estimated PPV (in/sec) [a]
Vibration Receptor #1 (Green Hotel Apartments)	15~~20~~	0.12	0.124
Vibration Receptor #2 (Castle Green) [e]	73~~40~~	0.12	0.044
Vibration Receptor #3 (103-115 South Fair Oaks Avenue)	80	0.5	0.016
Vibration Receptor #4 (84 South Fair Oaks Avenue)	10~~15~~	0.12	0.191

The vibration velocities predicted to occur at Vibration Receptor #1 (Green Hotel Apartments), located 15~~20~~ feet to the north of the nearest project site boundary would be 0.124 in/sec PPV. This exceeds the FTA 0.12 in/sec PPV threshold. Vibration Receptor #2 (Castle Green) is approximately 73~~40~~ feet from the project site; at this distance, vibration impacts are anticipated to be 0.044 in/sec PPV and would not exceed the

FTA threshold. Vibration Receptor #3, at a distance of 80 feet, is estimated to have vibration levels of 0.016 in/sec PPV and would also not exceed FTA thresholds. Vibration Receptor #4 is estimated to have vibration levels of 0.191 in/sec PPV and would also exceed the FTA threshold of 0.12 in/sec PPV. **Mitigation Measures NOI-1** and **NOI-2** would reduce potential vibration impacts to associated with construction activities to a less than significant level.

MM NOI-1: Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, and to the satisfaction of the City of Pasadena, the applicant shall retain a Professional Structural Engineer with experience in structural vibration analysis and monitoring for historic buildings and a Project Historical Architect with similar experience as a team to ensure project construction-induced vibration levels do not expose the existing Green Hotel Apartments or the restaurant building at 84 South Fair Oaks Avenue to vibration levels of 0.12 ppv in/sec or greater. The Professional Structural Engineer/Project Historical Architect team shall perform the following tasks:

- Review the project plans for demolition and construction;
- Survey the project site and the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue, including photographic and/or videographic documentation and geological testing, if required; and
- Prepare and submit a report to the Director of Planning and Community Development to include, but not be limited to, the following:
  - Description of existing conditions at the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue, including photographic and/or videographic documentation;
  - Vibration level limits based on building conditions, soil conditions, and planned demolition and construction methods to ensure vibration levels would be below 0.12 ppv in/sec, the potential for damage to the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue;
  - Specific measures to be taken during construction to ensure the specified vibration level limits are not exceeded; and

- ~~A~~ Prepare and submit a monitoring plan to be implemented during demolition and construction that includes post-construction and post-demolition surveys of the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue. The plan should include, but not be limited to, monitoring instrument specifications, instrument calibration certificates, list of exact monitoring locations, data collection protocol, alarming and alerting protocol, reporting protocol, and maintenance and service outage protocol. Any of the measures can be removed when no longer necessary to achieve the 0.12 ppv in/sec threshold of structure damage at the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue.

- Examples of measures that may be specified for implementation during demolition or construction include, but are not limited to

  - Prohibition of certain types of impact equipment;
  - Requirement for lighter tracked or wheeled equipment;
  - Specifying demolition by non-impact methods, such as sawing concrete;
  - Phasing operations to avoid simultaneous vibration sources; and
  - Installation of vibration measuring devices to guide decision making for subsequent activities. Monitoring shall be conducted, at minimum, during all ground-disturbing significant impact construction activities (i.e., demolition, shoring excavation, and foundation work). Warning thresholds, as specified in the monitoring plan, shall be below the specified vibration limits to allow the Contractor to take the necessary steps to reduce vibration, including but not limited to halting/staggering concurrent activities, utilizing quieter or lower-vibratory techniques, or reducing the speed or intensity of equipment. A monitoring record that documents all alarms and includes information regarding compliance with these vibration measures shall be provided to the City of Pasadena upon request.

MM NOI-2: To the satisfaction of the City of Pasadena, in the unanticipated event of discovery of vibration-caused damage, the Professional Structural Engineer and the Project Historical Architect shall document any damage to the existing Green Hotel Apartments and/or

restaurant building located at 84 South Fair Oaks Avenue caused by construction of the project and shall recommend necessary repairs. Until the conclusion of vibration causing activities, a report from the Professional Structural Engineer or Project Historical Architect shall be submitted every 90 days to the City of Pasadena documenting the presence or absence of damage, and, if needed, the status of any required repairs. The project applicant shall be responsible for any repairs associated with vibration-caused damage as a result of construction of the project. Any such repairs shall be undertaken and completed as required to conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 Code of Federal Regulations 68), and shall apply the California Historical Building Code (California Code of Regulations, Title 24, Part 8) and other applicable codes.

c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

☐ ☐ ☐ ☒

WHY? The project site is not in the vicinity of a private airstrip or airport land use plan. Likewise, the project site is not located within an airport land use plan or within two miles of a public airport or public use airport. As such, the project would not expose people residing or working in the project area to excessive airport-related noise levels. No impact would occur from the proposed project and no further analysis is required.

The closest airport is the Hollywood Burbank (Bob Hope) Airport (formerly the Burbank-Glendale-Pasadena Airport), which is located more than 10 miles from Pasadena in the City of Burbank. Therefore, the proposed project would not expose people to excessive airport related noise and would have no associated impacts.

4.14 POPULATION AND HOUSING

Would the project:

a. *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

☐ ☐ ☒ ☐

WHY? The proposed project involves the construction and operation of residential units, work/live units, and commercial and restaurant space, which is consistent with the land use designations for the site (See **Section 11, Land Use,** of this document). Therefore, the proposed project is consistent with the growth anticipated and accommodated by the City's General Plan. Furthermore, the project is located in a

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

developed urban area with an established roadway network and in-place infrastructure. Thus, development of the proposed project would not require extending or improving infrastructure in a manner that would facilitate off-site growth. Therefore, the proposed project would not induce substantial population growth, and would have no related significant impacts.

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

☐ ☐ ☐ ☒

WHY? The project site does not contain any existing dwelling units. Therefore, the proposed project would not displace any residents or housing, and would have no related impacts.

4.15 PUBLIC SERVICES

Will the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a. Fire Protection?

☐ ☐ ☒ ☐

WHY? The proposed project would not result in the need for additional new or altered fire protection services and would not alter acceptable service ratios or response times. The proposed project consists of 84 residential units, 4 work/live units, and approximately 6,200 square feet of restaurant and commercial space, which could increase the demand on the Pasadena Fire Department. However, the project itself is not large enough to require the development of additional Fire Department facilities. Nor does the project require alteration of any facilities (including the fire station almost directly across the street from the project). Therefore, the proposed project would not significantly impact fire protection services.

b. Police protection?

☐ ☐ ☒ ☐

WHY? The proposed project would not result in the need for additional new or altered police protection services and would not alter acceptable service ratios or response times. The proposed project consists of 84 residential units, 4 work/live units, and approximately 6,200 square feet of restaurant and commercial space, which could increase the demand on the Pasadena Police Department. However, the project itself is not large enough to require the development of additional Police facilities. Therefore, the proposed project would not significantly impact police protection services.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
c. Schools?	☐	☐	☒	☐

WHY? The City of Pasadena collects a Pasadena Unified School District (PUSD) Construction tax on all new construction. A fee is collected by the City's Building Official for PSUD on each residential unit constructed, as well as a fee for non-residential development. Payment of this fee mitigates any impacts on schools.

d. Parks?	☐	☐	☒	☐

WHY? The project is located approximately 50 feet from the nearest park, (Central Park). According to the City's park impact fee nexus study prepared in 2004, for every 1,000 residents the City as a whole has 2.17 acres of developed parkland and 1.49 acres of open space parkland, for a total of 3.66 acres of park and open space per 1,000 residents.

For each new residential unit there is a "Residential Impact Fee" charged in accordance with Pasadena Municipal Code Section 4.17.050 for parkland acquisition, capital improvements and maintenance. If affordable housing is built on the site, as in the proposed project, the residential impact fee is $ 13,735.49 per studio to $25,424.99 for a five or more-bedroom unit, or $ 1,016.85 per unit for affordable housing units. Payment of this fee mitigates any project impact on parks.

e. Libraries?	☐	☐	☒	☐

WHY? The project is located approximately 0.50 miles from the nearest branch library (Pasadena Public Library – Central Branch). The City as a whole is well served by its Public Information (library) System; and the project would not significantly impact library services and no new or expanded library facilities would be needed.

f. Other public facilities?	☐	☐	☒	☐

WHY? The project's development may result in additional maintenance of public facilities. However, with the projected revenue to the City in terms of impact fees, increased property taxes and additional sales tax, and development fees this impact is not significant.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

4.16 RECREATION

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

☐ ☐ ☐ ☒

WHY? The project is located approximately 50 feet from the nearest park, Central Park. The proposed project is expected to generate 213 residents and would result in a proportional increase in the use of neighborhood and regional parks. However, in accordance with Ordinance No. 6252, the City collects a park impact fee for each residential unit constructed and on each residential addition over 400 sq. ft. in size. These fees are used to fund land acquisition and capital improvements. The project itself would not lead to substantial physical deterioration of any recreational facilities, and would have no related significant impacts.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

☐ ☐ ☐ ☒

WHY? The project includes private recreational facilities for the residents of the project, including multiple outdoor terraces and a swimming pool and would not require the construction or expansion of recreational facilities. Therefore, the proposed project does not involve the development of recreational facilities that would have an adverse effect on the environment, and would have no associated impacts.

4.17 TRANSPORTATION

Would the project:

a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

☐ ☐ ☒ ☐

WHY? On November 2014, the City of Pasadena City Council adopted a resolution to replace the City's transportation performance measures with five new Transportation Performance Measures and new thresholds of significance to determine transportation and traffic impacts under CEQA. The new performance measures and CEQA thresholds are consistent with the City's adopted General Plan and Senate Bill 743 and include vehicle miles traveled (VMT) per capita, vehicle trips (VT) per capita, proximity and quality of the bicycle network, proximity and quality of the transit network, and pedestrian accessibility. The new measures support the City's vision of creating a community where people can circulate without cars, which relies upon an integrated multimodal transportation system that provides choices and accessibility for everyone in the City.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

The City established *Transportation Impact Analysis Current Practice & Guidelines* to implement the transportation performance measures and CEQA thresholds. These guidelines identify projects with 50 or more residential units and/or 50,000 square feet or more of nonresidential use as having communitywide significance and must consider the City's CEQA thresholds. As a result, the project was required to undergo a transportation analysis to determine whether the project would exceed the transportation review thresholds described above. The Travel Demand Forecasting Model calculation results for the proposed project determined that the project would not cause a significant impact to any of the metrics as outlined in the City's Traffic Transportation Impact Analysis Current Practice and Guidelines. The transportation analysis also concluded that the project would not cause a decrease in the percentage of existing citywide service population within a quarter mile of Level 1 and 2 transit or bike facilities. Furthermore, the analysis also concluded that the project would not decrease the Citywide Pedestrian Accessibility Score.

Additionally, the proposed project lies within 0.25 miles of the Gold Line/Del Mar Metro Station and encourages bike use through providing end-of-trip bicycle storage. Therefore, the project will not conflict with a program plan, ordinance, or policy addressing the circulation system and will encourage the use of alternative modes of transportation.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

☐ ☐ ☒ ☐

WHY? Section 15064.3(b)(1) of the *State CEQA Guidelines* refers to evaluating transportation impacts using vehicle miles traveled (VMT) for land use projects. The City's *Transportation Impact Analysis Current Practice & Guidelines* were prepared to reflect this requirement. The CEQA transportation analysis (included as Appendix G) utilized a CEQA threshold of an increase of the existing Citywide VMT per capita of 22.6. The analysis concluded an incremental change (existing plus project) of 16.2, which is below the significant impact cap. There would be a less than significant impact.

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

☐ ☐ ☒ ☐

WHY? The project has been evaluated by the Pasadena Department of Transportation (PasDOT) and its impact on circulation due to the proposed use and its design has been found not to be hazardous to traffic circulation either within the project or in the vicinity of the project. In addition, the project's circulation design meets the City's engineering standards. Therefore, the proposed project would not increase hazards due to a design feature or incompatible use, and would have no associated impacts.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
d. Result in inadequate emergency access?	☐	☐	☒	☐

WHY? The ingress and egress for the site have been evaluated by the PasDOT and found to be adequate for emergency access or access to nearby uses. The project does not involve the elimination of a through-route, does not involve the narrowing of a roadway, and all proposed roadways, access roads and drive lanes meet the Pasadena Fire Department's access standards.

The project must comply with all State and local Building, Fire and Safety Codes and plans are subject to review and approval by the Public Works and the Transportation Departments, and the Building Division and Fire Department. Therefore, there would be no significant impacts related to inadequate emergency access.

4.18 TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☒	☐	☐

WHY? The proposed project is subject to compliance with Assembly Bill 52 (AB 52), which requires consideration of impacts to "tribal cultural resources" as defined in Public Resources Code 21074 as part of the CEQA process and requires the City to notify any groups (who have requested notification) of the proposed project who are traditionally or culturally affiliated with the geographic area of the project. Two tribes (the Gabrieleno Band of Missions Indians – Kizh Nation and the Gabrielino-Tongva Tribe) requested formal notification of all projects within the City. Accordingly, the City notified the Gabrieleno Band of Mission Indians – Kizh Nation and Gabrielino-Tongva of the proposed project under AB 52 in order to provide an opportunity to consult on tribal cultural resources and other matters of concern.

As described in Section 5, there are no known prehistoric or historic archeological sites on the project site. However, it is possible that intact and previously undiscovered prehistoric archaeological deposits are present at subsurface levels and could be uncovered during ground-disturbing activities. In the event that such deposits are previously unknown tribal cultural resources, significant effects may occur to that resource, if the resource is disturbed, destroyed, or otherwise improperly treated. As such, mitigation

measure TCR-1 is provided in the event that resources are uncovered during construction. Mitigation measure TCR-1 requires a qualified Native American monitor meeting the satisfaction of the Gabrieleno Band of Mission Indians – Kizh Nation to be present during grading and excavation activities at the project site. Mitigation measure TCR-1 further requires the proper handling and treatment of any significant resources would be less than significant.

MM TCR-1: During grading and excavation, a monitor meeting the satisfaction of the Gabrieleno Band of Mission Indians – Kizh Nation shall be present. Consistent with Mitigation Measure 4-1 in the Pasadena General Plan EIR, if Native American artifacts are found, all ground disturbing activities in the immediate vicinity of the find shall be halted until the find is evaluated by a Registered Professional Archaeologist. If testing determines that significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon data as applicable, and other special studies; and provide a comprehensive final report, including site record to the City and the South Central Coastal Information Center at California State University, Fullerton. No further grading shall occur in the area of the discovery until the Planning Department approves the report. Subsequently, the find shall be turned over to the tribe of the resource's origin. In addition, any cultural resources found shall be treated in accordance with regulatory requirements. Grading and excavation may continue around the isolated area of the find so long as the activities do not impede or jeopardize the protection and preservation of any cultural resources as determined by the Registered Professional Archaeologist.

b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

☐ ☒ ☐ ☐

WHY? There are no resources at the project site that have been determined by the City to be significant pursuant to the criteria set forth in Public Resources Code Section 5024.1. However, as described above, there is the potential that previously undiscovered cultural resources could be uncovered during ground-disturbing activities. In the event that such resources are determined to be significant under Public Resources Code Section 5024.1, the project could result in significant impacts to such resources, if the resource is disturbed, destroyed, or otherwise improperly treated. As such, **Mitigation Measure TCR-1** has set forth procedures to ensure that any finds that are exposed during construction activities for the proposed

project are properly handled and treated. Upon incorporation of **Mitigation Measure TCR-1**, impacts to tribal cultural resources would be less than significant.

4.19 UTILITIES AND SERVICE SYSTEMS

Would the project:

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

☐ ☐ ☐ ☒

WHY? The proposed project consists of 84 residential units, 4 work/live units, and 6,200 square feet of residential and commercial space, and as a result, would increase the demand for water and wastewater service.

The City's Department of Public Works, Engineering Division maintains the local sewer system. Flows from the local system are currently carried to the trunk sewers operated by the Los Angeles County Sanitation District. An existing 18-inch vitrified clay pipe sewer main is located in Fair Oaks Avenue.

Under normal operation the proposed project would generate approximately 18,886 gallons of wastewater per day, while the proposed project would use approximately 24,261 gallons of water per day. Utility usage is discussed in the Energy section, above.

No existing sewer deficiencies were identified in the City's Master Sewer Plan.[46] In addition, no deficiencies have been identified in the County Sanitation Districts' collection and treatment facilities serving the City. Wastewater is currently treated at the Whittier Narrows Reclamation Plant, San Jose Creek Water Reclamation Plant, and the Los Coyotes Water Reclamation Plant. The design capacities of these facilities are based on regional growth forecasts adopted by SCAG. All expansions of the District's facilities must be sized in a manner consistent with SCAG's regional growth forecast. As previously discussed, the proposed project is consistent with the City's General Plan land use designation, which forms the basis of SCAG's regional forecast. As Los Angeles County Sanitation District 16 treats the City's wastewater, the proposed project would be subject to a sewer connection fee when the project is hooked up to a sewer line. Connection of the main sewer lines would occur during construction and would not result in environmental impacts beyond those analyzed in this SCEA.

46 City of Pasadena, Master Sewer Plan, Figure 6-1.

As previously stated, the proposed project would generate the need for approximately 24,261 gallons of water per day. The proposed project would be subject to several PMC requirements designed to reduce water consumption. In conformance with the California Green Building Program (CALGreen), the City has adopted an amended California Green Building standards Code (PMC 14.04.500) for all new construction and tenant improvements. In conformance with this Ordinance, the project would be designed to meet the California Green Building Standards Code Tier 2 Requirements (PMC 14.04.504, Section 307.2). In addition to the mandatory measures of Tier 2, compliance with specific prerequisites and as many additional elective measures to achieve an equivalent 50 LEED points is also required to achieve Tier 2 status (PMC 14.04.558), which would reduce water use through various water conservation measures. Furthermore, the proposed project would be subject to the Water Waste Prohibitions and Water Supply Shortage Plans Ordinance (PMC 13.10), which imposes mandatory water conservation measures during Level 1 (least restrictive) through Level 4 (most restrictive) water supply shortages; the Water Efficient Landscaping Ordinance (PMC 13.22); and Landscaping Ordinance (PMC 17.44); to further reduce water demand and any corresponding requirement for new water facilities. In addition, since the proposed project is consistent with the General Plan designation for the project site, the growth associated with the project has already been accounted for in PWP's latest Urban Water Management Plan. Further, more than 75 percent of planting material utilized in this project is identified by WUCOLS (Water Use Classification of Landscape Species) as needing "Low" or "Very Low" amounts of irrigation water, indicating that an overwhelming majority of plants will be drought tolerant. The project would use a drip irrigation system with a weather-based irrigation controller. Refer to the CAP Consistency Checklist Supporting Docs, p. 8-9 (Landscape Plan - Ground Floor Tree Locations, Landscape Plan - Ground Floor Planting Locations) for additional information about landscape and irrigation systems, included in **Appendix D**. Therefore, the proposed project is not expected to exceed PWP's available supplies, and impacts would be less than significant.

No deficiencies have been identified for the water mains and treatment facilities that currently serve the project area. In addition, as a priority project for the City's Water System identified in the current Capital Improvement Program, new and replacement water distribution mains would be installed at various locations throughout the City, which would be funded, in part, by development fees.[47] The proposed project would also be required to pay fees to connect to the existing water mains available to serve the site. Overall, as existing wastewater and water facilities are available to serve the proposed project and no new wastewater or water treatment facilities or expansion of existing facilities would be required impacts would be less than significant.

47 City of Pasadena, Budget In Brief | Fiscal Year 2020, https://www.cityofpasadena.net/finance/wp-content/uploads/sites/27/2020-Budget-in-Brief.pdf?v=1575936000082

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

As discussed in Section 6, Energy, increased energy use by this project is not expected to be significant in relationship to the number of customers currently served by the electrical and gas utility companies. Supplies are available from existing mains, lines and substations in the area. Occupation associated with the project is not expected to significantly increase consumption of natural gas. Furthermore, the project would not require or result in the relocation of telecommunications facilities. This impact is less than significant.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

☐ ☐ ☒ ☐

WHY? As shown in **Table 4.19-1** below, project would result in an increase of approximately 24,220 gallons per day in water consumption.

As previously noted, project water would be provided by PWP. Based on known present uses of the site for surface parking, it is reasonably and conservatively assumed that minimal water uses currently occur on the Project Site. Therefore, implementation of the proposed project would introduce new water use requirements to the site, and would increase the amount of water delivered to the Project Site by PWP. However, land uses associated with the proposed project are consistent with land uses anticipated in the current Urban Water Management Plan (UWMP) for this area of Pasadena. As such, the proposed project would introduce water usage rates consistent with land uses anticipated in the UWMP and associated water supply planning documents for the area.

Further, during periods of drought, this project would be required to comply with the City's Water Shortage Procedures Ordinance, which reduces monthly water consumption to 90 percent of the expected consumption for this type of land use. According to the Water Division of the Pasadena Water and Power Department, there are sufficient water supplies available to serve the project from existing entitlements and resources.

Table 4.19-1
Projected Water Use

Land Use	Size	Usage Rate[1] (gallons per day)	Water Use (Gallons per day)
Market Rate Apartments	84 units	218/unit	18,312
Work/Live Units	4 units	218/unit	872
	5,245 sf	0.216/sf	1,133
Restaurant	65 seats[a]	36 gpd/seat	2,340
Commercial /Retail	4,218 sf	0.216/sf	912

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

Land Use	Size	Usage Rate[1] (gallons per day)	Water Use (Gallons per day)
Parking structure	195 spaces	2/parking space	390
Landscaping	4,194 sf	MAWA[b]	261
TOTAL PROJECT Water Use			**24,220**

gpd = gallons per day; sf = square feet
1. Assumptions:

The water use factors utilized for these project demand estimates were drawn from a WSA approved for the City of Pasadena[48] *as well as from the DWR's Urban Water Needs Analysis produced in 2017. These water use estimates are slightly more than the figures reported in the City of Pasadena's 2002 Water System Master Plan and the City of Pasadena's UWMP; however, these figures are used for the purposes of providing conservative estimates.*
All water use calculations assume same water use over 365 days per year.
a: 1,974 sf / 30 sf per seat = 65 seats
b: MAWA = maximum applied water allowance:
52.3 = Reference Evapotranspiration in inches per year – assumed to be 52.3 inches from the Model Water Efficient Landscape Ordinance for Pasadena (California Code of Regulations, Title 23. Waters - Division 2. Department of Water Resources – Chapter 2.7. Model Water Efficient Landscape Ordinance);
0.62 = Conversion factor for inches to gallons;
0.7 = Evapotranspiration Adjustment Factor;
4,194 = Landscaping Area in square feet.
*52.3 * 0.62 * 0.7 * 4,194 = 95,196 gallons per year/365 = 261 gpd*
Source: City of Pasadena 2015, Impact Sciences, 2020

In September 2008, Council directed PWP to develop a Comprehensive Water Conservation Plan (CWCP) with a variety of approaches and recommendations for achieving 10%, 20% and 30% reductions in water consumption as well as an analysis of the financial impacts on the Water Fund if those conservation targets were achieved. On April 13, 2009, Council voted to approve the CWCP presented by PWP and to replace the Water Shortage Procedure Ordinance with a new Water Waste Prohibition and Water Shortage Plan Ordinance (PMC 13.10). As a long-term goal, the CWCP presupposes an initial target of reducing per-capita potable water consumption 10% by 2015 and 20% by 2020.

The new Water Waste Prohibitions and Water Supply Shortage Plan Ordinance (PMC 13.10) became effective on July 4, 2009 and established thirteen permanent mandatory restrictions on wasteful water use activities. In addition, statewide water demand reduction requirements began in 2009, as a result of the State's 20x2020 Water Conservation Plan from April 30, 2009 ("20x2020"), and the current work being done by the California Department of Water Resources, the State Water Resources Control Board, and other state agencies to implement the Governor's 20x2020 Water Conservation Initiative Program.

The project is also required to adhere to the requirements of the Water Efficient Landscape Ordinance which was adopted in 2010 and updated in 2018. This ordinance is a result of State Assembly Bill 1881 (SB1881) which mandates that all local jurisdictions follow specific regulations for the efficient use of water in the irrigation of landscapes. The project must adhere to all applicable provisions on this ordinance which

48 City of Pasadena. 2015. Hill and Colorado Project Water Supply Assessment, Appendix A. July.

are contained in Title 13 (Utilities and Services) of the Pasadena Municipal Code. The ordinance may require design features that include specific plant types, the use of recycled water for irrigation and/or water features etc. Adherence to the requirements will reduce the amount of water used in the project landscaping and will aid the project in complying with all related water reduction provisions.

Project impacts would be less than significant.

c. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

☐ ☐ ☒ ☐

WHY? The proposed project under normal operation would generate approximately 18,725 gallons of wastewater per day.[49] However, the proposed increase to wastewater service demand is negligible in comparison to the existing service area of the wastewater service purveyor. Wastewater from the City is currently treated by the County Sanitation Districts' Whittier Narrows Reclamation Plant, San Jose Creek Water Reclamation Plant, and the Los Coyotes Water Reclamation Plant. No deficiencies have been identified in these wastewater treatment facilities. Furthermore, the proposed project would be subject to a County Sanitation Districts' sewer connection fee when the project is hooked up to a sewer line. In order to cover current and future infrastructure costs for sewer facilities located in the City, the proposed project may also be subject to a Sewer Facility Fee Charge as specified under PMC 4.53, if it is determined that there is an increase in the average daily flow compared to existing conditions. Therefore, impacts on available wastewater treatment capacity of the wastewater treatment plants that serve the project site would be less than significant.

d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

☐ ☐ ☐ ☒

WHY? The project can be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. The City of Pasadena is served primarily by Scholl Canyon landfill, which is permitted through 2030. The Scholl Canyon Landfill has a maximum daily capacity of 3,400 tons and a total remaining capacity of 9,900,000 cubic yards (CalRecycle 2020). Because there is adequate remaining capacity to accommodate the amount of solid waste generated by the proposed project, the proposed project's impacts to landfill capacity would be less than significant.

49 Calculated as 80 percent of anticipated water usage minus water used for landscaping and in the parking structure.

Waste generated at the project site would be required to comply with AB 939. Passed in 1989, this regulation requires every city in California to divert at least 50 percent of its annual waste by the year 2000. The City of Pasadena has 37 solid waste diversion programs, including composting, household hazardous waste, public education programs, recycling, source reduction, and special waste materials such as tires and concrete/asphalt/rubble (CalRecycle 2013), including the City's Pay-As-You-Throw program that offers reduced costs for households that recycle more and throw away less mixed waste. For 2010, the State estimated that Pasadena generated as a whole 584,840 tons of waste. Of this total, 152,881 tons were disposed in a landfill and 431,959 tons were diverted, yielding a diversion rate of just over 73 percent for Pasadena. Further, the City has adopted the Zero Waste Strategic Plan that provides a philosophy and design framework that promotes reuse, recycling, and conservation programs, and emphasizes sustainability by considering the entire life-cycle of products, processes, and systems (City of Pasadena 2014). The Plan aims to get the City as close as possible to zero waste by 2040.

The City of Pasadena's Climate Action Plan also aims to reduce GHG emissions through a reduction in solid waste. The strategy aims to minimize waste by improving waste management and promoting reuse, recycling, and composting. The proposed project would include separate trash and recycling bins. The first parking level (P1) features two rooms that include space for separate trash and recycling bins. Informational signage will be displayed to clearly indicate which materials can be recycled to educate residents, employees, and visitors to the building about proper refuse disposal procedures.

The handling of all debris and waste generated during construction of the proposed project would be subject to the State's (AB 939) requirements for salvaging, recycling, and reuse of materials from construction activity on the project site. The proposed project has two components (construction and operation) that would result in the generation of solid waste. For purposes of this analysis, the estimated operational waste is used to determine the net increase in solid waste from the proposed project. Construction of the proposed project would also involve site preparation activities that would generate waste materials. However, construction would be temporary.

The proposed project would also be subject to PMC Chapters 8.61 and 8.62. Chapter 8.61 establishes the City's Solid Waste Collection Franchise System where each franchisee is responsible for meeting the minimum recycling diversion rate of 75 percent on both a monthly basis and annual basis for construction and demolition debris and 60 percent on monthly basis and on an annual basis for other solid waste. Chapter 8.62 is the construction demolition and waste management ordinance and includes preparation of a Construction Waste Management Plan for new structures over 1,000 SF. Pursuant to this ordinance, the proposed project would be required to divert a minimum of 75 percent of the construction and demolition

debris from the project. Further, the proposed project would be required to meet the standards of California Green Building Standards Code, and would be required to comply with design requirements for refuge storage areas (PMC Section 17.40.120). The applicant may also be required to submit a program to the Public Works

The project would not result in the need for a new or in substantial alteration to the existing system of solid waste collection and disposal. Therefore, the project would cause no impacts under this topic.

e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

☐ ☐ ☐ ☒

WHY? In 1992, the City adopted the "Source Reduction and Recycling Element" to comply with the California Integrated Waste Management Act. This Act requires that jurisdictions maintain a 50% or better diversion rate for solid waste. The City implements this requirement through Section 8.61 of the Pasadena Municipal Code, which establishes the City's "Solid Waste Collection Franchise System". As described in Section 8.61.175, each franchisee is responsible for meeting the minimum recycling diversion rate of 50% on both a monthly basis and annual basis. The proposed project is required to comply with the applicable solid waste franchise's recycling system, and thus, will meet Pasadena's and California's solid waste diversion regulations. In addition, the project complies with the City's Construction and Demolition Ordinance (PMC Section 8.62) and design requirements for refuge storage areas (PMC Section 17.64.240). Therefore, the project would not cause any significant impacts from conflicting with statutes or regulations related to solid waste.

Additionally, in accordance with the Construction and Demolition Ordinance (Chapter 8.62 of the Pasadena Municipal Code, the applicant must submit a Construction Waste Management Plan, if the project meets any of the following thresholds;

- Residential additions of 1,000 or more gross square feet;
- Tenant improvements of 3,000 or more square feet;
- New structures of 1,000 or more gross square feet;
- Demolition 1,000 or more gross square feet; and
- All City public works and construction projects, which are awarded pursuant to competitive, bid procedure established by Chapter 4.08 of the Pasadena Municipal Code).

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

Since the proposed project includes the construction of over 1,000 square feet of new structures, the project is subject to, and would be required to comply with the Ordinance.

4.20 WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

☐ ☐ ☒ ☐

WHY? According to Plate P-2 from the City's 2002 Safety Element of the General Plan, the project site is in a low fire hazard zone. Therefore, the proposed project would not cause an impairment to an adopted emergency response plan or emergency evacuation plan.

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

☐ ☐ ☒ ☐

WHY? As stated above, according to Plate P-2 from the City's 2002 Safety Element of the General Plan, the project site is in a low fire hazard zone. In the event a fire begins during construction or operation of the project, the nearest fire station is the City of Pasadena Fire Station No. 31, located approximately 130 feet from the project site. Being in a developed urban area, there are several fire protection facilities in the project vicinity that could respond to an emergency at the site. There would be a less than significant impact and no mitigation is required.

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

☐ ☐ ☒ ☐

WHY? As stated above, according to Plate P-2 from the City's 2002 Safety Element of the General Plan, the project site is in a low fire hazard zone. The project site is located in a dense urban area that would not require the installation of infrastructure such as roads, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate the fire risk. There would be a less than significant impact and no mitigation is required.

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

☐ ☐ ☒ ☐

WHY? The project site is relatively flat within a low fire hazard zone of a highly urbanized portion of Pasadena. The risk of wildfire or the resulting runoff and drainage changes as a result of wildfire are very low. There would be a less than significant impact and no mitigation is required.

4.21 EARLIER ANALYSIS

Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. See *CEQA Guidelines* Section 15063(c)(3)(D).

No program EIR, tiering, or other process can be used for analysis of the project's environmental effects.

4.22 MANDATORY FINDINGS OF SIGNIFICANCE

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

☐ ☒ ☐ ☐

WHY? As discussed in **Section 4.4, Biological Resources,** the project would not impact any endangered fauna or flora. Further, because of the highly urbanized nature of the project site and the surrounding area, construction and operation of the proposed project would not impact the habitat or population of the project site and the surrounding area, the project would not impact the habitat or population level of fish or wildlife species, nor would it threaten a plant or animal community, nor impact the range of a rare endangered plant or animal.

As discussed in **Section 4.5, Cultural Resources**, potential impacts related historical, archaeological, and paleontological resources would be less than significant following the implementation of the regulatory compliance and mitigation measures.

Therefore, the project will not substantially degrade the quality of the land, air, water, minerals, flora, fauna, noise and objects of historic or aesthetic significance.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact

when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

☐ ☒ ☐ ☐

WHY? The potential for cumulative impacts occurs when the independent impacts of the project are combined with impacts from other development to result in impacts that are greater than the impacts of the project alone. Located within the vicinity of the project site are other past, current, and reasonably foreseeable projects whose development, in conjunction with that of the project, may contribute to potential cumulative impacts. However, based on the proceeding discussions, which consider cumulative conditions/impacts, no unmitigatable significant impacts were identified for the environmental resources identified in this Initial Study. As the proposed project would not result in any unmitigated significant impacts pursuant to the topics analyzed in the above Initial Study Checklist, the project would not result in a considerable contribution to any significant cumulative impacts.

c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

☐ ☒ ☐ ☐

WHY? As identified throughout the analysis, the proposed project would have no unmitigatable significant impacts that would cause substantial adverse effects on human beings directly or indirectly. Impacts would be less than significant.

5.0 LIST OF PREPARERS

Impact Sciences, Inc., has prepared this environmental document under contract to the City of Pasadena. Persons directly involved in the review and preparation of this report include:

City of Pasadena

Kevin Johnson, Senior Planner

Theresa Fuentes, Assistant City Attorney

John Bellas, Contract Environmental Planner

Impact Sciences, Inc.

Jessica Kirchner Flores, AICP, Managing Principal

Lynn Kaufman, CLA, Associate Principal

Doug Kim, AICP, Contract Technical Specialist

Raul Castillo, MPL, Staff Planner II

Kara Yates Hines, MPS, Publications Manager

Brown Editorial

Douglas Brown, Production Coordination

Historic Resources Group

Paul Travis, AICP, Managing Principal

6.0 REFERENCES

Alquist-Priolo Earthquake Fault Zoning Act, California Public Resources Code, revised January 1, 1994 official Mt. Wilson, Los Angeles and Pasadena quadrant maps were released March 25, 1999.

Central District Specific Plan Overlay District, City of Pasadena Planning and Development Department, codified 2005 and amended in 2007 and 2009

CEQA Air Quality Handbook, South Coast Air Quality Management District, revised 1993

Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy). Southern California Association of Governments, adopted 2020.

East Pasadena Specific Plan Overlay District, City of Pasadena Planning and Development Department, codified 2001

Energy Element of the General Plan, City of Pasadena, adopted 1983

Fair Oaks/Orange Grove Specific Plan Overlay District, City of Pasadena Planning and Development Department codified 2002

Final Environmental Impact Report (FEIR) Zoning Code Revisions and Central District Specific Plan, 2004

Final Environmental Impact Report (FEIR) Land Use and Mobility Elements of the General Plan, City of Pasadena, certified 2015

2014-2021 Housing Element of the General Plan, City of Pasadena, adopted 2014.

Inclusionary Housing Ordinance Pasadena Municipal Code Chapter 17.71 Ordinance #6868

Land Use Element of the General Plan, City of Pasadena, adopted 2016

Mobility Element of the General Plan, City of Pasadena, adopted 2015

Noise Element of the General Plan, City of Pasadena, adopted 2002

Noise Protection Ordinance Pasadena Municipal Code Chapter 9.36 Ordinances # 5118, 6132, 6227, 6594 and 6854

North Lake Specific Plan Overlay District, City of Pasadena Planning and Development Department, Codified 1997

Pasadena Municipal Code, as amended

Recommendations On Siting New Sensitive Land Uses, California Air Resources Board, May 2005

Regional Comprehensive Plan and Guide, “Growth Management Chapter,” Southern California Association of Governments, June 1994

Safety Element of the General Plan, City of Pasadena, adopted 2002

Scenic Highways Element of the General Plan, City of Pasadena, adopted 1975

Seismic Hazard Maps, California Department of Conservation, official Mt. Wilson, Los Angeles and Pasadena quadrant maps were released March 25, 1999. The preliminary map for Condor Peak was released in 2002.

South Fair Oaks Specific Plan Overlay District Planning and Development, codified 1998

State of California "Aggregate Resource in the Los Angeles Metropolitan Area" by David J. Beeby, Russell V. Miller, Robert L. Hill, and Robert E. Grunwald, Miscellaneous map no. .010, copyright 1999, California Department of Conservation, Division of Mines and Geology

Storm Water and Urban Runoff Control Regulations Pasadena Municipal Code Chapter 8.70 Ordinance #6837

Transportation Impact Review Current Practice and Guidelines, City of Pasadena, 2015

Tree Protection Ordinance Pasadena Municipal Code Chapter 8.52 Ordinance # 6896

West Gateway Specific Plan Overlay District, City of Pasadena Planning and Development Department codified 2001

Zoning Code, Chapter 17 of the Pasadena Municipal Code

7.0 MASTER RESPONSES TO COMMENTS

7.1 INTRODUCTION

According to CEQA (Public Resources Code [PRC]) § 21155.2 (b) (4), the lead agency must consider the comments received during consultation and review periods on the SCEA Environmental Checklist. However, comments received on a SCEA Environmental Checklist are not required to be attached to the SCEA Environmental Checklist, nor is the lead agency required to make specific written responses to public agencies or individual commenters. Further, neither CEQA nor the CEQA Guidelines require the lead agency to send responses individually or directly to commenters.

According to PRC § 21155.2 (b) (4):

> Prior to acting on the Sustainable Communities Environmental Assessment, the lead agency shall consider all comments received.

As a number of similar issues related to the analysis in the SCEA Environmental Checklist were raised by multiple commenters, the City of Pasadena, as the lead agency, has chosen to provide responses to the comments received during the public review process for the proposed project SCEA in the form of several **Master Responses to Comments,** which are provided in Sections 7.2 through 7.13, below.

A total of three state and local agencies, eight organizations, and 45 individuals provided comments and/or letters during the circulation period for the SCEA; **Table 7.0-1 Matrix of Comments Received in Response to the SCEA** provides a listing of the commenters as well as a matrix showing the commenters' primary topics of concern. See **Appendix H, Letters Received on the SCEA during the Public Comment Period** for copies of the comment letters.

Table 7.0-1
Matrix of Comments Received in Response to the SCEA

Letter No	Commenter	Support	Oppose	Use of SCEA	Project Description	Aesthetics / Views / Shadows	Air Quality	Biological Resources	Historical Resources	Open Space	Seismic Safety	Land Use Planning	Noise / Vibration	Park / Recreation	Transportation	Utilities	Construction Impacts	General/Other
Agencies																		
A-1	Caltrans														X			
A-2	LA Co Sanitation															X		
A-3	Metro														X			
Organizations																		
O-1	Colleen Jaurretche, Castle Green HOA			X	X	X			X	X					X			
O-2	Chatten-Brown, et al			X														
O-3	Chatten-Brown, et al		X	X	X	X	X		X	X		X			X		X	
O-3a	Michael Salazar, Castle Green HOA		X	X	X	X		X	X	X	X	X	X	X	X		X	
O-4	Dayton St Residents & Property Owners		X			X			X				X		X		X	

Letter No	Commenter	Support	Oppose	Use of SCEA	Project Description	Aesthetics / Views / Shadows	Air Quality	Biological Resources	Historical Resources	Open Space	Seismic Safety	Land Use Planning	Noise / Vibration	Park / Recreation	Transportation	Utilities	Construction Impacts	General/Other
O-5	Green Hotel Apartments – Residents Petition		X		X			X		X							X	
O-6	Pasadena Heritage					X			X				X		X			
O-7	Teresa Grimes Historic Preservation								X									
Individuals																		
I-1	Carole Abelmann		X															
I-2	John Adams		X															
I-3	Thelma Alvarado		X			X				X			X					
I-4	Lorraine Anderson		X						X									
I-5	Mark Archer	X																
I-6	Aimee Brazeau		X				X		X				X		X			
I-7	Kathy Brown		X						X						X		X	
I-8	Eric Brubaker		X						X									
I-9	Shirin Caiola		X				X								X			

Letter No	Commenter	Support	Oppose	Use of SCEA	Project Description	Aesthetics / Views / Shadows	Air Quality	Biological Resources	Historical Resources	Open Space	Seismic Safety	Land Use Planning	Noise / Vibration	Park / Recreation	Transportation	Utilities	Construction Impacts	General/Other
I-10	Zongding Zhang & Zhaohin Chen		X							X							X	
I-11	Nina Chomsky		X	X														
I-12	Cindy Clark-Schuelle		X									X						
I-13	Carmen Daugherty		X															
I-14	Judy Desormeaux		X							X			X				X	
I-15	Judy Desormeaux (2)		X						X									
I-16	Paul Dorn		X															
I-17	Mary Fitzpatrick		X															
I-18	Erin Fleming		X						X									
I-19	Vicki Fletcher		X						X									
1-20	Alan Flores		X										X				X	
I-21	Henry Golas		X						X						X			
I-22	Shannon Gold		X						X						X			
I-23	Timothi Jane Graham		X						X						X			

Letter No	Commenter	Support	Oppose	Use of SCEA	Project Description	Aesthetics / Views / Shadows	Air Quality	Biological Resources	Historical Resources	Open Space	Seismic Safety	Land Use Planning	Noise / Vibration	Park / Recreation	Transportation	Utilities	Construction Impacts	General/Other
I-24	Jack Green		X	X				X							X			
I-25	Peter C. Hatzen									X								
I-26	Maureen Henry		X			X			X				X				X	
I-27	Rick Hockens												X				X	
I-28	Doug Ingoldsby		X						X									
I-29	Kenneth Keith		X										X				X	
I-30	Cynthia A. Kelly		X										X				X	
I-31	Deborah Lingrey		X						X	X						X		
I-32	Kim Mischook		X															
I-33	Krista Moll		X												X			
I-34	Lisa Montijo		X			X			X	X								
I-35	Margaret Moran		X			X			X				X		X		X	
I-36	Primo & Rachel Pena		X							X								
I-37	Andrea Rawlings								X								X	

Letter No	Commenter	Support	Oppose	Use of SCEA	Project Description	Aesthetics / Views / Shadows	Air Quality	Biological Resources	Historical Resources	Open Space	Seismic Safety	Land Use Planning	Noise / Vibration	Park / Recreation	Transportation	Utilities	Construction Impacts	General/Other
I-38	Adam Relin		X	X	X			X	X				X	X	X			
I-39	Magnus Stark		X			X			X						X		X	
I-40	Patty Stifel Swenson								X									
I-41	Edward Temm														X			
I-42	Amy White		X						X		X				X			
I-43	Julie Wofford		X			X												
I-44	David Woodbury		X			X		X	X									
I-45	John Cambianica					X			X	X								

7.2 CURRENT PROJECT VS. PREVIOUS PROJECT

The application for the 'Green Hotel Apartments Project' ('previous project') was withdrawn by the Project Applicant, on August 23, 2017, rendering any further actions on that previous application before the City of Pasadena unnecessary. Further, while provided for review by public agencies, organizations, and individuals, the Green Hotel Apartments Final EIR (dated June 2015) was never certified by the City of Pasadena, and no Findings of Fact, Mitigation Measures, Mitigation Monitoring Program, or Statement of Overriding Considerations were ever adopted by the City.

A new application for the current project, 'Central Park Apartments' was filed on May 16, 2018, to allow for the redevelopment of an existing surface parking lot with the construction of a mixed-use development, with approximately 11,400 square feet of commercial/retail uses (including four work/live units) and 84 apartments over four levels of subterranean parking.

The prior environmental review, including responses to comments, has been made part of the administrative record for this project (see Comment Letter O-3 in **Appendix H** and **Appendix I, Green Hotel Apartment Project Final EIR - *Not Certified***). However, as the previous project was withdrawn prior to the application for the current project being submitted to the City of Pasadena for review, there is no requirement to reconsider any of the analysis or comments made during the CEQA process for the previous project. Further, all analyses conducted for this SCEA are based on the current project scope and designation of this project as a Transit Priority Project (which the previous project was not), as well as changes to state law that took effect after the prior project EIR was drafted. These changes render the prior analysis outdated. That is why none of this more current analysis relies on any of the analyses that were conducted for the EIR for the previous project. Accordingly, the SCEA stands alone and presents state-of-the-art analysis in compliance with updated state law on all potential environmental effects of the current Transit Priority project.

7.3 USE OF A SUSTAINABLE COMMUNITIES ENVIRONMENTAL ASSESSMENT (SCEA)

SB 375 Streamlining Provisions

On September 30, 2008, the State of California adopted Senate Bill (SB) 375, ***The Sustainable Communities and Climate Protection Act of 2008***, which outlines growth strategies that better integrate regional land use and transportation planning and that help meet the State of California's greenhouse gas (GHG) emissions reduction mandates. SB 375 requires the State's 18 metropolitan planning organizations to incorporate a "sustainable communities strategy" (SCS) into their regional transportation plans to achieve their respective region's GHG emission reduction targets set by the California Air Resources Board (CARB). Correspondingly, SB 375 provides various CEQA streamlining provisions for projects that are consistent with an adopted applicable SCS and meet certain objective criteria as described below.

The Southern California Association of Governments (SCAG) is the metropolitan planning organization for the County of Los Angeles (along with the Counties of Imperial, San Bernardino, Riverside, Orange, and Ventura). On May 7, 2020, SCAG's Regional Council approved Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS]) for conformity purpose by the Federal Highway Administration (FHWA). On September 3, 2020, the Regional Council formally adopted the Connect SoCal Plan to provide a roadmap to expand transportation options, improve air quality and bolster Southern California's long-term economic viability. The SCEA evaluated the proposed project and determined that it would be consistent with the land use patterns promoted by the Connect SoCal Forecasted Regional Development Pattern. The project site, which is within one-half mile from a major transit stop, is in an area that is considered by SCAG as a Priority Growth Area. Furthermore, the project would not be located in areas identified by SCAG as having 'Absolute' or Variable' Constraints, such agricultural land, designated open space, 500-year flood plains, or tribal lands.[1]

Specifically, the SCEA form of CEQA documentation was established by SB 375 to provide streamlined environmental review for certain "Transit Priority Projects." SB 375 (PRC § 21155(b)) defines Transit Priority Projects (TPPs) as projects that shall:

(1) be consistent with the general land use designation, density, building intensity, and applicable policies specified for the project area in the applicable SCAG RTP/SCS;

[1] Southern California Association of Governments. 2020. Sustainable Communities Strategy Technical Report. Available at: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_sustainable-communities-strategy.pdf?1606002097

(2) contain at least 50 percent residential use, based on total building square footage and, if the project contains between 26 percent and 50 percent nonresidential uses, a floor area ratio of not less than 0.75;

(3) provide a minimum net density of at least 20 dwelling units per acre; and

(4) be within one-half mile of a major transit stop or high-quality transit corridor included in a regional transportation plan. A major transit stop is as defined in § 21064.3, except that, for purposes of this section, it also includes major transit stops that are included in the applicable regional transportation plan. For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. A project shall be considered to be within one-half mile of a major transit stop or high-quality transit corridor if all parcels within the project have no more than 25 percent of their area farther than one-half mile from the stop or corridor and if not more than 10 percent of the residential units or 100 units, whichever is less, in the project are farther than one-half mile from the stop or corridor.

The City of Pasadena Planning and Community Development Department, as the Lead Agency, reviewed the project application and determined that the Central Park Apartments Project, as currently proposed, met the qualifications of a TPP under PRC § 21155(b), and thereby qualified for CEQA streamlining and a SCEA.

Section 3.0, SCEA Assessment Eligibility, provides a detailed discussion of the current project's consistency with the criteria listed above.

It is important to note that the intent of the CEQA streamlining provisions is not to undercut or circumvent CEQA requirements, but rather to reduce documentation and redundancy and to provide an incentive for TPPs that are consistent with a larger effort to reduce GHG emissions by integrating transportation and land use planning.

A SCEA is comparable to an Initial Study-Mitigated Negative Declaration in that the lead agency must find that all potentially significant impacts of a project have been identified, adequately analyzed, and mitigated to a level of insignificance. However, unlike a negative declaration, the SCEA need not consider the cumulative effects of the project that have been adequately addressed and mitigated in prior environmental impact reports (EIRs), in this case the SCAG Connect SoCal RTP/SCS EIR, the City's General Plan EIR, and the Central District Specific Plan EIR. Also, growth-inducing impacts are not required to be referenced, described, or addressed and project specific or cumulative impacts from cars and light duty truck trips on global warming or the regional transportation network need not be referenced, described, or discussed.

Further, SB 743, signed into law in September 2013, limits the extent to which aesthetics and parking are defined as impacts under CEQA. Specifically, PRC § 21099 (d)(1) states that a project's aesthetic and parking impacts shall not be considered a significant impact on the environment if:

1. The project is a residential, mixed-use residential, or employment center project, and

2. The project is located on an infill site within a transit priority area.[2]

Section 4.0 SCEA Environmental Checklist of the SCEA was prepared with the support of the following technical analyses/reports: Air Quality and Greenhouse Gas Emissions Calculations, an Arborist Report, a Historical Resources Technical Report, a Climate Action Plan Consistency Report (which includes a Geotechnical Engineering Investigation, a Title 24 Building Energy Analysis Report, Hydrologic Analysis and Drywell Calculations, and a Draft Transportation Demand Management Plan), a Noise Report, and a Transportation Report. These technical analyses/reports are all included as appendices to the SCEA, and are essentially identical to those that would typically be provided in an EIR.

As discussed in the environmental analysis contained in **Section 4.0 SCEA Environmental Checklist**, implementation of the Central Park Apartments Project could include some potentially significant effects on the environment, but these potential effects would be reduced to less-than-significant effects with the inclusion of certain project design features and mitigation measures. With regard to some other impacts, analysis in the SCEA Environmental Checklist showed that no substantial evidence indicates that the Project would have a significant environmental effect.

In addition, it should be noted that the comment from Chatten Brown, et al in the letter dated May 6, 2021, stating *'A SCEA is only allowed if the Project will cause no adverse impacts to historic resources'. The relevant provisions of CEQA that address the SCEA process begin at Public Resources Code section 21155.1. That section mandates "applicability requirements." One criterion is that the project "not have a significant effect on historical resources pursuant to Section 21084.1." (Pub. Resources Code, § 21155.1 (a)(5).)",* is incorrect, as the PRC section cited in the comment is related to the use of a **Sustainable Communities Project CEQA Exemption (SCPE)**, and **not** a SCEA which is authorized under PRC § 21155(b).

---

2 Section 21099 (a) of the PRC defines the following terms:
(4) "Infill site" means a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.
(7) "Transit priority area" means an area within one-half mile of a major transit stop that is existing or planned.

7.4 THE MEANING/PURPOSE OF THE INCLUSION OF APPENDIX A

Several comments were submitted regarding the project's consistency with mitigation measures listed in **Appendix A, Incorporation of Applicable Mitigation Measures, Performance Standards, and Criteria from Prior Applicable EIRs** to the SCEA. This response is intended to clarify the meaning and purpose of the inclusion of the **Appendix A** analysis. The SCEA form of CEQA review and documentation was established by SB 375 to provide streamlined environmental review for certain "Transit Priority Projects." One of the requirements of this legislation is that the State's 18 metropolitan planning organizations must incorporate a "sustainable communities strategy" with their regional transportation plans to achieve their respective region's greenhouse gas emission reduction targets set by the California Air Resources Board (CARB). The Southern California Association of Governments (SCAG) is the metropolitan planning organization that has jurisdiction over the Project site and adopted a sustainable communities strategy called Connect SoCal Regional Transportation Plan/Sustainable Communities Strategy in September 2020.

As such, the SCEA evaluated the Project's consistency with the Environmental Impact Report that was certified in conjunction with the adoption of this plan, and incorporates the feasible mitigation measures, performance standards, and/or criteria from that EIR, along with the City's General Plan 2015 EIR, and the 2004 Central District Specific Plan EIR, into the proposed project (included as **Appendix A** to this SCEA). The mitigation measures contained in these documents are all programmatic, rather than project-specific in nature. As such, they are prescriptive only in the sense that the project must remain consistent with their intention to reduce or mitigate any potential project impacts. Mitigation measures that are specific to the proposed Central Park Apartments Project (there are two, both related to reducing potential construction vibration impacts) are included in **Section 4.13, Noise** of the SCEA Environmental Checklist.

Additional information has been added to some of the consistency analyses for a few of the mitigation measures listed in **Appendix A;** these additions/updates are included in the section in <u>underlined format</u> for clarity.

7.5 ANALYSIS OF CARBON MONOXIDE (CO) HOTSPOTS

Several comments were submitted regarding the potential for the project to cause air quality impacts related to Carbon Monoxide Hotspots. Carbon Monoxide (CO) emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near congested roadways or intersections may reach unhealthful levels and adversely affect residents, school children, hospital patients, the elderly, etc.

As stated and described in Section 4.3, Air Quality of the SCEA Environmental Checklist (Section 4.0 of the SCEA), the South Coast Air Basin (SCAB) is designated as an attainment/maintenance area for the federal CO standards and an attainment area for state standards. There has been a decline in CO emissions even though vehicle miles traveled (VMT) on U.S. urban and rural roads have increased nationwide; estimated anthropogenic CO emissions have decreased 68 percent between 1990 and 2014. In 2014, mobile sources (vehicles) accounted for 82 percent of the nation's total anthropogenic CO emissions.[3] Three major control programs have contributed to the reduced per-vehicle CO emissions: exhaust standards, cleaner burner fuels, and motor vehicle inspection/maintenance programs.

According to the SCAQMD CEQA Air Quality Handbook, a potential CO hotspot may occur at any location where the background CO concentration already exceeds 9.0 ppm, the California Ambient Air Quality Standards (CAAQS) for 8-hour ozone. The SCAQMD prepared a detailed CO analysis in the *Federal Attainment Plan for Carbon Monoxide* as part of the 2003 Air Quality Management Plan (AQMP). The 2003 AQMP is the most recent AQMP that addresses CO concentrations. The CO analysis included microscale modeling of CO at the worst-case intersections in the SCAB. Of these locations, the Wilshire Boulevard and Veteran Avenue intersection in Los Angeles experienced the highest CO concentration of 4.6 ppm. At the time of analysis, the Wilshire Boulevard and Veteran Avenue intersection was the most congested intersection in Los Angeles County with an average daily traffic volume of approximately 100,000 vehicles per day. As CO impacts at the Wilshire Boulevard and Veteran Avenue intersection did not exceed the 8-hour CAAQS, it can be inferred that the intersections near the project site would not create any CO hotspots because they were found to be less congested and carry fewer vehicles than the Wilshire Boulevard and Veteran Avenue intersection. Furthermore, as previously discussed in the SCEA, the site is located in Source Receptor Area (SRA) 8, West San Gabriel Valley. Communities within SRAs are expected to have similar climatology and ambient air pollutant concentrations. The monitoring station representative of SRA 8 is the Pasadena-South Wilson Avenue air quality monitoring station located approximately 1.5 miles southeast of the site. According to data obtained from the EPA's AirData database for CO pollutants, the highest eight-hour concentration reported for the Pasadena station in 2018 was 1.4 ppm. As such, the

[3] U.S. Environmental Protection Agency, Carbon Monoxide Emissions, Report on the Environment, https://cfpub.epa.gov/roe/indicator.cfm?i=10, accessed July, 26, 2021.

background CO concentration in combination with the CO concentration at worst-case scenario intersection in SCAB do not exceed 9.0 ppm and a CO hotspot would not occur.

7.6 CLARIFICATION OF IMPACTS TO EXISTING TREES

A tree survey conducted by Carlberg Associates in May 2018 documented a total of 35 existing trees, on and around the Project Site. These trees fell into the following categories: Trees within the City Right-of-Way (8 'Street Trees'), On-Site Trees (21 trees within the Project Site boundary), and Off-Site Trees (6 trees located on the on the adjoining Hotel Green property, i.e., not on the Project Site).

Upon review of the information found in the SCEA, the following errors were identified: the Protected Tree Location Exhibit provided by Carlberg Associated as updated in 2019 mislabeled three trees, the exhibit transposed the locations of off-site trees OS32 and OS33, and incorrectly marked tree 24 as having failed in 2018 rather than 2019.

The November 2019 Updated Concept Design Review Submittal incorrectly calculated the number of existing trees, the number of trees to be removed, the number of trees to be relocated, and the net gain of trees. The corrected tree counts are provided in **Table 7.6-1, Summary of Impacts to Existing Trees**, below.

In order to clarify the SCEA, **Figures 7.6-1a-e Updated Tree Inventory**, and **Figures 7.6-2a-b Updated Protected Tree Locations** are provided below, in both "Clean" and "Markup" versions to illustrate the changes summarized in **Table 7.6-1**.

Color-coding has been added to **Figures 7.6-1a-c Updated Tree Inventory** to better differentiate protected trees within the City's Right-of-Way, On-site trees (within the Project site boundary), and Off-site trees on the adjacent parcel. The figures include updated information regarding the failed tree, updated dispositions for three trees, and a table summarizing applicable totals for retention, removal, and relocation of on-site trees and street trees.

Figure 7.6-2a Updated Protected Tree Locations now shows the correct date of the failed tree and correct locations of off-site trees.

In accordance with City Tree Replacement Requirements, as shown on **Figure 2.0-32, Ground Level Landscape Plan** in the SCEA, the Proposed Project would plant 17 36" box (or larger) trees, and 21 24" box trees, for a total of 38 new trees. Following the planting of these new trees, there would be a net gain of 21 new trees on the Project Site, and the Proposed Project would exceed the City's Replacement Tree Requirement for the trees removed.

Table 7.6-1
Summary of Impacts to Existing Trees[a]

	City Right-of-Way	On-Site[b]	TOTAL
Total Existing Trees	**8**	**21**	**29**
Existing Trees to Remain	7	1	8
Existing Trees to be Relocated	1	3	4
Total Existing Trees to Remain	**8**	**4**	**12**
Total Existing Trees to be Removed	**0**	**17**	**17**

[a] – this Table does not include Off-Site Trees which would not be impacted by the Proposed Project

[b] - treats tree # 24 as 'Existing'

Source: Carlberg Associates, Architectural Resources Group, May 2021

Tree ID	Common Name / Botanical Name	DBH / BT Ht.	Height	Spread (N/E/S/W)	Health Grade	Structure Grade	Comments	Disposition	Protected Y/N City Right of Way	Protected Y/N On-Site	Protected Y/N Off-Site
ST1	Crape myrtle/ *Lagerstroemia indica*	3	20	4/4/5/4	B	B	tree well, sparse interior	Retain	Y		
ST2	Crape myrtle/ *Lagerstroemia indica*	3	15	6/6/5/3	A	A	tree well, minor basal damage	Retain	Y		
ST3	Crape myrtle/ *Lagerstroemia indica*	2	13	4/4/5/5	A-	B	planted low, dry	Retain	Y		
ST4	Crape myrtle/ *Lagerstroemia indica*	1	10	2/2/2/2	F	F	dead	Retain	Y		
ST5	Crape myrtle/ *Lagerstroemia indica*	1	10	1/1/1/1	B	B	codominant stems at 6 feet	Retain	Y		
ST6	Crape myrtle/ *Lagerstroemia indica*	stump sprouts	4	2/2/2/2	A-	C	powdery mildew	Retain	Y		
ST7	Queen palm/ *Syagrus romanzoffiana*	20' BT*	30	10/10/10/10	A	A		Relocate	Y		
ST8	Queen palm/ *Syagrus romanzoffiana*	15' BT	20	7/7/7/7	A	B	shaded by phoenix canariensis to north	Retain	Y		
12	Tree of Heaven/ *Ailanthus altissima*	8.5	30	10/12/14/20	A	B	codominant stems, concrete all around	Remove		N	
13	Mexican fan palm/ *Washingtonia robusta*	50' BT	58	10/10/10/10	A	A	old tags 71, 38	Remove		N	
14	Mexican fan palm/ *Washingtonia robusta*	65' BT	73	8/8/8/8	A	A		Remove		N	
15	Canary Island pine/ *Pinus canariensis*	21	80	8/8/12/12	B	B	topped (laterals), shaded on west by other, epicormic growth	Remove		N	
16	Canary Island pine/ *Pinus canariensis*	18.5	75	12/12/12/13	A	B-	topped (laterals), shaded on east by other, epicormic growth	Remove		N	
17	Mexican fan palm/ *Washingtonia robusta*	42' BT	50	8/8/8/8	A	A		Remove		N	
18	Camphor/ *Cinnamomum camphora*	19, 21, 31	45	15/21/25/15	B	C	multiple pruning events, topped, epicormic, history of breakage, mechanical damage, good callus, heart rot	Remove		Y	
19	Camphor/ *Cinnamomum camphora*	16, 16.5	45	12/18/15/20	B	B	multiple pruning events, codominant stems, epicormic, twig dieback, old mechanical damage	Remove		Y	

Protected Trees to Retain
Protected Trees to Remove
Protected Trees to Relocate
Tree Failed January 2019

SOURCE: Architectural Resources Group, May 2021

FIGURE **7.6-1a**

IMPACT SCIENCES

Updated Tree Tables

Tree ID	Common Name / Botanical Name	DBH / BT Ht.	Height	Spread (N/E/S/W)	Health Grade	Structure Grade	Comments	Disposition	Protected Y/N City Right of Way	Protected Y/N On-Site	Protected Y/N Off-Site
20	Camphor/ *Cinnamomum camphora*	18.5, 23.5	45	15/21/21/30	B	B	multiple pruning events, epicormic, twig dieback, old mechanical damage, history of breakage	Remove		Y	
21	Chinese elm/ *Ulmus parvifolia*	15	25	9/12/20/12	B	C	old tag 10, 2 trunks, anthracnose at base, mechanical damage, lost a codominant stem at 19ft and at base	Remove		N	
22	Mexican fan palm/ *Washingtonia robusta*	50' BT	57	7/7/7/7	A	A-	woodpeckers, old tags 235 and 77	Remove		N	
23	California fan palm/ *Washingtonia filifera*	45' BT	55	10/10/10/10	A	A-	woodpeckers, spiked, old tag 11	Relocate		Y	
24**	Indian laurel fig/ *Ficus microcarpa*	40.5 at 4 ft	45	30/15/18/27	B	C	white fungi on roots at all sides (only on bark), old tags 12 and 55	Remove**		Y**	
25	Mexican fan palm/ *Washingtonia robusta*	50' BT	58	8/8/8/8	A	A	old tags 27 and 78, curved trunk	Remove		N	
26	Canary Island date palm/ *Phoenix canariensis*	50' BT	58	10/10/10/10	A	A	old tags 13 and 65	Relocate		Y	
27	Mexican fan palm/ *Washingtonia robusta*	55' BT	62	8/8/8/8	A	A	spiked, old tag 29, woodpeckers	Remove		N	
28	Mexican fan palm/ *Washingtonia robusta*	55' BT	62	8/8/8/8	A	A	curved trunk, old tag 30, woodpeckers	Remove		N	
29	Mexican fan palm/ *Washingtonia robusta*	60' BT	68	8/8/8/8	A	A	old tag 31, woodpeckers in skinned part	Remove		N	
30	Southern Magnolia/ *Magnolia grandiflora*	15	30	10/10/8/12	B	B	old tag 82, multiple pruning events, root pruned on westside 2ft	Remove		N	
31	California fan palm/ *Washingtonia filifera*	50' BT	60	8/8/8/8	A	B	old tag 6 and 53, eroded trunk on south and west, spiked, mechanical damage on trunk	Relocate		Y	
OS32	Hollywood juniper/ *Juniperus chinensis 'Torulosa'*	5, 8, 10	30	4/12/9/6	A-	A-	codominant stems, minor dieback, old tags 34 and 74	Retain			N
OS33	Hollywood juniper/ *Juniperus chinensis 'Torulosa'*	13	30	3/10/10/12	A-	A	minor dieback, old tag 75	Retain			N
OS34	Hollywood juniper/ *Juniperus chinensis 'Torulosa'*	10	25	3/5/9/12	A	B-	old tag 32, leans southwest, cable imbedded (trunk and branch)	Retain			N
OS35	Camphor/ *Cinnamomum camphora*	24	45	21/12/12/24	B	B-	topped laterals and top, multiple pruning events, old pruning callus is good, old tags 7 and 68	Retain			Y

Protected Trees to Retain
Protected Trees to Remove
Protected Trees to Relocate
Tree Failed January 2019

SOURCE: Architectural Resources Group, May 2021

FIGURE **7.6-1b**

IMPACT SCIENCES

Updated Tree Tables

Tree ID	Common Name / Botanical Name	DBH / BT Ht.	Height	Spread (N/E/S/W)	Health Grade	Structure Grade	Comments	Disposition	Protected Y/N City Right of Way	Protected Y/N On-Site	Protected Y/N Off-Site
OS36	Victorian box/ *Pittosporum undulatum*	10	28	1/6/10/10	C	C-	old tags 8 and 83, canker on southwest, topped, epicormic shoots	Retain			N
OS37	Weeping fig/ *Ficus benjamina*	2, 4, 6	30	14/15/14/10	A	B	potted plant escapee, shaded out	Retain			N
38	Canary Island date palm/ *Phoenix canariensis*	20' BT	30	15/15/15/15	A	A	old tag 67	Retain		Y	
	*BT - Brown Trunk - Because palm trunks typically do not expand in diameter, they are measured by their Brown Trunk Height. This is the Nursery Standard Measurement from grade to the newest emerging spear.										
	** This tree failed due to weather in January 2019. Notwithstanding, the project provides replacement trees as required.										

SUMMARY	City Right of Way	On-Site (Treats Tree #24 as Existing)	On-Site (Excluding Tree #24)	Off-Site (Adjacent Parcel)
TOTAL EXISTING TREES	**8**	**21**	**20**	**6**
Existing Trees to Retain	7	1	1	6
Existing Trees to be Removed	0	17	16	0
Existing Trees to be Relocated	1	3	3	0
TOTAL PROTECTED TREES	**8**	**8**	**7**	**1**
Protected Trees to Retain	7	1	1	1
Protected Trees to be Removed	0	4	3	0
Protected Trees to be Relocated	1	3	3	0

Protected Trees to Retain
Protected Trees to Remove
Protected Trees to Relocate
Tree Failed January 2019

SOURCE: Architectural Resources Group, May 2021

FIGURE **7.6-1c**

IMPACT SCIENCES

Updated Tree Tables

FOR REFERENCE PURPOSES – MARKED TO SHOW CORRECTIONS

Added columns to differentiate

Tree ID	Common Name / Botanical Name	DBH / BT Ht.	Height	Spread (N/E/S/W)	Health Grade	Structure Grade	Comments	Disposition	Protected Y/N
ST1	Crape myrtle/ *Lagerstroemia indica*	3	20	4/4/5/4	B	B	tree well, sparse interior	Retain	City right-of-way
ST2	Crape myrtle/ *Lagerstroemia indica*	3	15	6/6/5/3	A	A	tree well, minor basal damage	Retain	City right-of-way
ST3	Crape myrtle/ *Lagerstroemia indica*	2	13	4/4/5/5	A-	B	planted low, dry	Retain	City right-of-way
ST4	Crape myrtle/ *Lagerstroemia indica*	1	10	2/2/2/2	F	F	dead	Retain	City right-of-way
ST5	Crape myrtle/ *Lagerstroemia indica*	1	10	1/1/1/1	B	B	codominant stems at 6 feet	Retain	City right-of-way
ST6	Crape myrtle/ *Lagerstroemia indica*	stump sprouts	4	2/2/2/2	A-	C	powdery mildew	Retain	City right-of-way
ST7	Queen palm/ *Syagrus romanzoffiana*	20' BT*	30	10/10/10/10	A	A		Relocate ~~Remove~~	City right-of-way
ST8	Queen palm/ *Syagrus romanzoffiana*	15' BT	20	7/7/7/7	A	B	shaded by phoenix canariensis to north	Retain ~~Remove~~	City right-of-way
12	Tree of Heaven/ *Ailanthus altissima*	8.5	30	10/12/14/20	A	B	codominant stems, concrete all around	Remove	No
13	Mexican fan palm/ *Washingtonia robusta*	50' BT	58	10/10/10/10	A	A	old tags 71, 38	Remove	No
14	Mexican fan palm/ *Washingtonia robusta*	65' BT	73	8/8/8/8	A	A		Remove	No
15	Canary Island pine/ *Pinus canariensis*	21	80	8/8/12/12	B	B	topped (laterals), shaded on west by other, epicormic growth	Remove	No
16	Canary Island pine/ *Pinus canariensis*	18.5	75	12/12/12/13	A	B-	topped (laterals), shaded on east by other, epicormic growth	Remove	No
17	Mexican fan palm/ *Washingtonia robusta*	42' BT	50	8/8/8/8	A	A		Remove	No
18	Camphor/ *Cinnamomum camphora*	19, 21, 31	45	15/21/25/15	B	C	multiple pruning events, topped, epicormic, history of breakage, mechanical damage, good	Remove	**Yes**
19	Camphor/ *Cinnamomum camphora*	16, 16.5	45	12/18/15/20	B	B	multiple pruning events, codominant stems, epicormic, twig dieback, old mechanical damage	Remove	**Yes**
20	Camphor/ *Cinnamomum camphora*	18.5, 23.5	45	15/21/21/30	B	B	multiple pruning events, epicormic, twig dieback, old mechanical damage, history of breakage	Remove	**Yes**
21	Chinese elm/ *Ulmus parvifolia*	15	25	9/12/20/12	B	C	old tag 10, 2 trunks, anthracnose at base, mechanical damage, lost a codominant stem at	Remove	No
22	Mexican fan palm/ *Washingtonia robusta*	50' BT	57	7/7/7/7	A	A-	woodpeckers, old tags 235 and 77	Remove	No
23	California fan palm/ *Washingtonia filifera*	45' BT	55	10/10/10/10	A	A-	woodpeckers, spiked, old tag 11	Relocate	**Yes**
24**	Indian laurel fig/ *Ficus microcarpa*	40.5 at 4 ft	45	30/15/18/27	B	C	white fungi on roots at all sides (only on bark), old tags 12 and 55	Remove**	**Yes****
25	Mexican fan palm/ *Washingtonia robusta*	50' BT	58	8/8/8/8	A	A	old tags 27 and 78, curved trunk	Remove	No

Added color-coding and legend

SOURCE: Architectural Resources Group, May 2021

FIGURE **7.6-1d**

IMPACT SCIENCES

Updated Tree Tables

FOR REFERENCE PURPOSES – MARKED TO SHOW CORRECTIONS

May 2018 TREE INVENTORY 86 South Fair Oaks Ave. Pasadena

Added columns to differentiate

Tree ID	Common Name / Botanical Name	DBH / BT Ht.	Height	Spread (N/E/S/W)	Health Grade	Structure Grade	Comments	Disposition	Protected Y/N
26	Canary Island date palm/ *Phoenix canariensis*	50' BT	58	10/10/10/10	A	A	old tags 13 and 65	~~Remove~~ Relocate	**Yes**
27	Mexican fan palm/ *Washingtonia robusta*	55' BT	62	8/8/8/8	A	A	spiked, old tag 29, woodpeckers	Remove	No
28	Mexican fan palm/ *Washingtonia robusta*	55' BT	62	8/8/8/8	A	A	curved trunk, old tag 30, woodpeckers	Remove	No
29	Mexican fan palm/ *Washingtonia robusta*	60' BT	68	8/8/8/8	A	A	old tag 31, woodpeckers in skinned part	Remove	No
30	Southern Magnolia/ *Magnolia grandiflora*	15	30	10/10/8/12	B	B	old tag 82, multiple pruning events, root pruned on westside 2ft	Remove	No
31	California fan palm/ *Washingtonia filifera*	50' BT	60	8/8/8/8	A	B	old tag 6 and 53, eroded trunk on south and west, spiked, mechanical damage on trunk	Relocate	**Yes**
OS 32	Hollywood juniper/ *Juniperus chinensis 'Torulosa'*	5, 8, 10	30	4/12/9/6	A-	A-	codominant stems, minor dieback, old tags 34 and 74	Remain	No
OS 33	Hollywood juniper/ *Juniperus chinensis 'Torulosa'*	13	30	3/10/10/12	A-	A	minor dieback, old tag 75	Remain	No
OS 34	Hollywood juniper/ *Juniperus chinensis 'Torulosa'*	10	25	3/5/9/12	A	B-	old tag 32, leans southwest, cable imbedded (trunk and branch)	Remain	No
OS 35	Camphor/ *Cinnamomum camphora*	24	45	21/12/12/24	B	B-	topped laterals and top, multiple pruning events, old pruning callus is good, old tags 7 and 68	Remain	**Yes**
OS 36	Victorian box/ *Pittosporum undulatum*	10	28	1/6/10/10	C	C-	old tags 8 and 83, canker on southwest, topped, epicormic shoots	Remain	No
OS 37	Weeping fig/ *Ficus benjamina*	2, 4, 6	30	14/15/14/10	A	B	potted plant escapee, shaded out	Remain	No
38	Canary Island date palm/ *Phoenix canariensis*	20' BT	30	15/15/15/15	A	A	old tag 67	Retain	**Yes**

*BT - Brown Trunk - Because palm trunks typically do not expand in diameter, they are measured by their Brown Trunk Height. This is the Nursery Standard Measurement from grade to the newest emerging spear.

** This tree failed due to weather in January 2019. Notwithstanding, the project provides replacement trees as required.

Added table summarizing applicable totals

Added color-coding and legend

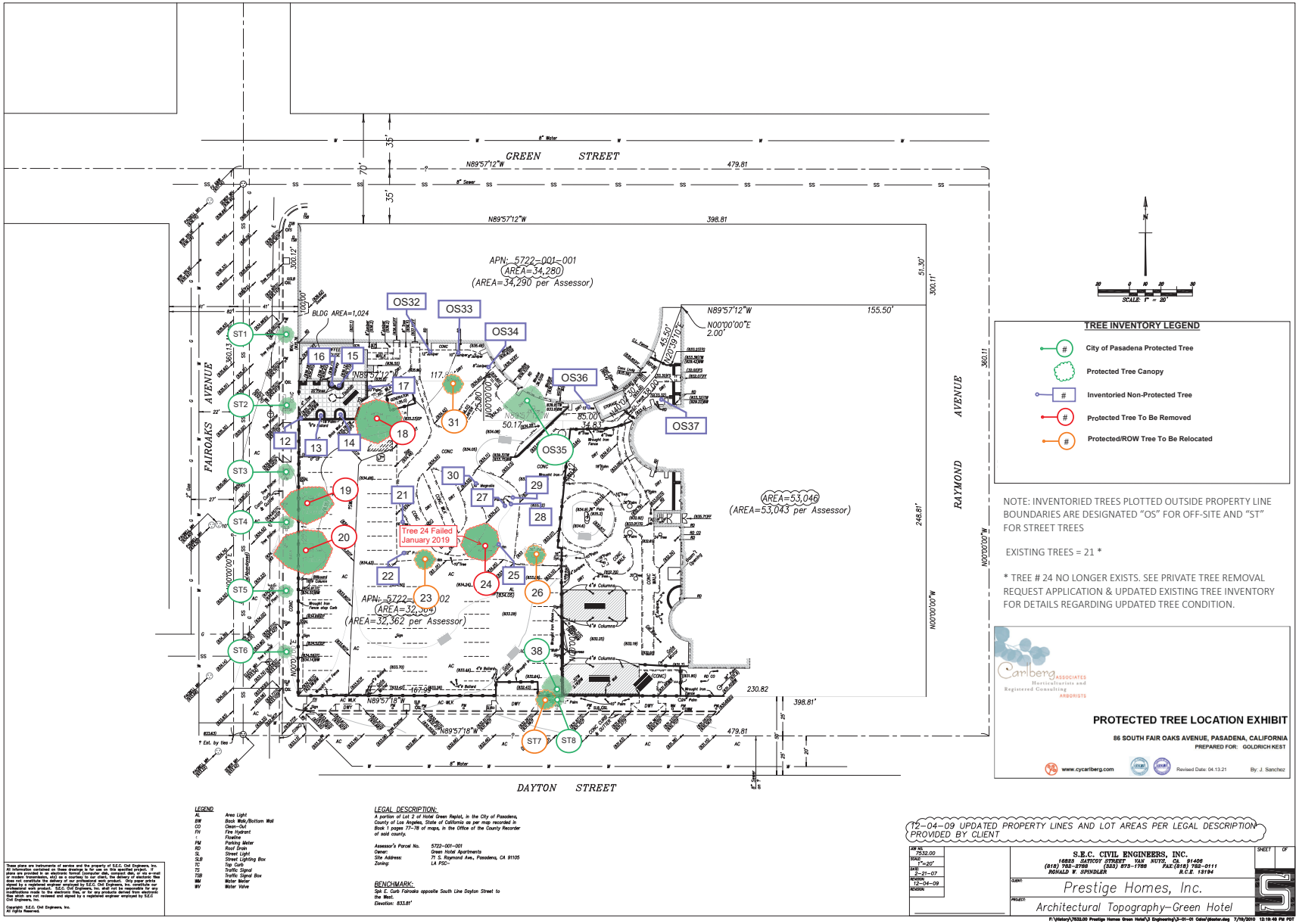
SOURCE: Architectural Resources Group, May 2021

FIGURE **7.6-1e**

IMPACT SCIENCES

Updated Tree Tables

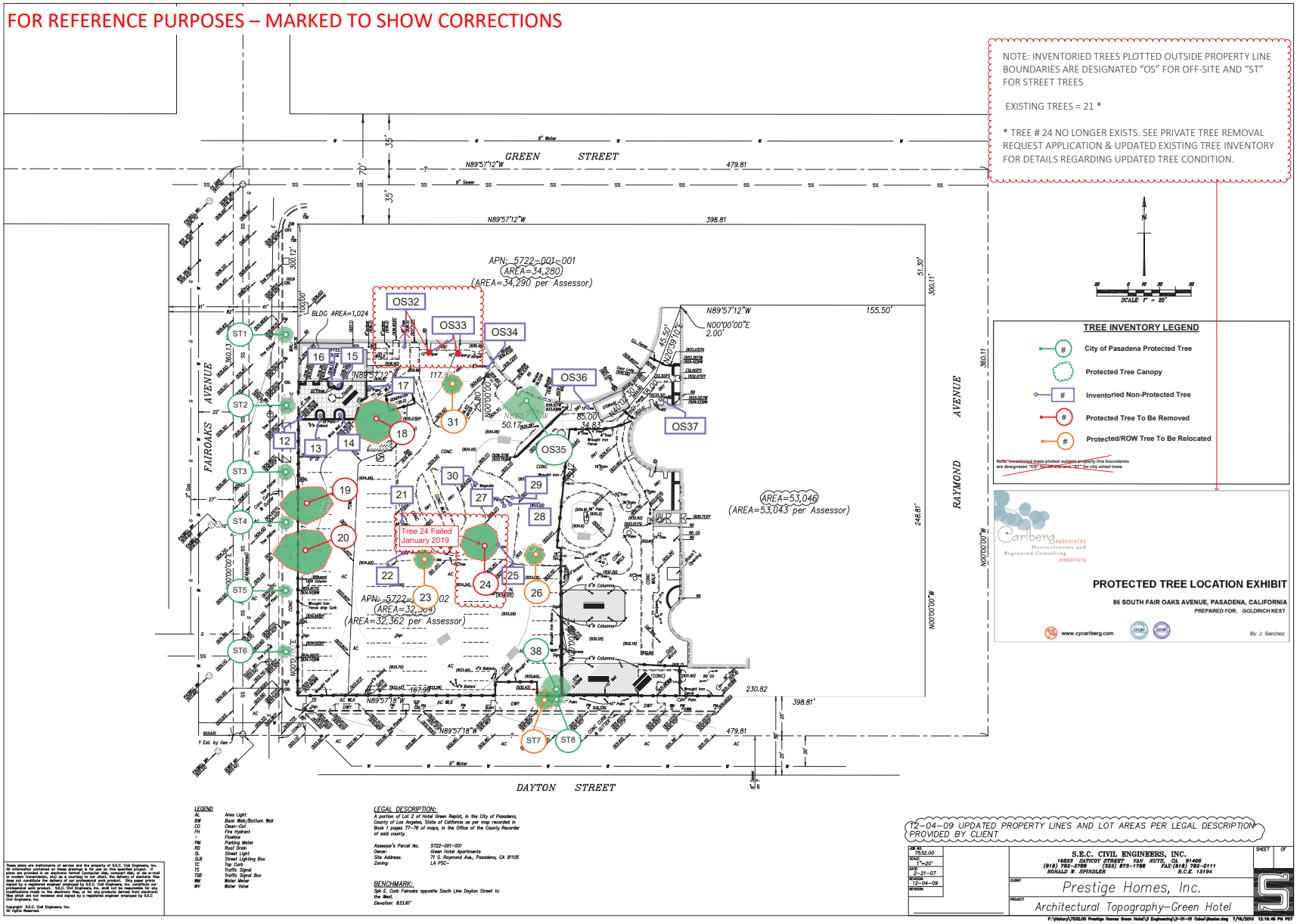
1136.004•08/2021



SOURCE: Architectural Resources Group, May 2021

FIGURE **7.6-2a**

Updated Tree Exhibits



SOURCE: Architectural Resources Group, May 2021

FIGURE **7.6-2b**

Updated Tree Exhibits

7.7 PROVISION AND FINDINGS OF A HISTORICAL RESOURCES TECHNICAL REPORT

The *CEQA Guidelines* indicate that a project would have a significant impact on a historical resource if it would result in a substantial adverse change in the significance of a historical resource as defined in § 15064.5.

As defined in § 15064.5(b)(1), a substantial adverse change in the significance of a historic resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.[4]

Section 15064.5(b)(2) further states that "[t]he significance of an historic resource is materially impaired when a project… [d]emolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources… or that account for its inclusion in a local register of historic resources… or its identification in a historic resources survey."[5]

In addition, while not a threshold of significance, the Secretary of the Interior's Standards for the Treatment of Historic Properties (the "Standards") provide guidance for reviewing proposed projects that may affect historic resources.

The intent of the Standards is to assist the long-term preservation of a property's significance through the preservation, rehabilitation, and maintenance of historic materials and features. The Standards pertain to historic buildings of all materials, construction types, sizes, and occupancy and encompass the exterior and interior of the buildings. The Standards also encompass related landscape features and the building's site and environment, as well as attached, adjacent, or related new construction.

From a practical perspective, the Standards have guided agencies in carrying out their historic preservation responsibilities. The Standards have also been adopted by State and local jurisdictions across the country.

In addition, the Standards are a useful analytic tool for aiding in the evaluation of potential impacts to historic resources. However, these Guidelines and Regulations are not part of the CEQA process. CEQA requires analysis of physical impacts to the environment and the only relationship of the Secretary of the Interior Standards to the CEQA process are discussed under *CEQA Guidelines* Section 15064.5(b)(3):

---

4 *CEQA Guidelines*, section 15064.5(b)(1). https://govt.westlaw.com/calregs/Document/IA0E0C760D48811DEBC02831C6D6C108E?transitionType=Default&contextData=(sc.Default).

5 *CEQA Guidelines*, section 15064.5(b)(2). https://govt.westlaw.com/calregs/Document/IA0E0C760D48811DEBC02831C6D6C108E?transitionType=Default&contextData=(sc.Default).

"Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource."

The analysis provided in **Section 4.0 SCEA Environmental Checklist, 4.5(a)** is based on the *86 Fair Oaks Avenue Historic Resources Technical Report (*Historic Resources Report*),* prepared by **Historic Resources Group** (HRG), dated September 2020, included as **Appendix E, Historic Resources Technical Report** to the SCEA. The Historic Resources Report was prepared by Paul Travis, AICP, who meets the qualifications for historic preservation professionals outlined in Title 36 of the Code of Federal Regulations, Part 61.

Analysis of the potential impacts to historical resources presented in the Historic Resources Report found that with the implementation of mitigation measures regarding potential vibration impacts, and the recommendations of an approved Geotechnical Report, the Project would not result in significant adverse impacts on the identified historical resources located within and adjacent to the Project Site. The Project would not result in a substantial adverse change in the significance of the Old Pasadena Historic District, the Hotel Green Apartments, Castle Green, or the building at 84 South Fair Oaks Avenue because all of these resources would retain those physical characteristics that convey their historical significance and that justify their inclusion in the California Register of Historic Resources and the National Register of Historic Places.

Before mitigation, the vibration velocities predicted to occur at Green Hotel Apartments, located approximately 20 feet to the north of the nearest project site boundary would exceed the Federal Transit Administration (FTA) threshold for the most sensitive receptors. The vibration velocities predicted to occur at 84 South Fair Oaks Avenue would also exceed this FTA threshold before mitigation. Castle Green is approximately 40 feet from the project site; at this distance vibration impacts would not exceed the FTA threshold. **Mitigation Measures NOI-1** and **NOI-2** would reduce potential vibration impacts to the Green Hotel Apartments and the building at 84 South Fair Oaks Avenue associated with construction activities to a less than significant level. These mitigation measures are included below for reader convenience:

MM NOI-1: Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, and to the satisfaction of the City of Pasadena, the applicant shall retain a Professional Structural Engineer with experience in structural vibration analysis and monitoring for historic buildings and a Project Historical Architect with similar experience as a team to ensure project construction-induced vibration levels do not expose the existing

Green Hotel Apartments or the restaurant building at 84 South Fair Oaks Avenue to vibration levels of 0.12 ppv in/sec or greater. The Structural Engineer/Project Historical Architect team shall perform the following tasks:

- Review the project plans for demolition and construction;
- Survey the project site and the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue, including photographic and/or videographic documentation and geological testing, if required; and
- Prepare and submit a report to the Director of Planning and Community Development to include, but not be limited to, the following:
    - Description of existing conditions at the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue, including photographic and/or videographic documentation;
    - Vibration level limits based on building conditions, soil conditions, and planned demolition and construction methods to ensure vibration levels would be below 0.12 ppv in/sec, the potential for damage to the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue;
    - Specific measures to be taken during construction to ensure the specified vibration level limits are not exceeded; and
- Prepare and submit a monitoring plan to be implemented during demolition and construction that includes post-construction and post-demolition surveys of the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue. The plan should include, but not be limited to, monitoring instrument specifications, instrument calibration certificates, list of exact monitoring locations, data collection protocol, alarming and alerting protocol, reporting protocol, and maintenance and service outage protocol. Any of the measures can be removed when no longer necessary to achieve the 0.12 ppv in/sec threshold of structure damage at the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue.
    - Examples of measures that may be specified for implementation during demolition or construction include, but are not limited to
        - Prohibition of certain types of impact equipment;
        - Requirement for lighter tracked or wheeled equipment;

- Specifying demolition by non-impact methods, such as sawing concrete;
- Phasing operations to avoid simultaneous vibration sources; and
- Installation of vibration measuring devices to guide decision making for subsequent activities. Monitoring shall be conducted, at minimum, during all ground-disturbing significant impact construction activities (i.e., demolition, shoring excavation, and foundation work). Warning thresholds, as specified in the monitoring plan, shall be below the specified vibration limits to allow the Contractor to take the necessary steps to reduce vibration, including but not limited to halting/staggering concurrent activities, utilizing quieter or lower-vibratory techniques, or reducing the speed or intensity of equipment. A monitoring record that documents all alarms and includes information regarding compliance with these vibration measures shall be provided to the City of Pasadena upon request.

MM NOI-2: To the satisfaction of the City of Pasadena, in the unanticipated event of discovery of vibration-caused damage, the Professional Structural Engineer and the Project Historical Architect shall document any damage to the existing Green Hotel Apartments and/or restaurant building located at 84 South Fair Oaks Avenue caused by construction of the project and shall recommend necessary repairs. Until the conclusion of vibration causing activities, a report from the Professional Structural Engineer or Project Historical Architect shall be submitted every 90 days to the City of Pasadena documenting the presence or absence of damage, and, if needed, the status of any required repairs. The project applicant shall be responsible for any repairs associated with vibration-caused damage as a result of construction of the project. Any such repairs shall be undertaken and completed as required to conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 Code of Federal Regulations 68), and shall apply the California Historical Building Code (California Code of Regulations, Title 24, Part 8) and other applicable codes.

It should be noted that the construction associated with the currently proposed project does not destroy historic materials and features of the existing buildings because it is apart from, and does not touch or intervene in, any of the historic buildings on the adjacent properties. As such, any additional measures or materials to protect the exterior of these buildings (and their 'historic fabric') are not necessary.

In addition to the comprehensive analysis provided in the Historic Resources Report prepared by HRG, a comment letter was received from **Teresa Grimes I Historic Preservation**[6] which provides a point-by-point analysis of potential Project impacts and provides supplemental information to City decisionmakers considering the Project's impacts on historical resources per Title 14 California Code of Regulations Section 15064.5(b). The analysis provided by Ms. Grimes is consistent with the content and conclusions set forth in the Historic Resources Report. As previously stated, the HRG report concluded that the Project would not result in significant adverse impacts to the identified historical resources, because the Project would not materially alter the Hotel Green Apartments, 84 South Fair Oaks Avenue, Castle Green, or the Old Pasadena Historic District.

Both analyses conclude that the existing improvements on the Project Site do not contribute to the significance of the Hotel Green Apartments, 84 South Fair Oaks Avenue, Castle Green, or the Old Pasadena Historic District. As such, the demolition of the existing improvements would not result in a substantial adverse change in the significance of these historical resources and the resources would remain eligible for listing under national, state, and local landmark or historic district programs.

The Project would introduce a new visual element within the boundaries of the Hotel Green Apartments, 84 South Fair Oaks Avenue, Castle Green, and the Old Pasadena Historic District; however, the new building would be physically separated from the contributing buildings on the Project Site and in the vicinity, and it has been designed, and would be constructed in a manner that is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

6 As demonstrated by the inclusion of her resume with her comment letter, Ms. Grimes confirms that she meets the qualifications for historic preservation professionals outlined in Title 36 of the Code of Federal Regulations, Part 61, refer to Comment Letter O-7, Teresa Grimes Historic Preservation in **Appendix H** for a copy of the full text of Ms. Grimes analysis.

7.8 LAND USE PLAN CONSISTENCY ANALYSIS

Several comments were received regarding potential land use impacts of the project. The State CEQA Guidelines require the analysis of land use impacts when a project has the potential to physically divide an established community; conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project that has been adopted for the purpose of avoiding or mitigating an environmental effect; or conflict with any applicable Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). The SCEA analysis determined that the Proposed Project would not have any impacts relating to the potential to divide an established community or conflict with an HCP or NCCP. Because the discussion of the consistency of the Proposed Project with the goals and objectives of applicable general and specific plans adopted for the purpose of avoiding or mitigating potential environmental effects was focused on meeting the requirements of CEQA, this response provides more detail to document the project's consistency with such plan policies.

The information below is provided to summarize the relevant goals and objectives of the applicable general, and specific plan that were adopted for the purpose of avoiding or mitigating potential environmental effects, and provide an evaluation of the Proposed Project's consistency with these goals and objectives.

Regional Comprehensive Plan

The Southern California Association of Governments (SCAG) undertakes regional planning efforts for the six-county metropolitan region, which includes Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial Counties. SCAG is a regional planning agency and serves as a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG's 2008 Regional Comprehensive Plan (RCP; SCAG 2008) is a major advisory plan that addresses important regional issues like housing, traffic/transportation, water, and air quality. The RCP serves as an advisory document to local jurisdictions and agencies in the Southern California region for their information and voluntary use in preparing local plans and handling local issues of regional significance in an integrated and comprehensive way. Given that this document is intended for local jurisdictions to use as guidance in preparing local plans, the project has not been evaluated for consistency with the recommended goals and policies set forth in the RCP. However, the City of Pasadena uses information and recommendations set forth in the RCP when preparing and updating City planning documents.

Regional Transportation Plan/Sustainable Communities Strategy

SCAG's Connect SoCal 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal) provides a vision for transportation investments throughout the region. Connect SoCal is a long-range transportation plan that is developed and updated by SCAG every four years. Using growth

forecasts and economic trends that project out over a 25-year period, Connect SoCal considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address the region's mobility needs.

Within Connect SoCal is the Sustainable Communities Strategy (SCS), which demonstrates the region's ability to attain and exceed the greenhouse gas (GHG) emission-reduction targets set forth by the California Air Resources Board. The intent of the SCS is to focus new housing and job growth in high-quality transit areas and other opportunity areas in existing main streets, downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. This overall land use development pattern supports and complements the proposed transportation network outlined in Connect SoCal and emphasizes system preservation, active transportation, and transportation demand management measures. The primary goals and benefits associated with the SCS include: 1) better placemaking; 2) lower cost to taxpayers and families; 3) benefits to public health and the environment; 4) greater responsiveness to demographics and the changing housing market; and 5) improved access and mobility. The SCEA fully documents in **Appendix A** the project's consistency with the applicable mitigation measures adopted in conjunction with this plan.

Local Plans

Citywide, the City of Pasadena General Plan and Pasadena Municipal Code (PMC) govern land uses and set development standards for private properties, which are intended to guide future growth and development. In addition, the Central District Specific Plan (CDSP) and accompanying implementation ordinance within the PMC govern land uses and set development standards for private properties within the Central District, which includes the subject property. As stated above, a proposed project would result in a significant impact if it would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project that was adopted for the purpose of avoiding or mitigating an environmental effect.

This discussion identifies those aspects of the General Plan, CDSP and PMC that pertain to environmental effects and are applicable to the Proposed Project, including: the Guiding Principles and Citywide goals of the General Plan; applicable policies and regulations found in the Land Use, Open Space & Conservation, and Green Space, Recreation & Parks Elements; and the CDSP.

City of Pasadena General Plan

Background

The City's General Plan is its fundamental planning policy document, which includes goals, policies and objectives that balance the needs and expectations of residents, business owners, and institutions. The General Plan lays out specific strategies which reflect the community's values and provides a framework for the development of the City by establishing land use designations for each parcel of land within the City and limiting the amount of development (residential dwelling units and commercial square footage) that is permitted citywide.

Over time, the City Council has approved various updates to the City's General Plan, which include the following:

- Updated Land Use Element (January 2016);
- Updated Land Use Diagram (November 2016);
- Updated Mobility Element (August 2015); and
- Elimination of six optional General Plan Elements as of August 2015 (Public Facilities, Social Development, Cultural and Recreational, Economic Development and Employment, Historic and Cultural, and Scenic Highways).

The General Plan currently consists of a series of state-mandated elements to direct the City's physical growth. Elements include:

- Land Use (2016);
- Mobility (2015);
- Housing (2014);
- Green Space, Recreation & Parks (2007);
- Open Space & Conservation (2012);
- Noise (2002); and
- Safety (2002).

The changes associated with the 2016 update to the General Plan focused on the Land Use and Mobility Elements and Land Use Diagram. The updates to the Land Use and Mobility Elements, together with the other General Plan elements, guide the overall physical development and circulation of the entire City

through horizon year 2035. The General Plan, as updated, established new development caps in the City for its specific plan areas. The updated General Plan also included a policy to expand and/or modify the boundaries of several Specific Plans, including the CDSP; however, the Specific Plan update process is still ongoing at this time.

The Land Use Element establishes a framework that promotes higher density mixed-use urban environments oriented to transit and pedestrian activity within specific areas that are high quality and reflect the historic scale and character of the City. The Land Use Element includes seven Guiding Principles which help to set forth the overall framework for developing, interpreting, and implementing the City's General Plan.

Guiding Principles and Goals

The following Guiding Principles and Citywide goals of the Land Use Element pertain to environmental effects.

Guiding Principles:

Guiding Principle 2: Pasadena's historic resources will be preserved. Citywide, new development will be in harmony with and enhance Pasadena's unique character and sense of place. New construction that could affect the integrity of historic resources will be compatible with, and differentiated from, the existing resource.

Guiding Principle 4: Pasadena will be a socially, economically, and environmentally sustainable community. Safe, well designed, accessible and human-scale residential and commercial areas will be provided where people of all ages can live, work and play. These areas will include neighborhood parks, urban open spaces and the equitable distribution of public and private recreational facilities; new public spaces will be acquired. Human services will be coordinated and made accessible to those who need them.

Guiding Principle 5: Pasadena will be a city where people can circulate without cars. Specific plans in targeted development areas will emphasize a mix of uses, pedestrian activity, and transit; public and private transit will be made more available; neighborhood villages and transit villages will reduce the need for auto use.

Citywide Goals:

Goal 1: Sustainable Growth. Sustainable growth and change in orderly and well-planned developments within targeted areas that allow for higher density development in an urban core setting and in close

proximity to transit that provides for the needs of existing and future residents and businesses, ensures the effective provision of public services, and makes efficient use of land, energy, and infrastructure.

Goal 5: Pedestrian-Oriented Places. Development that contributes to pedestrian vitality and facilitates bicycle use in the Central District, Transit Villages, Neighborhood Villages, and community corridors.

Goal 6: Character and Scale of Pasadena. A built environment that evolves while maintaining Pasadena's unique sense of place, character, and the urban fabric.

Goal 8: Historic Preservation. Preservation and enhancement of Pasadena's cultural and historic buildings, landscapes, streets and districts as valued assets and important representations of its past and a source of community identity, and social, ecological, and economic vitality.

Goal 10: City Sustained and Renewed. Development and infrastructure practices that sustain natural environmental resources for the use of future generations and, at the same time, contribute to the reduction of greenhouse gas emissions and impacts on climate change.

Goal 18: Land Use/Transportation Relationship. Pasadena will be a City where there are effective and convenient alternatives to using cars and the relationship of land use and transportation is acknowledged through transit-oriented development, multi-modal design features, and pedestrian and bicycle amenities in coordination with and accordance with the Mobility Element.

General Plan Land Use Designation

The General Plan Land Use Diagram designates the Project site for High Mixed-Use land uses with a maximum floor area ratio (FAR) of 3.0. The Project site is approximately 32,362 square feet (sf). Therefore, development of the site in a manner consistent with the adopted Land Use Diagram would allow for an approximate maximum 97,086-square-foot commercial, mixed use, or residential development. The proposed approximately 93,355-square-foot mixed use development is within the site's allowable FAR.

Central District Specific Plan

A Specific Plan is a regulatory tool that local governments use to implement a General Plan and to guide development in a localized area. While the General Plan is the primary guide for growth and development in a community, a Specific Plan is able to focus on the unique characteristics of a specific area by customizing the planning process and land use regulations to that area. Specific Plans in Pasadena include both a policy document and an implementation ordinance that is codified in Article 3 of the City's Zoning Ordinance.

The project site is within the Central District Specific Plan (CDSP) Area and is designated as High-Mixed Use under the Land Use Element of the City of Pasadena General Plan. This designation allows for a

maximum of 3.00 FAR, up to 87 dwellings per acre, and is intended to support the development of multi-story buildings with a variety of compatible commercial (retail and office) and residential uses. The vision for the CDSP Area, as stated in the Land Use Element, is to build upon its existing strengths as a vibrant downtown with a mix of uses, walkable areas with shopping, entertainment, restaurants, offices, and housing connected by multiple modes of transit. Within the Central District there are a number of distinct neighborhoods (or sub-districts) with unique identities including Old Pasadena, the Civic Center, Pasadena Playhouse, and South Lake. The project site is within the Old Pasadena sub-district, identified as the historic core of the City, which has developed into a vibrant retail and entertainment destination. The Central District is served by three Metro L Line (formerly Gold Line) stations (Del Mar, Memorial Park, and Lake) creating a myriad of opportunities for higher-density, transit-oriented development, served by multimodal linkages, and pedestrian and open space amenities.

To regulate the building intensity and population density within the City consistently with the designations established by the Land Use Element, development capacities for each Specific Plan Area are used to set threshold limits for residential and commercial development. Within these capacities, cumulative new development in these areas would not exceed the set limits for housing units or square feet of commercial use. For the CDSP Area, the 2016 Land Use Element stipulates a development capacity of 4,272 residential units and 2,112,000 sf of commercial development; the Development Cap Tracking Worksheet[7], last updated on July 31, 2021, shows a remaining capacity of 957 residential units and 900,635 sf of commercial development. As such, the Proposed Project would be within the established development capacity for the CDSP area.

CDSP Zoning Ordinance

The purpose of the City's Zoning Code, which is provided in Section 17.10.010 of the PMC, is to list allowable land uses, place restrictions on those land uses, and provide basic standards for site layout and building placement and envelope (bulk/massing). Importantly, the Zoning Code does not permit an increase in height, residential density, or land uses that are inconsistent with the General Plan and the CDSP.

The project site is located within the historic 'Old Pasadena' Subdistrict of the CDSP with a zoning designation of Central District, Subdistrict 1 (CD-1). The CD-1 zone list of allowable uses and development standards is identified in PMC Chapter 17.30 – Central District Specific Plan. A mixed-use building is an allowable use within both the CD-1 zone and the High Mixed-Use land use designation, subject to certain restrictions enumerated in the Central District Specific Plan (CDSP), such as the requirement of commercial

7 Which includes projects with issued building permits, projects in the pipeline, entitled but with no building permit, and projects in the pipeline in progress (e.g., the Central Park Apartments Project), https://www.cityofpasadena.net/planning/wp-content/uploads/sites/30/GP-Development-Cap-Project-Detail-August-2021.pdf?v=1632172936492, accessed September 14, 2021.

uses on the ground floor and the exclusion of residential uses on the ground floor. The project would require review and approval of applications for Concept and Final Design Review from the City of Pasadena Design Commission.

CDSP Policy Framework

As previously discussed, a proposed project would have a significant land use impact if it would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. The following objectives of the CDSP pertain to environmental effects and are applicable to the Proposed Project:

Objective 2: Identify Growth Areas. Downtown growth and development will be directed toward the most appropriate locations, with the intention of 1) protecting existing residential neighborhoods; 2) supporting transit usage; 3) and revitalizing underutilized areas.

Objective 3: Develop Urban Land Patterns. Development patterns will support Downtown's role as Pasadena's distinctive urban core, emphasizing a vibrant community with diverse opportunities. Transit-oriented, pedestrian-oriented and mixed-use development will be encouraged.

Objective 4: Expand Open Space Network. Downtown will feature an extensive network of public, semi-public and private open spaces, including street and alleys, parks, urban plazas, and other improvements that will augment and expand the existing network.

Objective 6: Reinforce District Character. The distinctive character of Downtown and its unique Sub-districts will be maintained and further enhanced. New development will respond to the area's architectural heritage with sensitivity and offer creative design solutions.

Objective 7: Preserve Historic & Cultural Resources. Downtown will retain its cultural heritage through recognition and protection of culturally and historically significant resources. Adaptive reuse and infill development that respect existing resources will be encouraged; adaptive reuse should receive favorable consideration when the original uses of an historic building are no longer feasible.

Objective 9: Protect Landscape Resources. Downtown's public outdoor spaces will remain a community asset through protection and enhancement of important landscape resources, including the area's mature street trees.

Objective 10: Support Traditional Urban Patterns. New construction and contemporary design will reinforce Downtown's traditional development patterns, respond to the surrounding context, and contribute to Pasadena's status as an inviting and memorable place. Streets will support public activity and buildings will be scaled to the presence of people.

Objective 23: Minimize Traffic Impacts. As far as feasible, traffic impacts upon in-town and adjoining residential neighborhoods will be minimized. New development will be directed toward principal mobility corridors and in close proximity to transit stations.

Objective 25: Promote Transit Usage. Transit will be a viable option for movement within and through Downtown, emphasizing improved transit connections between the activity centers of Downtown. Regional transit will be supported by transit-oriented development near light rail stations.

Objective 26: Make Downtown Walkable. Downtown will be a safe, convenient and comfortable place to walk, a place where walking is the mode of choice for short trips.

District-Wide Mobility Concept

The District-Wide Mobility Concept is based on the idea that the CDSP will provide for convenient multi-modal movement by foot, bicycle, transit, and car. Concepts of particular note to the Proposed Project include the following:

- [K]ey pedestrian routes should maintain a width of at least 10 feet. This is usually sufficient to accommodate clear pedestrian passage, as well as a zone for street trees, street furniture and other streetscape amenities.
- No CDSP sidewalk should be reduced in width.
- Street trees are a highly visible and especially important streetscape element; they make streets at once more attractive and comfortable for pedestrians. Maintain existing street trees, and plant new street trees throughout the CDSP.

Pasadena Municipal Code

The City has adopted a Tree Protection Ordinance (TPO; PMC Chapter 8.52). In accordance with the TPO, removal of a public tree located anywhere in the City is prohibited without review by the Urban Forestry Advisory Committee and approval of the City Manager. In addition, the TPO also prohibits removal of private protected trees without review and approval of a Private Tree Removal Permit. Specifically, regarding public trees, the TPO states:

"No permits will be issued to any person or entity for … removal of public trees, and all … removal of public trees shall be undertaken by employees or contractors of the city pursuant to Section 8.52.080. Any person desiring to initiate … removal of a public tree by the city, may make a written request to the city manager and pay the costs of service and replacement at rates set by resolution of the city council, should the request be granted. Any such request will be considered based on

the provisions of this chapter, established public tree removal criteria, other ongoing public tree work and available resources."

Regarding private trees, the TPO states:

Where a property owner wishes to remove a tree protected under this ordinance as part of a plan for which a discretionary approval under Title 17 of this code is otherwise required, the application for discretionary approval shall also be deemed an application for a permit under this chapter to the decision maker for the discretionary approval.

According to the most recent Tree Inventory, the Project site contains 21 trees, with an additional eight street trees in the adjacent the public right-of-way. Eight of the trees onsite and all of the adjacent street trees are protected under the TPO.

General Plan Consistency Analysis

The consistency of the Proposed Project with Guiding Principles and goals adopted for the purpose of avoiding or mitigating potential environmental effects in the Land Use Element of the General Plan are outlined in **Table 7.8-1**.

Table 7.8-1

Consistency with Land Use Element of General Plan

Relevant Policy or Objective	Project's Consistency
Guiding Principles	
Guiding Principle 1: Growth will be targeted to serve community needs and enhance the quality of life. Higher density development will be directed away from residential neighborhoods and into the Central District, Transit Villages, and Neighborhood Villages. These areas will have a diverse housing stock, job opportunities, exciting districts with commercial and recreational uses, and transit opportunities. New development will build upon Pasadena's tradition of strong sense of place, great neighborhoods, gardens, plazas, parks, and trees.	**Consistent:** The Proposed Project would improve the overall project environment through the redevelopment of an existing surface parking lot with a new mixed-use development and new landscaping that would be subject to the City's Design Review process. The project site is located within the Old Pasadena subdistrict of the Central District and away from established residential neighborhoods. The Proposed Project would feature a 6-story plus mezzanine transit-oriented mixed-use development that includes retail space, restaurants, and work/live units at the ground level and mixed-rate apartment units on levels 2-6. The Proposed Project would also be located in close proximity to the Del Mar L Line (formerly known as the Gold Line) Light Rail Station which is located less than a quarter of a mile to the southeast of the

	project site along Raymond Avenue just north of Del Mar Boulevard, and the Memorial Park Station which is located less than a half mile to the northeast of the project site along Holly Street at the terminus of N. Arroyo Parkway. In addition, several bus transit providers (i.e., Metro, Foothill Transit, ARTS, and LADOT) serve the immediate project area. The Proposed Project would include landscaping, an outdoor lounging area and pool, and walkways to create an inviting environment for people.
Guiding Principle 2: Pasadena's historic resources will be preserved. Citywide, new development will be in harmony with and enhance Pasadena's unique character and sense of place. New construction that could affect the integrity of historic resources will be compatible with, and differentiated from, the existing resource.	**Consistent:** The Project would not demolish or alter any historic building on the Project Site or in the near vicinity of the Project site. However, because the Project would construct a six-story plus penthouse building on a parcel largely used as surface parking under current conditions, the immediate surroundings of the adjacent historic resources, i.e., the Hotel Green and the Castle Green, and the Old Pasadena Historic District in which the property is located, would be altered. The analysis provided in the Historical Resources Evaluation Report (HRER) included as **Appendix E** to the SCEA) finds that these alterations would not materially impair any of the surrounding historical resources and thus would not result in a substantial adverse change in the significance of a historical resource(s).
Guiding Principle 4: Pasadena will be a socially, economically, and environmentally sustainable community. Safe, well designed, accessible and human-scale residential and commercial areas will be provided where people of all ages can live, work and play. These areas will include neighborhood parks, urban open spaces and the equitable distribution of public and private recreational facilities; new public spaces will be acquired. Human services will be coordinated and made accessible to those who need them.	**Consistent:** The Proposed Project would be located in close proximity to the Del Mar L Line (formerly known as the Gold Line) Light Rail Station which is located less than a quarter of a mile to the southeast of the project site along Raymond Avenue just north of Del Mar Boulevard; further, the Memorial Park Station is located less than a half mile to the northeast of the project site along Holly Street at the terminus of N. Arroyo Parkway. In addition, several bus transit providers (i.e., Metro, Foothill Transit, ARTS, and LADOT) serve the immediate project area. The project's location in an urbanized area would help reduce reliance on the automobile and increase opportunities for the use of alternative modes of transportation, which would reduce traffic congestion. The developers, designers, and contractors of the Proposed Project would be required to adhere to

	the Design Guidelines in the Central District Specific Plan. Such compliance would ensure consistency with the City's character and traditional urban design. The Project would not conflict with neighborhood parks, urban open spaces, and the equitable distribution of public and private recreational facilities or the accessibility of human services because these facilities would continue to be provided in the vicinity. The Proposed Project would include landscaping, a central courtyard, an outdoor patio, and walkways to create an inviting environment for people.
Guiding Principle 5: Pasadena will be a city where people can circulate without cars. Specific plans in targeted development areas will emphasize a mix of uses, pedestrian activity, and transit; public and private transit will be made more available; neighborhood villages and transit villages will reduce the need for auto use.	**Consistent:** As noted above, the Proposed Project would be in close proximity to public transportation. Moreover, the project's location and mixed-use typography in an urbanized area would help reduce reliance on the automobile and increase opportunities for the use of alternative modes of transportation, which would reduce traffic congestion. The Proposed Project includes landscaping, courtyards, and walkways to create a pedestrian friendly environment for the public. The project would not alter the existing sidewalks along Fair Oaks Avenue or Dayton Street.
Goals	
Goal 1: Sustainable Growth. Sustainable growth and change in orderly and well-planned developments within targeted areas that allow for higher density development in an urban core setting and in close proximity to transit that provides for the needs of existing and future residents and businesses, ensures the effective provision of public services, and makes efficient use of land, energy, and infrastructure.	**Consistent:** The Project would make efficient use of land and existing infrastructure. Energy conservation features would be incorporated into the building and site design in accordance with the California Energy Code, the California Green Building Code, which has been adopted by the City, and the City's Climate Action Plan. The Proposed Project would be located in close proximity to transit, including the Del Mar L Line (formerly known as the Gold Line) Light Rail Station which is located less than a quarter of a mile to the southeast of the project site along Raymond Avenue just north of Del Mar Boulevard; further, the Memorial Park Station is located less than a half mile to the northeast of the project site along Holly Street at the terminus of N. Arroyo Parkway. Overall the project would be consistent with the policies under this goal, including the policy to target growth in infill areas by redeveloping

	underutilized properties, especially within the Central District.
Goal 2: Land Use Diversity. A mix of land uses meeting the diverse needs of Pasadena's residents and businesses, fostering improved housing conditions, offering a variety of employment and recreation opportunities, and supporting a healthy population while protecting the environment.	**Consistent:** The Proposed Project would improve the overall project environment through the redevelopment of an existing surface parking lot with a new mixed-use development that includes retail space, restaurants, and work/live units at the ground level and mixed-rate apartment units on levels 2-6, revitalizing an underutilized area, and offering a variety of employment.
Goal 5: Pedestrian-Oriented Places. Development that contributes to pedestrian vitality and facilitates bicycle use in the Central District, Transit Villages, Neighborhood Villages, and community corridors.	**Consistent:** The Proposed Project would be designed to be consistent with the City's Mobility Element and Bicycle Master Plan. It would be supported by the close proximity of alternative modes of public transportation, and would be within walking distance of numerous surrounding amenities.
Goal 6: Character and Scale of Pasadena. A built environment that evolves while maintaining Pasadena's unique sense of place, character, and the urban fabric.	**Consistent:** The project would be compatible with the adjacent historic resources and the historic character of the Old Pasadena Historic District in terms of materials, features, and scale, thereby ensuring that Pasadena's unique sense of place is maintained.
Goal 8: Historic Preservation. Preservation and enhancement of Pasadena's cultural and historic buildings, landscapes, streets and districts as valued assets and important representations of its past and a source of community identity, and social, ecological, and economic vitality.	**Consistent:** No historically or culturally significant structures would be demolished. Moreover, the project would be compatible with adjacent historic resources and the historic character of the Old Pasadena Historic District in terms of materials, features, and scale. The new building would have massing similar and complimentary to the existing nearby Hotel Green Apartments and Castle Green buildings. As discussed in the SCEA, impacts on historic resources would be less than significant.
Goal 10: City Sustained and Renewed. Development and infrastructure practices that sustain natural environmental resources for the use of future generations and, at the same time, contribute to the reduction of greenhouse gas emissions and impacts on climate change.	**Consistent:** By virtue of its location, design, and building practices, the Proposed Project would sustain natural resources and contribute to the reduction of greenhouse gas emissions. Energy conservation features would be incorporated into building and site design in accordance with the California Energy Code, the California Green Building Code, which has been adopted by the City, and the City's Climate Action Plan. The Proposed Project would be in close proximity to public transportation, including the Del Mar L Line (formerly known as the Gold Line) Light Rail Station which is located less than a quarter of a

	mile to the southeast of the project site along Raymond Avenue just north of Del Mar Boulevard; further, the Memorial Park Station is located less than a half mile to the northeast of the project site along Holly Street at the terminus of N. Arroyo Parkway. In addition, several bus transit providers (i.e., Metro, Foothill Transit, ARTS, and LADOT) serve the immediate project area. The project's location in an urbanized area would help reduce reliance on the automobile and increase opportunities by both residents and employees for the use of alternative modes of transportation, which would reduce traffic congestion and per capita vehicle miles traveled (VMT) and related greenhouse gas emissions.
Goal 18: Land Use/Transportation Relationship. Pasadena will be a City where there are effective and convenient alternatives to using cars and the relationship of land use and transportation is acknowledged through transit-oriented development, multi-modal design features, and pedestrian and bicycle amenities in coordination with and accordance with the Mobility Element.	**Consistent:** As noted previously, the Proposed Project would be in be close proximity to public transportation, including the Del Mar L Line (formerly known as the Gold Line) Light Rail Station which is located less than a quarter of a mile to the southeast of the project site along Raymond Avenue just north of Del Mar Boulevard; further, the Memorial Park Station is located less than a half mile to the northeast of the project site along Holly Street at the terminus of N. Arroyo Parkway. In addition, several bus transit providers (i.e., Metro, Foothill Transit, ARTS, and LADOT) serve the immediate project area. The project's location in an urbanized area would help reduce reliance on the automobile and increase opportunities by both residents and employees for the use of alternative modes of transportation, which would reduce traffic congestion and per capita VMT. The Proposed Project would be designed to be consistent with the City's Mobility Element and Bicycle Master Plan. It would be supported by the close proximity of alternative modes of transportation, and would be within walking distance of numerous surrounding amenities. The Proposed Project includes landscaping, courtyards, and walkways to create a pedestrian friendly environment for the public. The project would not alter the existing circulation systems along Fair Oaks Avenue and Dayton Street.

Central District Specific Plan Consistency Analysis

The consistency of the Proposed Project with goals and objectives adopted for the purpose of avoiding or mitigating potential environmental effects in the CDSP is outlined in Table 2. The ultimate vision of the specific plan is to provide "... a diversity of economic, residential, and cultural opportunities. Downtown will be a place to work, shop, live, and play, with convenient access by foot, bicycle, and transit, as well as by car. Physical and economic growth will support this role and respect the numerous resources of historical and cultural significance that contribute to Downtown's unique identity." The Proposed Project would be consistent with the ultimate vision of the specific plan as the Proposed Project would be in close proximity to public transportation, provide economic growth, and respect the surrounding historical and cultural resources.

Table 2

Central District Specific Plan Consistency Analysis

Relevant Objective	Project's Consistency
Policy Framework	
Objective 2: Identify Growth Areas. Downtown growth and development will be directed toward the most appropriate locations, with the intention of 1) protecting existing residential neighborhoods; 2) supporting transit usage; 3) and revitalizing underutilized areas.	**Consistent:** The Proposed Project is located within the Old Pasadena subdistrict of the Central District, away from existing single-family residential neighborhoods. The Proposed Project would also be in close proximity to the Del Mar L Line (formerly known as the Gold Line) Light Rail Station which is located less than a quarter of a mile to the southeast of the project site along Raymond Avenue just north of Del Mar Boulevard, and the Memorial Park Station which is located less than a half mile to the northeast of the project site along Holly Street at the terminus of N. Arroyo Parkway. In addition, several bus transit providers (i.e., Metro, Foothill Transit, ARTS, and LADOT) serve the immediate project area. The Proposed Project would redevelop and existing surface parking lot with a new 6-story plus mezzanine transit-oriented mixed-use development that includes retail space, restaurants, and work/live units at the ground level and mixed-rate apartment units on levels 2-6, revitalizing an underutilized area within the City's urban core.
Objective 3: Develop Urban Land Patterns. Development patterns will support Downtown's role as Pasadena's distinctive urban core, emphasizing a vibrant community with diverse	**Consistent:** The Proposed Project would add diversity to the mix of land uses in the area by providing a 6-story plus mezzanine transit-oriented mixed-use development that includes retail space,

opportunities. Transit-oriented, pedestrian-oriented and mixed use development will be encouraged.	restaurants, and work/live units at the ground level and mixed-rate apartment units on levels 2-6. The proposed site is located in close proximity to the Del Mar L Line (formerly known as the Gold Line) Light Rail Station which is located less than a quarter of a mile to the southeast of the project site along Raymond Avenue just north of Del Mar Boulevard, and the Memorial Park Station which is located less than a half mile to the northeast of the project site along Holly Street at the terminus of N. Arroyo Parkway, and in close proximity to several bus lines. The Proposed Project would include landscaping, courtyards, and walkways to create a pedestrian friendly environment.
Objective 4: Expand Open Space Network. Downtown will feature an extensive network of public, semi-public and private open spaces, including street and alleys, parks, urban plazas, and other improvements that will augment and expand the existing network.	**Consistent:** The Proposed Project would improve the sidewalks surrounding the Project site, and provide new private open space. The Proposed Project would enhance the pedestrian streetscapes and landscaping along Fair Oaks Avenue and Dayton Street.
Objective 6: Reinforce District Character. The distinctive character of Downtown and its unique Sub-districts will be maintained and further enhanced. New development will respond to the area's architectural heritage with sensitivity and offer creative design solutions.	**Consistent:** The Applicant for the Proposed Project would be required to adhere to the Design Guidelines in the Central District Specific Plan, which would be reviewed by the Design Commission during the design review process. Such compliance would ensure consistency with the City's character and traditional urban design.
Objective 7: Preserve Historic & Cultural Resources. Downtown will retain its cultural heritage through recognition and protection of culturally and historically significant resources. Adaptive reuse and infill development that respect existing resources will be encouraged; adaptive reuse should receive favorable consideration when the original uses of an historic building are no longer feasible.	**Consistent:** The Applicant's stated design intent for the Proposed Project is to ensure that the building exteriors reference historical commercial and residential land uses that surround the site and incorporate stone, stucco and metal in an earth tone palette. The Applicant's stated primary goal for the Proposed Project is to have a unified appearance with the nearby Castle Green and Hotel Green buildings and for the site plan to reference the adjacent Central Park with a landscaped ground floor courtyard that adjoins amenity spaces. The Proposed Project design will be subject to design review before the Pasadena Design Commission to ensure consistency with design guidelines related to construction in historically sensitive contexts such as the project site.
Objective 9: Protect Landscape Resources. Downtown's public outdoor spaces will remain a	**Consistent:** The Proposed Project would provide 16,231 sf of open space, which would be divided

community asset through protection and enhancement of important landscape resources, including the area's mature street trees.	between approximately 12,037 sf of hardscape and 4,194 sf of landscape. Landscaping for the Proposed Project would include native and adaptive species that are drought tolerant. The Proposed Project would include 38 proposed trees, including one 96" box tree, 10 – 60" box trees, 21 - 24" box trees and 6 – 36" box trees. The Proposed Project would retain seven existing street trees and one existing on-site tree and proposes to relocate on-site one existing street tree and three existing on-site trees.
Objective 10: Support Traditional Urban Patterns. New construction and contemporary design will reinforce Downtown's traditional development patterns, respond to the surrounding context, and contribute to Pasadena's status as an inviting and memorable place. Streets will support public activity and buildings will be scaled to the presence of people.	**Consistent:** The Proposed Project involves the construction of a new 6-story plus mezzanine building that has a rectangular plan with a small extension at the southeast corner of the building. The new structure is designed to recall historic features that complement the existing Hotel Green Apartments and Castle Green. The Proposed Project would include landscaping, an outdoor lounging area and pool, and walkways to create an inviting environment for people. The Proposed Project requires design review by the Design Commission to ensure it is consistent with CDSP design guidelines related to construction in historically sensitive contexts such as the project site.
Objective 23: Minimize Traffic Impacts. As far as feasible, traffic impacts upon in-town and adjoining residential neighborhoods will be minimized. New development will be directed toward principal mobility corridors and in close proximity to transit stations.	**Consistent:** The proposed site is located in close proximity to the Del Mar L Line (formerly known as the Gold Line) Light Rail Station which is located less than a quarter of a mile to the southeast of the project site along Raymond Avenue just north of Del Mar Boulevard, and the Memorial Park Station which is located less than a half mile to the northeast of the project site along Holly Street at the terminus of N. Arroyo Parkway. Access to the site would be provided via Dayton Street; no project-related traffic would occur in residential neighborhoods. The traffic study conducted for the Proposed Project concluded that the project would not have a significant impact on traffic.
Objective 25: Promote Transit Usage. Transit will be a viable option for movement within and through Downtown, emphasizing improved transit connections between the activity centers of Downtown. Regional transit will be supported by	**Consistent:** The Proposed Project would be in close proximity to the Del Mar L Line (formerly known as the Gold Line) Light Rail Station which is located less than a quarter of a mile to the southeast of the project site along Raymond Avenue just north of Del Mar Boulevard, and the

transit-oriented development near light rail stations.	Memorial Park Station which is located less than a half mile to the northeast of the project site along Holly Street at the terminus of N. Arroyo Parkway. In addition, several bus transit providers (i.e., Metro, Foothill Transit, ARTS, and LADOT) serve the immediate project area.
Objective 26: Make Downtown Walkable. Downtown will be a safe, convenient and comfortable place to walk, a place where walking is the mode of choice for short trips.	**Consistent:** The Proposed Project would improve the pedestrian environment in the immediate area by including pedestrian-friendly improvements, such as landscaped sidewalks, exterior lighting, and walkway enhancements. In addition, the Project location would provide new active ground-level land uses along Fair Oaks Avenue and Dayton Street to enhance the pedestrian environment, including a restaurant and retail space.
District-Wide Mobility Concept	
Key pedestrian routes should maintain a width of at least 10 feet. This is usually sufficient to accommodate clear pedestrian passage, as well as a zone for street trees, street furniture and other streetscape amenities.	**Consistent:** The Proposed Project would replace and improve the sidewalk along Fair Oaks Avenue, and maintain existing sidewalk width on Dayton Street, so that the pedestrian routes surrounding the Project site would both be at least 10-feet wide.
No CDSP sidewalk should be reduced in width.	**Consistent**: The Proposed Project would improve the pedestrian environment in the immediate area by including pedestrian-friendly improvements, such as landscaped sidewalks, exterior lighting, and walkway enhancements and would not reduce the width of any sidewalks.
Street trees are a highly visible and especially important streetscape element; they make streets at once more attractive and comfortable for pedestrians. Maintain existing street trees, and plant new street trees throughout the CDSP.	**Consistent**: Seven of the existing street trees associated with the Project site would remain, and one is proposed to be relocated to a new location on the Proposed Project site with implementation of the Proposed Project.

7.9 ANALYSIS OF CUMULATIVE CONSTRUCTION NOISE IMPACTS

Multiple comments were received regarding the SCEA's analysis of cumulative environmental impacts. As outlined in the CEQA Guidelines, analysis undertaken to consider cumulative impacts generally includes impacts related to noise, aesthetics (visual character), utilities (e.g., capacity of distribution facilities, capacity of treatment facilities), population and housing, public services, air quality, and greenhouse gas emissions.

As discussed in the Introduction section of the SCEA, a SCEA need not consider the cumulative effects of the project that have been adequately addressed and mitigated in prior EIRs, in this case the SCAG Connect SoCal RTP/SCS EIR, the City's General Plan EIR, and the Central District Specific Plan EIR. Also, growth-inducing impacts are not required to be referenced, described, or addressed and project specific or cumulative impacts from cars and light duty truck trips on global warming or the regional transportation network need not be referenced, described, or discussed. Further, pursuant to regulations provided in SB 743, which applies to residential, mixed-use residential, and employment center projects on infill sites within Transit Priority Areas (TPAs), aesthetic impacts cannot be considered significant impacts for the purposes of CEQA analysis.

The cumulative analysis in this SCEA considers the buildout of the City's General Plan. As shown in **Table 2.0-4, Pasadena General Plan Update: Development Capacities (2035)** in **Section 2.0, Project Description** of this SCEA, this table shows the total development forecasted to occur by 2035. As shown in **Table 2.0-4**, the Proposed Project is well within forecasted land use growth identified in the City's General Plan, which was adequately addressed and mitigated in the City's General Plan EIR, and as such, the SCEA need not consider cumulative impacts related to utilities, population and housing, public services, air quality, and greenhouse gas emissions. However, cumulative construction noise impacts remain to be considered.

Four related projects have been proposed in the vicinity of the Central Park Apartments project which could, if undergoing construction at the same time as the proposed project, contribute to a cumulative construction noise impact:

33-45 W. Green St.	Demolition of existing 450 sf commercial building and construction of new mixed-use project with 18,000 sf of commercial and 9 residential units
85 W. Green St.	Demolition of existing 4,222 sf restaurant and construction of a new mixed-use project with 20,530 sf of commercial and 18 residential units
100 E. Green St.	Mixed-use project with 2,500 sf commercial & 123 residential units (site currently vacant)

150 E. Colorado Blvd.	Demolition of existing 63,388 sf office building and construction of a new mixed-use building with 50,850 sf of commercial and 88-100 residential units

33-45 W. Green is closest to commencing construction; this project is currently undergoing building plan check and could receive a building permit within the next few months.

85 W. Green is in the Final Design Review phase of the design review process, and will also require building plan check after that, so it would likely be eight months to one year before it may commence construction.

100 E. Green and 150 E. Colorado have both completed Preliminary Consultation, which is the first phase of the design review process, so it will likely be two or more years before they would commence construction.

As described in the SCEA, **Appendix F, Noise Report**, noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). The human ear does not respond uniformly to sounds at all frequencies; it is less sensitive to low and high frequencies than to medium frequencies, which correspond with human speech. In response, the A-weighted noise level (or scale) has been developed. It corresponds better with people's subjective judgment of sound levels. This A-weighted sound level is called the "noise level" and is referenced in units of dB(A). Because noise is measured on a logarithmic scale, a doubling of sound energy results in a 3 dB(A) increase in noise levels. However, changes in a noise level of less than 3 dB(A) are not typically noticed by the human ear.[8] A change from 3 to 5 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise, and a 5.0 dB(A) increase is readily noticeable. The human ear perceives a 10 dB(A) increase in sound level as a doubling of sound.

The City has jurisdiction over noise regulation, as stated in the City's Municipal Code, Title 9, Chapter 36 Noise Restrictions (Noise Ordinance). The Noise Ordinance is intended to enforce the City's policy to prohibit "unnecessary, excessive, and annoying noises from all sources." The City's noise ordinance includes specific provisions regarding construction noise. Section 9.36.070 of the Municipal Code prohibits the operation of construction equipment and construction activity except from 7:00 AM to 7:00 PM Monday through Friday, and from 8:00 AM to 5:00 PM on Saturday in or within 500 feet of a residential district. Operation of construction equipment is prohibited on Sunday and on defined holidays. Section 9.36.080 of the Municipal Code prohibits the operation of powered construction equipment that generates a noise level of 85 dB(A) when measured within a radius of 100 feet from such equipment. The Central Park Apartments Project would comply with all City noise regulations.

8 California Department of Transportation, *Technical Supplement to the Traffic Noise Analysis Protocol*. September 2013.

Construction noise levels vary from hour-to-hour and day-to-day, depending on the equipment in use, the operations being performed, and the distance between the source and receptor. Construction of the proposed project and the related projects would generate noise that could expose nearby receptors to elevated noise levels that may disrupt communication and routine activities. The magnitude of the impact would depend on the type of construction activity, equipment, duration of the construction, distance between the noise source and receiver, and intervening structures. As noted above, section 9.36.080 of the Pasadena Municipal Code requires that construction equipment noise not exceed 85 dB(A) at 100 feet.

As shown in **Table 4.13-2** of the SCEA, which lists the construction equipment that would be used for the Proposed Project for various construction phases and their noise levels for a reference receptor at 100 feet, the loudest single piece of construction equipment would be anticipated to have a maximum value of 83.6 dBA at 100 feet. All other anticipated equipment to be used for the Proposed Project would have a lower noise level, and thus all would be below the City's threshold.

It is assumed that the nearest Related Project, located at 33-45 W. Green Street, approximately 350 feet from the project site[9], would generate a similar maximum construction noise level as the Proposed Project. As such, the construction noise level from the nearest Related Project would be 83.6 dBA at 100 feet, again, below the City's threshold. The nearest sensitive receptor, the Green Hotel Apartments building is approximately 300 feet from the nearest Related Project construction activity. At this distance, construction noise would be reduced to approximately 71 dBA.[10] Additionally, the nearest Related Project would be shielded from the Green Hotel Apartments building by existing buildings along both Fair Oaks Avenue and Green Street, which would further reduce construction noise by at least 10 dBA, resulting in a final construction noise level of 61 dBA at the Green Hotel Apartments building.

These temporary construction noise level increases would not exceed the requirements specified in Pasadena Municipal Code section 9.36.080. As a result, cumulative temporary construction noise impacts on ambient noise levels would be considered less than significant.

9 The other three Related Projects are approximately 500, 700, and 1,000 feet from the Project Site. Construction noise impacts associated with a particular development are generally localized and are not considered to be cumulatively considerable beyond 500 feet from the construction site or along roadways by which construction traffic would access the site.

10 Sound generated by a point source typically diminishes (attenuates) at a rate of 6 dB(A) for each doubling of distance from the source to the receptor at acoustically "hard" sites and 7.5 dB(A) at acoustically "soft" sites. For example, if a noise source produces a noise level of 89 dB(A) at a reference distance of 50 feet, the noise level would be 83 dB(A) at a distance of 100 feet from the noise source, 77 dB(A) at a distance of 200 feet, and so on. (Federal Highway Administration, Highway Noise Fundamentals, (1980) 97. Examples of "hard" or reflective sites include asphalt, concrete, and hard and sparsely vegetated soils. Examples of acoustically "soft" or absorptive sites include soft, sand, plowed farmland, grass, crops, heavy ground cover, etc.)

7.10 DISCUSSION OF OPERATIONAL NOISE IMPACTS

Several comments were submitted regarding the construction of the Proposed Project creating 'a three-sided enclosed 75-90 foot tall building canyon' and the potential for this to create a significant noise impact due to the volume of traffic entering and exiting via the Dayton Street driveway.

As discussed in **Section 4.13 Noise** of the SCEA Checklist Analysis prepared for the Proposed Project, the City of Pasadena's Transportation Data Management System shows that Dayton Street between Fair Oaks Avenue and Raymond Avenue has a traffic volume of approximately 70 vehicles during the A.M. peak hour, and 118 vehicles during the P.M. peak hour.[11] It takes a doubling of traffic volume to increase noise levels by 3 dB(A). Studies done by the California Department of Transportation (Caltrans)[12] have shown that a 3 dB(A) increase in sound level pressure is barely detectable by the human ear. As such, the project's addition of approximately 52 A.M. peak hour trips and 73 P.M. peak hour trips would not increase in traffic volumes enough to cause a significant audible increase in traffic noise.

Further, even if the receptor with the lowest ambient noise levels (Central Park 55.8 dBA Leq) is assumed to represent the noise levels at the Green Hotel Apartments, the 866 daily vehicles entering and exiting the parking garage would not substantially elevate ambient noise levels. This is due to three primary reasons. First, the 866 daily vehicle trips generated by the proposed project would average 52 vehicles during A.M. peak hours, 73 vehicles during P.M. peak hours, and would dwindle down to 20 vehicles during nighttime hours. Using time-of-day data from the Institute of Traffic Engineers (assuming land use code 221-Multifamily Housing Mid-Rise), during A.M. peak hours, this is an average of less than one vehicle per minute; during P.M. peak hours, this is an average of 1.22 vehicles per minute, and one vehicle every three minutes during the night. This volume of vehicle travel is not enough to substantially elevate noise levels. Second, these vehicles would be traveling at a slow rate of speed as they enter and exit the parking garage, navigating a turn from the driveway to the garage. Slower vehicles generate minimal noise from tires traveling over hardscape on a driveway. Finally, these vehicles would be entering a garage that would be 150 feet south of the Green Hotel Apartments. At that distance, low noise levels from vehicles entering and exiting the garage would be substantially attenuated, as noise can decrease by 6 dBA with each doubling of distance.

To confirm this, an analysis was run using the Federal Transit Administration's Noise Impact Assessment spreadsheet (included as **Appendix J, Supplemental Noise Analysis** to this SCEA), a tool that calculates the traffic noise generated from a project site, which takes into consideration the number of vehicles per

11 City of Pasadena, *Transportation Data Management System.* Available at: https://pasadena.ms2soft.com/tcds/tsearch.asp?loc =Pasadena&mod=.

12 California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, 2013.

hour during daytime and nighttime hours, which indicates that there would be less than a 1 dBA change in ambient noise levels at the Green Hotel Apartments. As discussed above, as this increase would be less than 3 dBA, this increase in operational traffic would be inaudible to the nearby residents of the Hotel Green Apartments and impacts would be less than significant.

In addition, neither CEQA nor the City of Pasadena have thresholds specific to an increase in reflected noise as a result of a ‘canyon’ created by the Proposed Project and the existing buildings, and there are no studies or data to support this effect. As such, any further analysis would be speculative, and not required per *CEQA Guidelines* Section 15145 as an analysis need not engage in "sheer speculation" as to future environmental consequences.

7.11 EMERGENCY (FIRE DEPARTMENT) ACCESS

Several comments were submitted regarding the project having inadequate Fire Department access in case of emergencies. As discussed in the SCEA Environmental Checklist, Section 4.17, Transportation, the ingress and egress for the site have been evaluated by the PasDOT and found to be adequate for emergency access and/or access to nearby uses. The project does not involve the elimination of a through-route, does not involve the narrowing of a roadway, and all proposed roadways, access roads and drive lanes meet the Pasadena Fire Department's access standards. More specifically, commenters were concerned about access to the site from Dayton Street. In specific discussions with the Pasadena Fire Department regarding this specific street, it was confirmed that the Fire Department currently is able to use Dayton Street as a throughfare when that is the best route for responding (including being able to access the south side of the Castle Green if necessary), and the project will not impact such access at all. In addition, the change in traffic volumes on Dayton Street and Fair Oaks Avenue will not impact the Fire Department's ability to provide adequate emergency access to the project site and Castle Green, and will not impact the Fire Department's ability to utilize the Fire Station traffic signal on Fair Oaks Avenue south of the project site, which is controlled by Fire Department personnel to stop traffic, to provide emergency services to its service area. The above statements were confirmed by Pari Bagayee, Supervising Fire Plans Examiner, and Deputy Chief/Fire Marshal, Anthony James, Fire and Environmental Safety Division of the Pasadena Fire Department via personal communications on July 7, 2021 and October 15, 2021, respectively

Further, the Project must comply with all State and local Building, Fire and Safety Codes, and all Project plans will be subject to review and approval by the Public Works and the Transportation Departments, and the Building Division and Fire Department. Therefore, there would be no significant impacts related to inadequate emergency access.

7.12 RESPONSES TO TRANSPORTATION-RELATED COMMENTS

Several comments were submitted regarding the "Outside of CEQA" traffic analysis information that was included in the SCEA. The "Outside of CEQA" traffic analysis focuses on traffic congestion and automobile delay, which are not environmental impacts that may be addressed by CEQA, per SB 743. Therefore, the comments received in this regard are not relevant to the transportation analysis in the SCEA, which followed the City's guidelines for addressing transportation impacts in CEQA documents consistent with SB 743. Refer to the Agenda and supporting documentation presented at the November 3, 2014, City Council meeting for a detailed explanation about how the review of traffic impacts has changed since the EIR for the previous project was prepared, specifically the purpose of, and adopted guidelines for the "Outside of CEQA" traffic analysis.[13][14]

Traffic Safety Response:

Several comments were received regarding the safety of street intersections in the vicinity of the project site, particularly the intersection of Fair Oaks Avenue at Dayton Street. Comments were received specifically noting the geometry of the offset intersection at Fair Oaks Avenue and Dayton Street. It should be noted that offset intersections in and of themselves are not more inherently unsafe than standard four-legged intersections. Every intersection has unique circumstances that can contribute to the intersection's safety and crash potential. This project does not alter the geometry of the intersection.

In addition, the City of Pasadena Department of Transportation (DOT) went the extra step of analyzing the intersections of Fair Oaks Avenue at Dayton Street and Raymond Avenue at Dayton Street to determine if a traffic signal would be installed based on traffic signal warrants in the California Manual of Uniform Traffic Control Devices, taking into account the added traffic volumes and pedestrian volumes. The analyses included a review of the existing vehicular and pedestrian traffic volumes, projected traffic volumes, and safety records at the intersections. For Fair Oaks Avenue at Dayton Street, the existing traffic volume and projected traffic volume from the development at 86 S Fair Oaks Avenue did not meet any of the vehicular/pedestrian volume warrants. The intersection had four collisions in the past five years and therefore did not meet the warrant for a traffic signal based on crash history. For Raymond Avenue at Dayton Street, the existing traffic volume and projected traffic volume from the development at 86 S Fair Oaks Avenue did not meet any of the vehicular/pedestrian volume warrants. The intersection had no

13 The full City Council Agenda for November 3, 2014, including Item 15, *NEW TRANSPORTATION PERFORMANCE MEASURES FOR TRANSPORTATION IMPACT ANALYSIS AND THRESHOLDS OF SIGNIFICANCE FOR CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)* with links to all of the related reports is available on-line at: https://ww2.cityofpasadena.net/2014%20Agendas/Nov_03_14/agenda.asp

14 Staff Report available on-line at: https://ww2.cityofpasadena.net/2014%20Agendas/Nov_03_14/AR%2015.pdf

collisions in the past five years and therefore did not meet the crash warrant. Therefore, based on the projected traffic/pedestrian volumes and collision history, the intersections of Fair Oaks Avenue at Dayton Street and Raymond Avenue at Dayton Street do not warrant a traffic signal and do not present a potential public safety hazard.

DOT would not install a new marked crosswalk across Fair Oaks Avenue without a traffic signal. In addition to not meeting the signal warrants at the Fair Oaks Avenue at Dayton Street intersection, there are significant design issues for a signal because of the existing driveway, existing transit stop, and locations of the existing Fire Station signals south of the east leg of the intersection. With the high traffic volume and 35 miles per hour (mph) speed along Fair Oaks Avenue, pedestrians shall utilize the signalized Fair Oaks Avenue at Green Street intersection located approximately 250 feet from the intersection of Fair Oaks Avenue at Dayton Street for a safer and protected crossing across Fair Oaks Avenue. Also, due to the high traffic volumes, street width, and conflict points along Fair Oaks Avenue, installation of bicycle lanes along Fair Oaks Avenue adjacent to the project is not recommended.

7.13 ADDITIONAL INFORMATION PROVIDED BY THE PROJECT APPLICANT

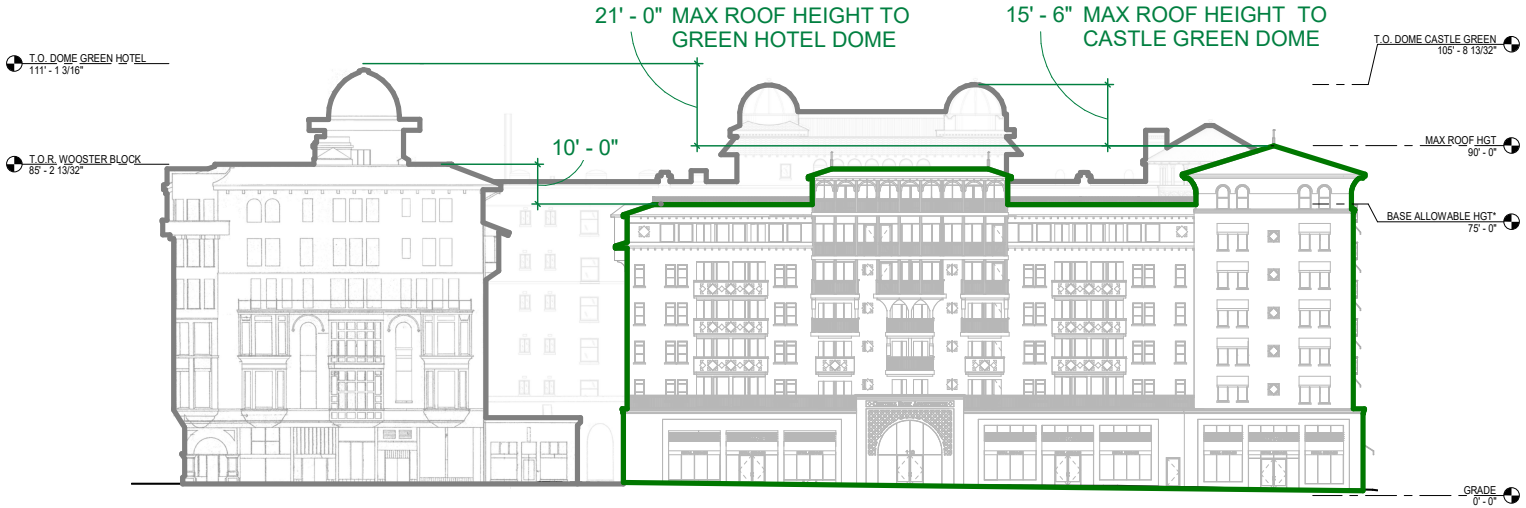
Following the release of the SCEA for public review in March 2021, the Project Applicant provided additional clarifying exhibits. These exhibits are provided in this SCEA as informational items; they do not change any of the previous analysis or findings of the SCEA.

The height study exhibits (**Figures 7.13-1a** and **7.13-1b**) demonstrate that the proposed project would be shorter than both the existing Green Hotel and Castle Green structures.

The distance study exhibits (**Figures 7.13-2a** and **7.13-2b**) show the distances of the proposed project construction site to the existing buildings. This is relevant to the construction noise analysis; refer to Section 4.13, Noise, for a discussion of construction noise.

The shadow studies (**Figures 7.13-3a** and **7.13-3b**) demonstrate the extent to which the existing buildings, particularly Hotel Green, would be shaded by the proposed project throughout the day on both the summer and winter solstices. As a reminder, Senate Bill 743, signed into law in September 2013, made several changes to CEQA for projects located in areas served by transit (i.e., TPAs). While the thrust of SB 743 addressed a major overhaul on how transportation impacts are evaluated under CEQA, it also limited the extent to which aesthetics and parking are defined as impacts under CEQA. Specifically, Section 21099 (d)(1) of the Public Resources Code (PRC) states that a project's aesthetic and parking impacts shall not be considered a significant impact on the environment if the project is located on an infill site within a transit priority area. As discussed in **Section 2.0, Project Description**, the project site is surrounded by existing development, thus qualifying the project site as an 'infill' site. In addition, the project consists of a mixed-use residential community. Further, the Los Angeles County Metropolitan Transportation Authority (Metro) Del Mar L Line (formerly known as the Gold Line) Light Rail Station is located less than a quarter of a mile to the southeast of the project site along Raymond Avenue just north of Del Mar Boulevard and the Memorial Park Station is located less than a half mile to the northeast of the project site along Holly Street at the terminus of N. Arroyo Parkway. For these reasons, the proposed project qualifies for SB 743 exemption from aesthetic and parking impacts, and these exhibits related to shade/shadow are provided for informational purposes only.

The turn analysis study (**Figure 7.13-4**) demonstrates the ability of a single unit delivery truck to successfully access the loading lock bay of the proposed project.



1 AX2.04 OVERALL WEST ELEVATION AT FAIR OAKS

ALL MEASUREMENTS MADE FROM THE LOWEST POINT AT GRADE LOCATED AT THE SOUTHEAST CORNER OF THE SITE

CENTRAL PARK APARTMENTS - HEIGHTS TO ADJACENT HISTORIC RESOURCES

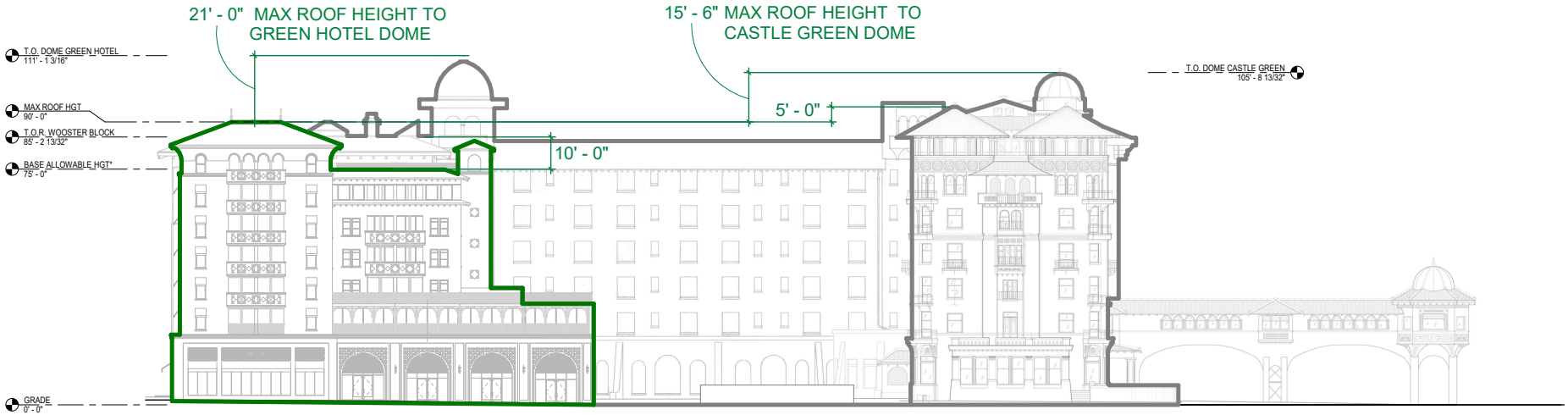
16 0 16 32

SOURCE: Architectural Resources Group, Inc., October 2021.

FIGURE **7.13-1a**

Height Study

IMPACT SCIENCES



1 AX2.05 OVERALL SOUTH ELEVATION AT DAYTON

ALL MEASUREMENTS MADE FROM THE LOWEST POINT AT GRADE LOCATED AT THE SOUTHEAST CORNER OF THE SITE

CENTRAL PARK APARTMENTS - HEIGHTS TO ADJACENT HISTORIC RESOURCES

16 0 16 32

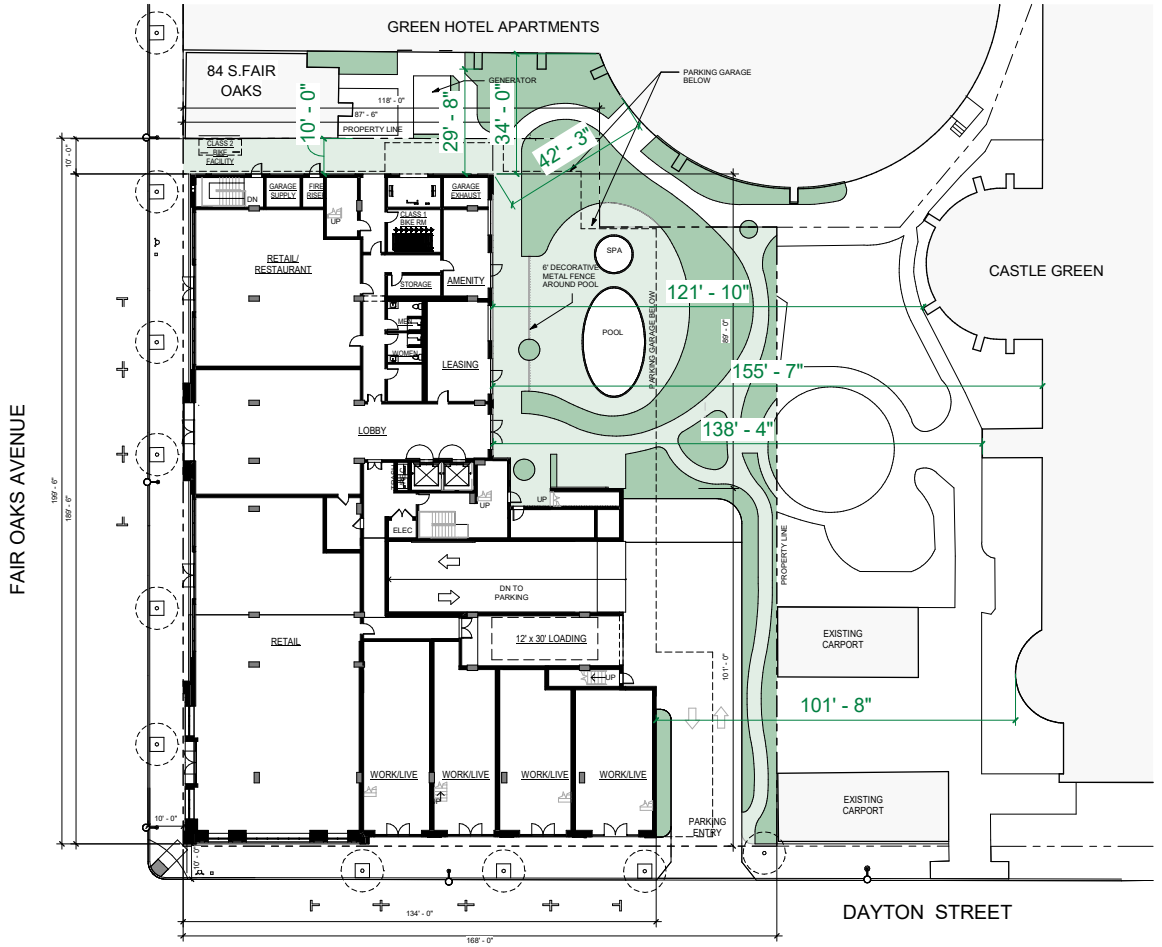
SOURCE: Architectural Resources Group, Inc., October 2021.

FIGURE **7.13-1b**

Height Study

IMPACT SCIENCES

1136.004•11/2021



1 PROPOSED SITE PLAN

16 0 16 32

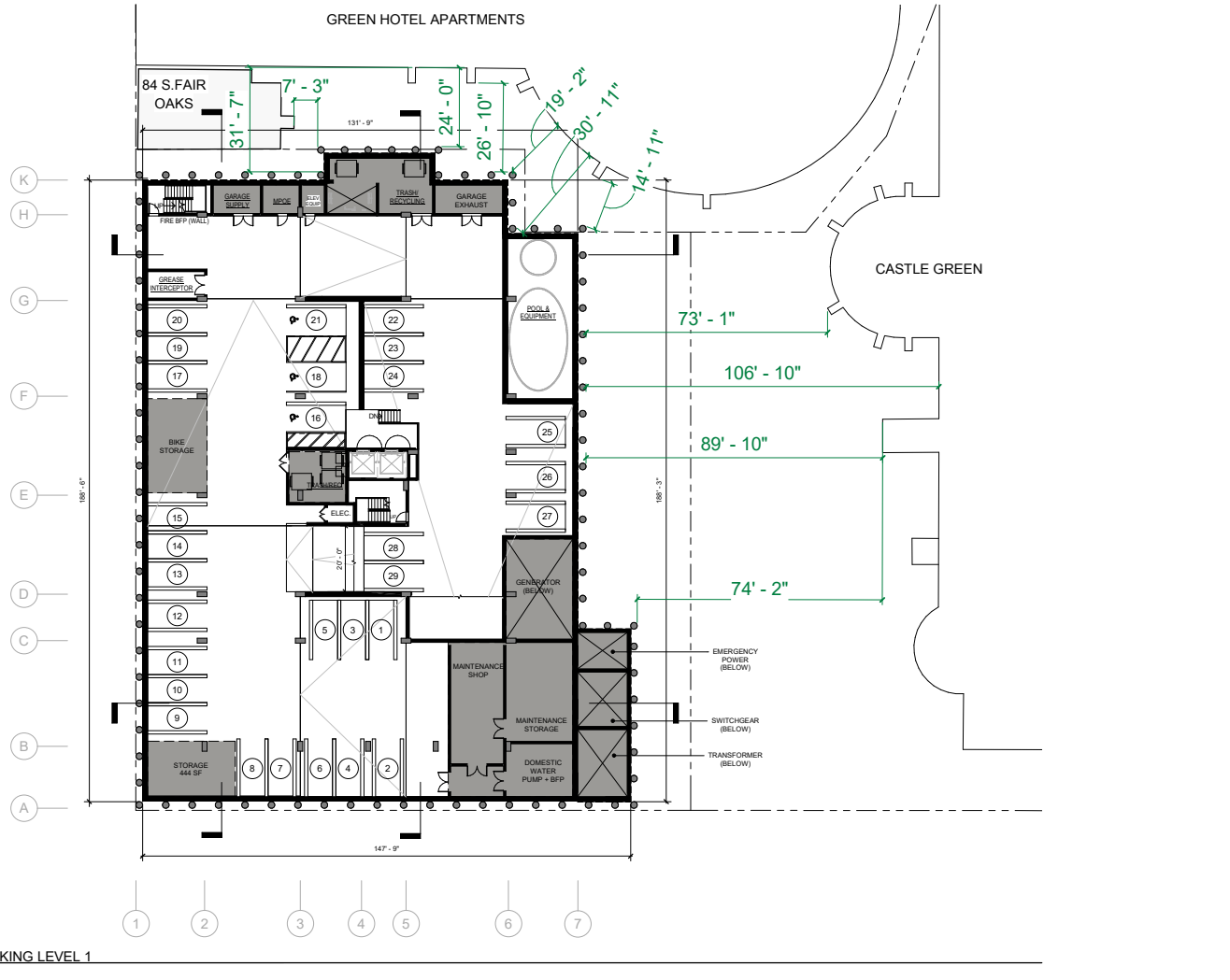
CENTRAL PARK APARTMENTS - DISTANCES TO ADJACENT BUILDINGS

ALL DIMENSIONS ARE TO FINISH FACE OF EXTERIOR WALL

SOURCE: Architectural Resources Group, Inc., October 2021.

FIGURE **7.13-2a**

Distance Study



CENTRAL PARK APARTMENTS - DISTANCES TO ADJACENT BUILDINGS

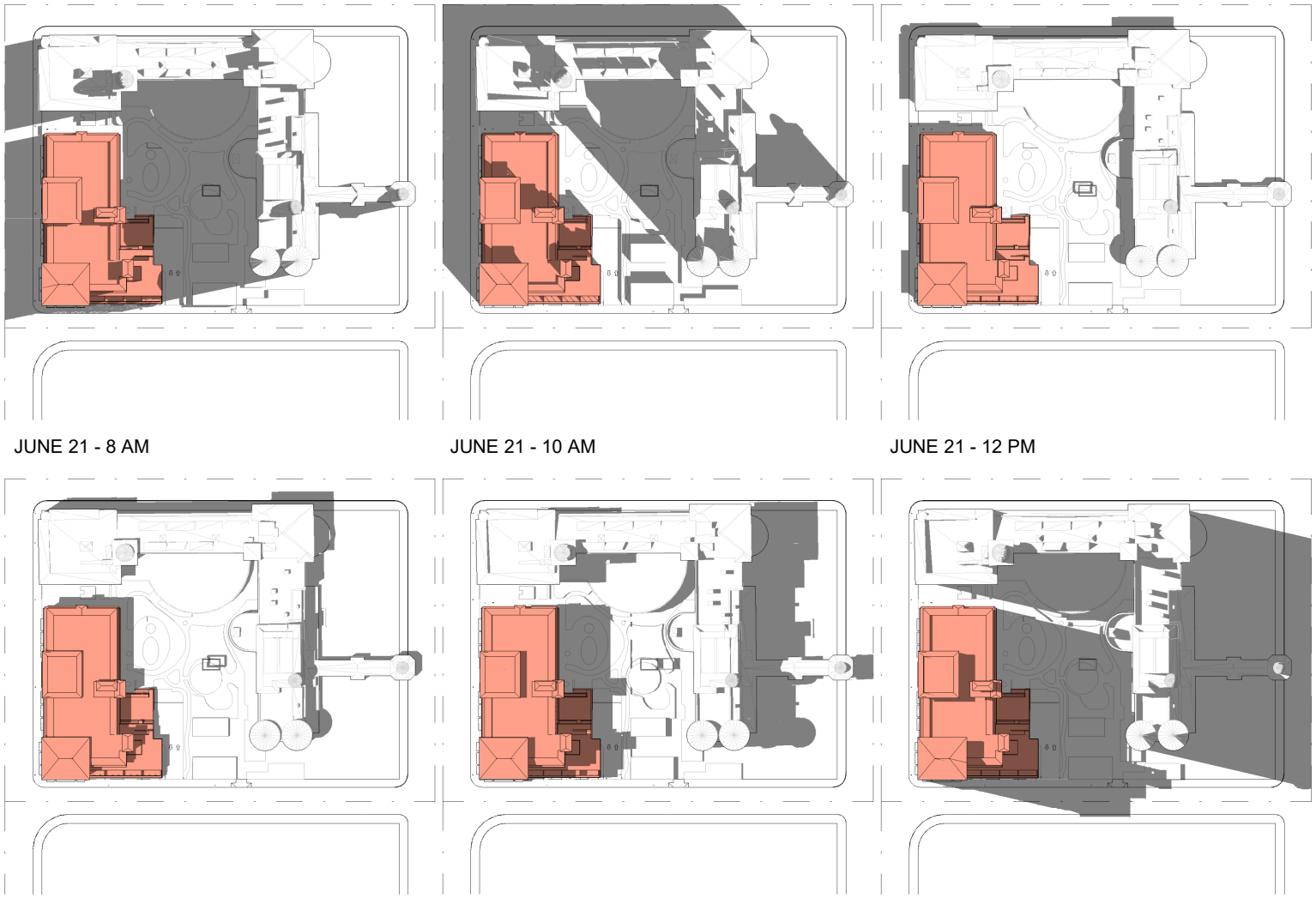
ALL DIMENSIONS ARE TO LIMITS OF CONCEPTUAL SHORING

SOURCE: Architectural Resources Group, Inc., October 2021.

FIGURE **7.13-2b**

Distance Study

IMPACT SCIENCES



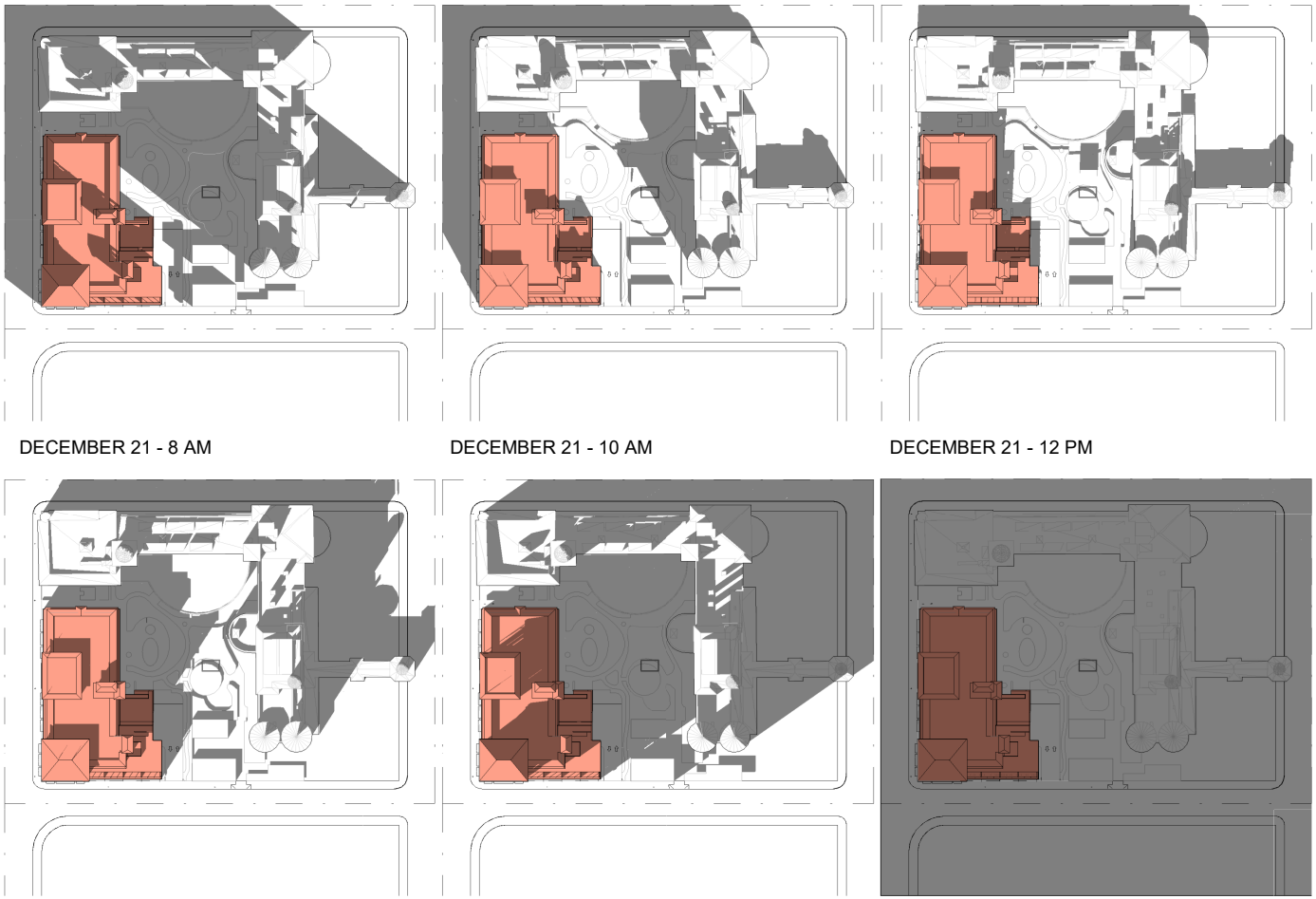
SOURCE: Architectural Resources Group, Inc., October 2021.

FIGURE **7.13-3a**

Shadow Study

IMPACT SCIENCES

1136.004•11/2021

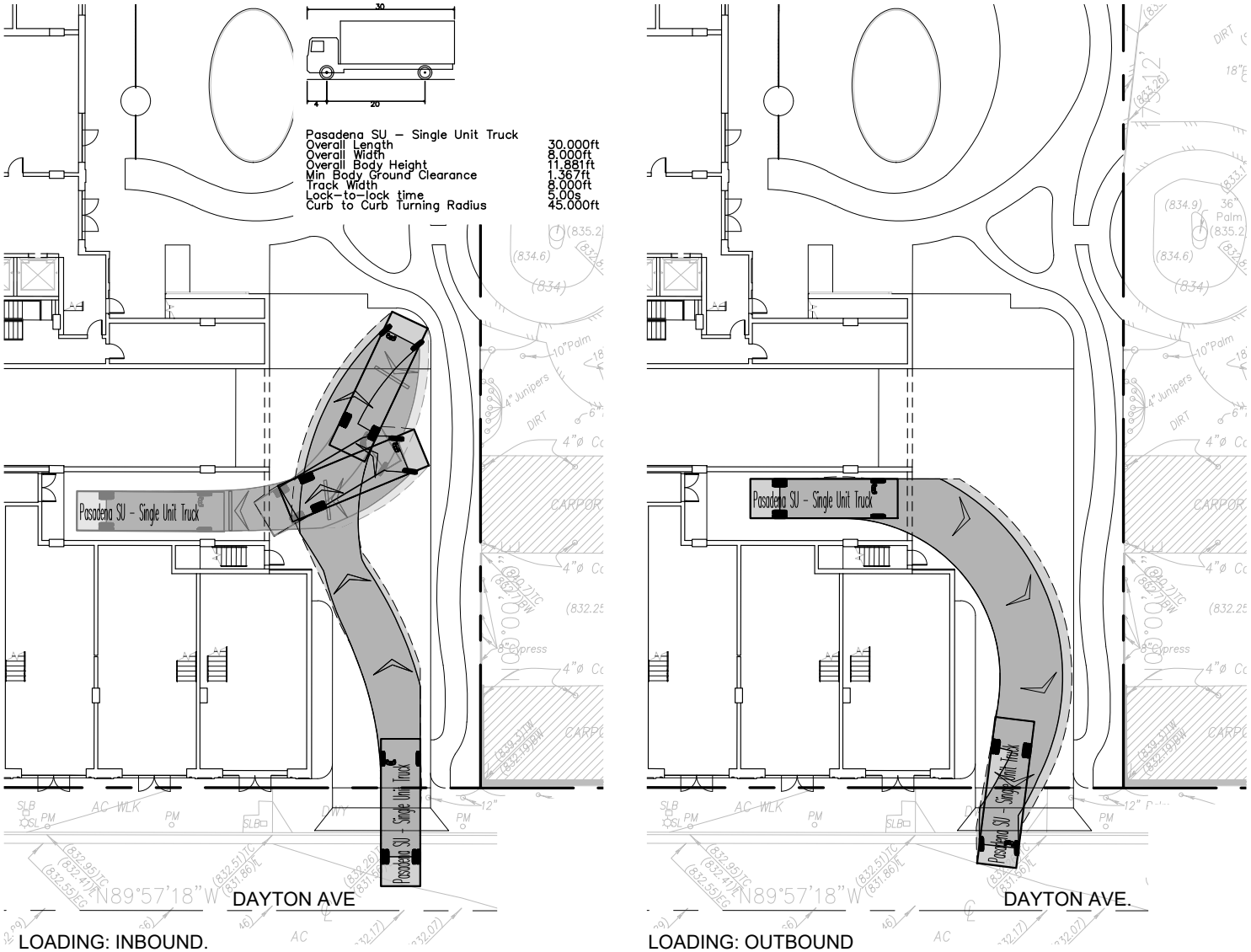


SOURCE: Architectural Resources Group, Inc., October 2021.

FIGURE **7.13-3b**

IMPACT SCIENCES

Shadow Study



SOURCE: Architectural Resources Group, Inc., October 2021.

FIGURE **7.13-4**

IMPACT SCIENCES

Turn Analysis

1136.004•11/2021

APPENDIX A

Incorporation of Applicable Mitigation Measures, Performance Standards, and Criteria from Prior Applicable EIRs

APPENDIX A

INCORPORATION OF FEASIBLE MITIGATION MEASURES, PERFORMANCE STANDARDS, AND CRITERIA FROM PRIOR APPLICABLE EIRS

Public Resources Code Section 21151.2 requires that a transit priority project incorporate all feasible mitigation measures, performance standards, or criteria from prior applicable EIRs. The City has complied with PRC Section 21151.2 by reviewing all of the suggested mitigation measures in Connect SoCal (2020 – 2045 Regional Transportation Plan/Sustainable Communities Strategy) and the City of Pasadena General Plan EIR for imposition on the project. The mitigation measures were not imposed if the project was found to be in substantial compliance with the mitigation measure as proposed or if the mitigation measures were found not to be relevant. If the project was not found to be in substantial compliance or the mitigation measure was found relevant, the City considered whether to use the mitigation measure or an equally effective City mitigation measure (including the mitigation measures developed for the SCEA prepared for the proposed project). The applicable mitigation measures, performance standards, or criteria from the aforementioned documents are discussed in the tables below and are included in applicable technical sections of the Environmental Checklist portion of the SCEA.

Table 1
Connect SoCal (2020 – 2045 Regional Transportation Plan/Sustainable Communities Strategy)
Applicable Mitigation Measures

Project Level Mitigation Measure	Applicability to the Project
Aesthetics	
PMM AES-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to address potential aesthetic impacts to scenic vistas, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Use a palette of colors, textures, building materials that are graffiti-resistant, and/or plant materials that complement the surrounding landscape and development. b) Use contour grading to better match surrounding terrain. Contour edges of major cut-and-fill to provide a more natural looking finished profile. c) Design new corridor landscaping to respect existing natural and man-made features and to complement the dominant landscaping of the surrounding areas. d) Replace and renew landscaping along corridors with road widenings, interchange projects, and related improvements. e) Retain or replace trees bordering highways, so that	This Mitigation Measure is not relevant to the Proposed Project as Public Resources Code Section 21099, enacted by Senate Bill 743, provides that "aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." The project site is located in an urbanized area within the City of Pasadena. The proposed project is a 6-story plus mezzanine transit-oriented mixed-use development that includes retail, restaurants, and work/live units at the ground level and mixed-rate apartment units on levels 2-6. The project site is located less than one-quarter mile from the Metro Del Mar L Line (formerly Gold Line) station and less than one-half a mile to the Memorial Park Station. Therefore, the proposed project is located in a transit priority area as defined in Public Resources Code Section 21099. The proposed project's aesthetic impacts shall not be considered significant impacts on the environment pursuant to Public Resources Code Section 21099. Further, the Proposed Project would follow the City's guidelines regarding building design and provide a full landscape plan for approval by the City.

Project Level Mitigation Measure	Applicability to the Project
clear-cutting is not evident. f) Provide new corridor landscaping that respects and provides appropriate transition to existing natural and man-made features and is complementary to the dominant landscaping or native habitats of surrounding areas. g) Reduce the visibility of construction staging areas by fencing and screening these areas with low contrast materials consistent with the surrounding environment, and by revegetating graded slopes and exposed earth surfaces at the earliest opportunity; h) Use see-through safety barrier designs (e.g. railings rather than walls)	
PMM AES-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to address potential aesthetic impacts that substantially degrade visual character, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Minimize contrasts in scale and massing between the projects and surrounding natural forms and development, minimize their intrusion into important viewsheds, and use contour grading to better match surrounding terrain in accordance with county and city hillside ordinances, where applicable. b) Design landscaping along highway corridors to add significant natural elements and visual interest to soften the hard-edged, linear transportation corridors. c) Require development of design guidelines for projects that make elements of proposed buildings/facilities visually compatible or minimize visibility of changes in visual quality or character through use of hardscape and softscape solutions. Specific measures to be addressed include setback buffers, landscaping, color, texture, signage, and lighting criteria. d) Design projects consistent with design guidelines of applicable general plans. e) Require that sites are kept in a blight/nuisance-free condition. Remove blight or nuisances that compromise visual character or visual quality of project areas including graffiti abatement, trash removal, landscape management, maintenance of signage and billboards in good condition, and replace compromised native vegetation and landscape. f) Where sound walls are proposed, require sound wall construction and design methods that account for visual impacts as follows: — use transparent panels to preserve views where sound walls would block views from residences; — use landscaped earth berm or a combination wall and berm to minimize the apparent sound wall height; — construct sound walls of materials whose color and texture complements the surrounding landscape and development;	This Mitigation Measure is not relevant to the proposed project as Public Resources Code Section 21099, enacted by Senate Bill 743, provides that "aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." The project site is located in an urbanized area within the City of Pasadena. The proposed project is a 6-story plus mezzanine transit-oriented mixed-use development that includes retail, restaurants, and work/live units at the ground level and mixed-rate apartment units on levels 2-6. The project site is located less than one-quarter mile from the Metro Del Mar L Line (formerly Gold Line) station and less than one-half a mile to the Memorial Park Station. Therefore, the proposed project is located in a transit priority area as defined in Public Resources Code Section 21099. The proposed project's aesthetic impacts shall not be considered significant impacts on the environment pursuant to Public Resources Code Section 21099.

Project Level Mitigation Measure	Applicability to the Project
g) Design sound walls to increase visual interest, reduce apparent height, and be visually compatible with the surrounding area; and landscape the sound walls with plants that screen the sound wall, preferably with either native vegetation or landscaping that complements the dominant landscaping of surrounding areas.	
PMM AES-3: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to address potential aesthetic impacts that substantially degrade visual character, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Use lighting fixtures that are adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties. b) Restrict the operation of outdoor lighting for construction and operation activities to the hours of 7:00 a.m. to 10:00 p.m. or as otherwise required by applicable local rules or ordinances. c) Use high pressure sodium and/or cut-off fixtures instead of typical mercury-vapor fixtures for outdoor lighting. d) Use unidirectional lighting to avoid light trespass onto adjacent properties. e) Design exterior lighting to confine illumination to the project site, and/or to areas which do not include light-sensitive uses. f) Provide structural and/or vegetative screening from light-sensitive uses. g) Shield and direct all new street and pedestrian lighting away from light-sensitive off-site uses. h) Use non-reflective glass or glass treated with a non-reflective coating for all exterior windows and glass used on building surfaces. i) Architectural lighting shall be directed onto the building surfaces and have low reflectivity to minimize glare and limit light onto adjacent properties.	This Mitigation Measure is not relevant to the Proposed Project as Public Resources Code Section 21099, enacted by Senate Bill 743, provides that "aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." The project site is located in an urbanized area within the City of Pasadena. The proposed project is a 6-story plus mezzanine transit-oriented mixed-use development that includes retail, restaurants, and work/live units at the ground level and mixed-rate apartment units on levels 2-6. The project site is located less than one-quarter mile from the Metro Del Mar L Line (formerly Gold Line) station and less than one-half a mile to the Memorial Park Station. Therefore, the proposed project is located in a transit priority area as defined in Public Resources Code Section 21099. The proposed project's aesthetic impacts shall not be considered significant impacts on the environment pursuant to Public Resources Code Section 21099.
Agriculture and Forestry	
PMM AG-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to address potential adverse effects on agricultural resources, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Require project sponsors to mitigate for loss of farmland by providing permanent protection of in-kind farmland in the form of easements, fees, or elimination of development rights/potential. b) Project relocation or corridor realignment to avoid Prime Farmland, Unique Farmland, or Farmland of Local or Statewide Importance. c) Maintain and expand agricultural land protections such as urban growth boundaries.	This Mitigation Measure is not relevant to the proposed project as no farmland or agricultural activity exists on or in the vicinity of the project site. See Section 2, Agricultural Resources, of the SCEA for further information.

Project Level Mitigation Measure	Applicability to the Project
d) Provide for mitigation fees to support a mitigation bank[1] that invests in farmer education, agricultural infrastructure, water supply, marketing, etc. that enhance the commercial viability of retained agricultural lands. e) Minimize severance and fragmentation of agricultural land by constructing underpasses and overpasses at reasonable intervals to provide property access. f) Use berms, buffer zones, setbacks, and fencing to reduce conflicts between new development and farming uses and protect the functions of farmland.	
PMM AG-2: Project level mitigation measures can and should be considered by Lead Agencies as applicable and feasible. Measures to reduce substantial adverse effects on Williamson Act contracts to the maximum extent practicable, as determined appropriate by each Lead Agency, may include the following, or other comparable measures: a) Project relocation or corridor realignment to avoid lands in Williamson Act contracts. b) Establish conservation easements consistent with the recommendations of the Department of Conservation, or 20-year Farmland Security Zone contracts (Government Code Section 51296 et seq.), 10-year Williamson Act contracts (Government Code Section 51200 et seq.), or use of other conservation tools available from the California Department of Conservation Division of Land Resource Protection.	This Mitigation Measure is not relevant to the proposed project as the project Site is not zoned for agricultural production, there is no farmland at the project site, and there are no Williamson Act Contracts in effect for the project site. See Section 2, Agricultural Resources, of the SCEA for further information.
PMM AG-3: Project level mitigation measures can and should be considered by Lead Agencies as applicable and feasible. Measures to reduce substantial adverse effects, through the conversion of Farmland to maximum extent practicable, as determined appropriate by each Lead Agency, may include the following, or other comparable measures: a) Minimize construction related impacts to agricultural and forestry resources by locating materials and stationary equipment in such a way as to prevent conflict with agriculture and forestry resources**.**	This Mitigation Measure is not relevant to the proposed project as the project Site is not zoned for agricultural production and there is no farmland at the project site. See Section 2, Agricultural Resources, of the SCEA for further information.
PMM AG-4: Project level mitigation measures can and should be considered by Lead Agencies as applicable and feasible. Measures to reduce substantial adverse effects, through the conversion of Farmland, to the maximum extent practicable, as determined appropriate by each Lead Agency, may include the following, or other comparable measures: a) Design proposed projects to minimize, to the greatest extent feasible, the loss of the highest valued agricultural land. b) Redesign project features to minimize fragmenting or isolating Farmland. Where a project involves acquiring land or easements, ensure that the remaining non-project area is of a size sufficient to allow economically viable farming operations. The project proponents shall be responsible for acquiring easements, making lot line adjustments, and merging affected land parcels into units suitable for continued commercial agricultural management.	This Mitigation Measure is not relevant to the proposed project as the project Site is not zoned for agricultural production and there is no farmland at the project site. See Section 2, Agricultural Resources, of the SCEA for further information.

1 The California Department of Fish and Wildlife provides a definition for conservation or mitigation banks on their website (please see https://www.wildlife.ca.gov/Conservation/Planning/Banking).

Project Level Mitigation Measure	Applicability to the Project
c) Reconnect utilities or infrastructure that serve agricultural uses if these are disturbed by project construction. If a project temporarily or permanently cuts off roadway access or removes utility lines, irrigation features, or other infrastructure, the project proponents shall be responsible for restoring access as necessary to ensure that economically viable farming operations are not interrupted.	
PMM AG-5: Project level mitigation measures can and should be considered by Lead Agencies as applicable and feasible. Measures to reduce substantial adverse effects, through the conversion of Farmland, to the maximum extent practicable, as determined appropriate by each Lead Agency, may include the following, or other comparable measures: a) Manage project operations to minimize the introduction of invasive species or weeds that may affect agricultural production on adjacent agricultural land. Where a project has the potential to introduce sensitive species or habitats or have other spill-over effects on nearby agricultural lands, the project proponents shall be responsible for acquiring easements on nearby agricultural land and/or financially compensating for indirect effects on nearby agricultural land. Easements (e.g., flowage easements) shall be required for temporary or intermittent interruption in farming activities (e.g., because of seasonal flooding or groundwater seepage). Acquisition or compensation would be required for permanent or significant loss of economically viable operations.	This Mitigation Measure is not relevant to the proposed project as the project Site is not zoned for agricultural production and there is no farmland at the project site. See Section 2, Agricultural Resources, of the SCEA for further information.
Air Quality	
PMM AQ-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Minimize land disturbance. b) Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes. c) Cover trucks when hauling dirt. d) Stabilize the surface of dirt piles if not removed immediately. e) Limit vehicular paths on unpaved surfaces and stabilize any temporary roads. f) Minimize unnecessary vehicular and machinery activities. g) Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway. h) Revegetate disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities. i) On Caltrans projects, Caltrans Standard Specifications 10-Dust Control, 17-Watering, and 18-Dust Palliative shall be incorporated into project	The proposed project is subject to the South Coast Air Quality Management District (SCAQMD) rules and mentioned in Section 3, Air Quality of the SCEA. Upon compliance, the project would satisfy the applicable requirements of this mitigation measure. The projects impacts to Air Quality were analyzed in Section 3, Air Quality, of the SCEA analysis and were found to be less than significant and the project would not require any mitigation measures for this impact.

Project Level Mitigation Measure	Applicability to the Project
specifications. j) Require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project. Prepare a plan for approval by the applicable air district demonstrating achievement of the applicable percent reduction for a CARB-approved fleet. k) Ensure that all construction equipment is properly tuned and maintained. l) Minimize idling time to 5 minutes—saves fuel and reduces emissions. m) Provide an operational water truck on-site at all times. Use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas. Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway. n) Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators. o) Develop a traffic plan to minimize community impacts as a result of traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites. Project sponsors should consider developing a goal for the minimization of community impacts. p) As appropriate require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain CARB Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the CARB or the District to determine registration and permitting requirements prior to equipment operation at the site. q) Require projects to use Tier 4 Final equipment or better for all engines above 50 horsepower (hp). In the event that construction equipment cannot meet to Tier 4 Final engine certification, the Project representative or contractor must demonstrate through future study with written findings supported by substantial evidence that is approved by SCAG before using other technologies/strategies. Alternative applicable strategies may include, but would not be limited to, construction equipment with Tier 4 Interim or reduction in the number and/or horsepower rating of construction equipment and/or limiting the number of construction equipment operating at the same time. All equipment must be tuned and maintained in compliance with the manufacturer's recommended maintenance schedule and specifications. All maintenance records for each	

Project Level Mitigation Measure	Applicability to the Project
equipment and their contractor(s) should make available for inspection and remain on-site for a period of at least two years from completion of construction, unless the individual project can demonstrate that Tier 4 engines would not be required to mitigate emissions below significance thresholds. Project sponsors should also consider including ZE/ZNE technologies where appropriate and feasible. r) Projects located within the South Coast Air Basin should consider applying for South Coast AQMD "SOON" funds which provides funds to applicable fleets for the purchase of commercially available low-emission heavy-duty engines to achieve near-term reduction of NOx emissions from in-use off-road diesel vehicles. s) Projects located within AB 617 communities should review the applicable Community Emissions Reduction Plan (CERP) for additional mitigation that can be applied to individual projects. t) Where applicable, projects should provide information about air quality related programs to schools, including the Environmental Justice Community Partnerships (EJCP), Clean Air Ranger Education (CARE), and Why Air Quality Matters programs. u) Projects should work with local cities and counties to install adequate signage that prohibits truck idling in certain locations (e.g., near schools and sensitive receptors). v) As applicable for airport projects, the following measures should be considered: a. Considering operational improvements to reduce taxi time and auxiliary power unit usage, where feasible. Additionally, consider single engine taxing, if feasible as allowed per Federal Aviation Administration guidelines. b. Set goals to achieve a reduction in emissions from aircraft operations over the lifetime of the proposed project. **c.** Require the use of ground service equipment (GSE) that can operate on battery-power. If electric equipment cannot be obtained, require the use of alternative fuel, the cleanest gasoline equipment, or Tier 4, at a minimum. w) As applicable for port projects, the following measures should be considered: a. Develop specific timelines for transitioning to zero emission cargo handling equipment (CHE). b. Develop interim performance standards with a minimum amount of CHE replacement each year to ensure adequate progress. c. Use short side electric power for ships, which may include tugboats and other ocean-going vessels or develop incentives	

Project Level Mitigation Measure	Applicability to the Project
to gradually ramp up the usage of shore power. d. Install the appropriate infrastructure to provide shore power to operate the ships. Electrical hookups should be appropriately sized. e. Maximize participation in the Port of Los Angeles' Vessel Speed Reduction Program or the Port of Long Beach's Green Flag Initiation Program in order to reduce the speed of vessel transiting within 40 nautical miles of Point Fermin. f. Encourage the participation in the Green Ship Incentives. g. Offer incentives to encourage the use of on-dock rail. x) As applicable for rail projects, the following measures should be considered: a. Provide the highest incentives for electric locomotives and then locomotives that meet Tier 5 emission standards with a floor on the incentives for locomotives that meet Tier 4 emission standards. y) Projects that will introduce sensitive receptors within 500 feet of freeways and other sources should consider installing high efficiency of enhanced filtration units, such as Minimum Efficiency Reporting Value (MERV) 13 or better. Installation of enhanced filtration units can be verified during occupancy inspection prior to the issuance of an occupancy permit. z) Develop an ongoing monitoring, inspection, and maintenance program for the MERV filters. a. Disclose potential health impacts to prospective sensitive receptors from living in close proximity to freeways or other sources of air pollution and the reduced effectiveness of air filtration systems when windows are open or residents are outside. b. Identify the responsible implementing and enforcement agency to ensure that enhanced filtration units are installed on-site before a permit of occupancy is issued. c. Disclose the potential increase in energy costs for running the HVAC system to prospective residents. d. Provide information to residents on where MERV filters can be purchased. e. Provide recommended schedule (e.g., every year or every six months) for replacing the enhanced filtration units. f. Identify the responsible entity such as future residents themselves, Homeowner's Association, or property managers for ensuring enhanced filtration units are replaced on time.	

Project Level Mitigation Measure	Applicability to the Project
g. Identify, provide, and disclose ongoing cost-sharing strategies, if any, for replacing the enhanced filtration units. h. Set criteria for assessing progress in installing and replacing the enhanced filtration units; and i. Develop a process for evaluating the effectiveness of the enhanced filtration units. aa) Consult the SCAG Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities.	
Biological Resources	
PMM BIO-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to threatened and endangered species, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Require project design to avoid occupied habitat, potentially suitable habitat, and designated critical habitat, wherever practicable and feasible. b) Where avoidance is determined to be infeasible, provide conservation measures to fulfill the requirements of the applicable authorization for incidental take pursuant to Section 7 or 10(a) of the federal ESA, Section 2081 of the California ESA to support issuance of an incidental take permit, and/or as identified in local or regional plans. Conservation strategies to protect the survival and recovery of federally and state-listed endangered and local special status species may include: i. Impact minimization strategies ii. Contribution of in-lieu fees for in-kind conservation and mitigation efforts iii. Use of in-kind mitigation bank credits iv. Funding of research and recovery efforts v. Habitat restoration vi. Establishment of conservation easements vii. Permanent dedication of in-kind habitat c) Design projects to avoid desert native plants protected under the California Desert Native Plants Act, salvage and relocate desert native plants, and/or pay in lieu fees to support off-site long-term conservation strategies. d) Temporary access roads and staging areas will not be located within areas containing sensitive plants, wildlife species or native habitat wherever feasible, so as to avoid or minimize impacts to these species. e) Develop and implement a Worker Environmental Awareness Program (environmental education) to inform project workers of their responsibilities to avoid and minimize impacts on sensitive biological resources.	This Mitigation Measure is not relevant to the proposed project as the project site does not contain any critical habitat or support any species identified or designated as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. The project site is located in an urbanized area of the City and is not identified as a vegetation zone that could serve as species' habitat. No mitigation is required for this impact.

Project Level Mitigation Measure	Applicability to the Project
f) Retain a qualified botanist to document the presence or absence of special status plants before project implementation. g) Appoint a qualified biologist to monitor construction activities that may occur in or adjacent to occupied sensitive species' habitat to facilitate avoidance of resources not permitted for impact. h) Appoint a qualified biologist to monitor implementation of mitigation measures. i) Schedule construction activities to avoid sensitive times for biological resources (e.g. steelhead spawning periods during the winter and spring, nesting bird season) and to avoid the rainy season when erosion and sediment transport is increased. j) Develop an invasive species control plan associated with project construction. k) If construction occurs during breeding seasons in or adjacent to suitable habitat, include appropriate sound attenuation measures required for sensitive avian species and other best management practices appropriate for potential local sensitive wildlife. l) Conduct pre-construction surveys to delineate occupied sensitive species' habitat to facilitate avoidance. m) Where projects are determined to be within suitable habitat and may impact listed or sensitive species that have specific field survey protocols or guidelines outlined by the USFWS, CDFW, or other local agency, conduct preconstruction surveys that follow applicable protocols and guidelines and are conducted by qualified and/or certified personnel.	
PMM BIO-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to riparian habitats and other sensitive natural communities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Consult with the USFWS and NMFS where such state-designated sensitive or riparian habitats provide potential or occupied habitat for federally listed rare, threatened, and endangered species afforded protection pursuant to the federal ESA. b) Consult with the USFS where such state-designated sensitive or riparian habitats provide potential or occupied habitat for federally listed rare, threatened, and endangered species afforded protection pursuant to the federal ESA and any additional species afforded protection by an adopted Forest Land Management Plan or Resource Management Plan for the four national forests in the six-county area: Angeles, Cleveland, Los Padres, and San Bernardino. c) Consult with the CDFW where such state-designated sensitive or riparian habitats provide potential or occupied habitat for state-listed rare, threatened, and endangered species afforded protection pursuant to the California ESA, or Fully Protected Species afforded protection pursuant to the State Fish and	This Mitigation Measure is not relevant to the proposed project as the project site does not contain any state-designated sensitive habitats, including riparian habitats that are in the jurisdiction and responsibility of U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the California Department of Fish and Wildlife; and other public agencies, and/or Lead Agencies. See Section 4, Biological Resources, of the SCEA for more information.

Project Level Mitigation Measure	Applicability to the Project
Game Code. d) Consult with the CDFW pursuant to the provisions of Section 1600 of the State Fish and Game Code as they relate to Lakes and Streambeds. e) Consult with the USFWS, USFS, CDFW, and counties and cities in the SCAG region, where state-designated sensitive or riparian habitats are occupied by birds afforded protection pursuant to the MBTA during the breeding season. f) Consult with the CDFW for state-designated sensitive or riparian habitats where furbearing mammals, afforded protection pursuant to the provisions of the State Fish and Game Code for fur-beaming mammals, are actively using the areas in conjunction with breeding activities. g) Require project design to avoid sensitive natural communities and riparian habitats, wherever practicable and feasible. h) Where avoidance is determined to be infeasible, develop sufficient conservation measures through coordination with local agencies and the regulatory agency (i.e., USFWS or CDFW) to protect sensitive natural communities and riparian habitats and develop appropriate compensatory mitigation, where required. i) Appoint a qualified wetland biologist to monitor construction activities that may occur in or adjacent to sensitive communities. j) Appoint a qualified wetland biologist to monitor implementation of mitigation measures. k) Schedule construction activities to avoid sensitive times for biological resources and to avoid the rainy season when erosion and sediment transport is increased. l) When construction activities require stream crossings, schedule work during dry conditions and use rubber-wheeled vehicles, when feasible. Have a qualified wetland scientist determine if potential project impacts require a Notification of Lake or Streambed Alteration to CDFW during the planning phase of projects. m) Consult with local agencies, jurisdictions, and landowners where such state-designated sensitive or riparian habitats are afforded protection pursuant an adopted regional conservation plan. n) Install fencing and/or mark sensitive habitat to be avoided during construction activities. o) Salvage and stockpile topsoil (the surface material from 6 to 12 inches deep) and perennial native plants, when recommended by the qualified wetland biologist, for use in restoring native vegetation to areas of temporary disturbance within the project area. Salvage of soils containing invasive species, seeds and/or rhizomes will be avoided as identified by the qualified wetland biologist. p) Revegetate with appropriate native vegetation following the completion of construction activities, as identified by the qualified wetland biologist. q) Complete habitat enhancement (e.g., through	

Project Level Mitigation Measure	Applicability to the Project
removal of non-native invasive wetland species and replacement with more ecologically valuable native species). r) Use Best Management Practices (BMPs) at construction sites to minimize erosion and sediment transport from the area. BMPs include encouraging growth of native vegetation in disturbed areas, using straw bales or other silt-catching devices, and using settling basins to minimize soil transport.	
PMM BIO-3: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to wetlands, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency. a) Require project design to avoid federally protected aquatic resources consistent with the provisions of Sections 404 and 401 of the CWA, wherever practicable and feasible. b) Where the lead agency has identified that a project, or other regionally significant project, has the potential to impact other wetlands or waters, such as those considered Waters Of the State of California under the State Wetland Definition and Procedures for Dischargers of Dredged or Fill Material to Waters of the State, not protected under Section 404 or 401 of the CWA, seek comparable coverage for these wetlands and waters in consultation with the SWRCB, applicable RWQCB, and CDFW. c) Where avoidance is determined to be infeasible, develop sufficient conservation measures to fulfill the requirements of the applicable authorization for impacts to federal and state protected aquatic resource to support issuance of a permit under Section 404 of the CWA as administered by the USACE. The use of an authorized Nationwide Permit or issuance of an individual permit requires the project applicant to demonstrate compliance with the USACE's Final Compensatory Mitigation Rule. The USACE reviews projects to ensure environmental impacts to aquatic resources are avoided or minimized as much as possible. Consistent with the administration's performance standard of "no net loss of wetlands" a USACE permit may require a project proponent to restore, establish, enhance or preserve other aquatic resources in order to replace those affected by the proposed project. This compensatory mitigation process seeks to replace the loss of existing aquatic resource functions and area. Project proponents required to complete mitigation are encouraged to use a watershed approach and watershed planning information. The new rule establishes performance standards, sets timeframes for decision making, and to the extent possible, establishes equivalent requirements and standards for the three sources of compensatory mitigation: — Permittee-responsible mitigation — Contribution of in-kind in-lieu fees	This Mitigation Measure is not relevant to the proposed project as the project site does not contain any state or federally protected wetlands. See Section 4, Biological Resources, of the SCEA for more information.

Project Level Mitigation Measure	Applicability to the Project
— Use of in-kind mitigation bank credits d) Where avoidance is determined to be infeasible and proposed projects' impacts exceed an existing Nationwide Permit (NWP) and/or California SWRCB-certified NWP, or applicable County Special Area Management Plan (SAMP), the lead agency should provide USACE and SWRCB (where applicable) an alternative analysis consistent with the Least Environmentally Damaging Practicable Alternatives in this order of priorities: — Avoidance — Impact Minimization — On-site alternatives — Off-site alternatives e) Require review of construction drawings by a certified wetland delineator as part of each project-specific environmental analysis to determine whether aquatic resources will be affected and, if necessary, perform formal wetland delineation.	
PMM BIO-4: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to wildlife movement, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Consult with the USFS where impacts to migratory wildlife corridors may occur in an area afforded protection by an adopted Forest Land Management Plan or Resource Management Plan for the four national forests in the six-County area: Angeles, Cleveland, Los Padres, and San Bernardino. b) Consult with counties, cities, and other local organizations when impacts may occur to open space areas that have been designated as important for wildlife movement related to local ordinances or conservation plans. c) Prohibit construction activities within 500 feet of occupied breeding areas for wildlife afforded protection pursuant to Title 14 § 460 of the California Code of Regulations protecting fur-bearing mammals, during the breeding season. d) Conduct a survey to identify active raptor and other migratory nongame bird nests by a qualified biologist at least two weeks before the start of construction at project sites from February 1 through August 31. e) Prohibit construction activities with 300 feet of occupied nest of birds afforded protection pursuant to the Migratory Bird Treaty Act, during the breeding season. f) Ensure that suitable nesting sites for migratory nongame native bird species protected under the Migratory Bird Treaty Act and/or trees with unoccupied raptor nests should only be removed prior to February 1, or following the nesting season. g) When feasible and practicable, proposed projects will be designed to minimize impacts to wildlife movement and habitat connectivity and preserve existing and	This Mitigation Measure is not applicable to the proposed project as the project is located in a developed urban area and does not involve the dispersal of wildlife nor would the project result in a barrier to migration or movement. The project would also comply with the Migratory Bird Treaty Act which governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests.

Project Level Mitigation Measure	Applicability to the Project
functional wildlife corridors. h) Conduct site-specific analyses of opportunities to preserve or improve habitat linkages with areas on- and off-site. i) Long linear projects with the possibility of impacting wildlife movement should analyze habitat linkages/wildlife movement corridors on a broad scale to avoid critical narrow choke points that could reduce function of recognized movement corridor. j) Require review of construction drawings and habitat connectivity mapping by a qualified biologist to determine the risk of habitat fragmentation. k) Pursue mitigation banking to preserve habitat linkages and corridors (opportunities to purchase, maintain, and/or restore offsite habitat). l) When practicable and feasible design projects to promote wildlife corridor redundancy by including multiple connections between habitat patches. m) Evaluate the potential for installation of overpasses, underpasses, and culverts to create wildlife crossings in cases where a roadway or other transportation project may interrupt the flow of species through their habitat. Retrofitting of existing infrastructure in project areas should also be considered for wildlife crossings for purposes of mitigation. n) Install wildlife fencing where appropriate to minimize the probability of wildlife injury due to direct interaction between wildlife and roads or construction. o) Where avoidance is determined to be infeasible, design sufficient conservation measures through coordination with local agencies and the regulatory agency (i.e., USFWS or CDFW) and in accordance with the respective counties and cities general plans to establish plans to mitigate for the loss of fish and wildlife movement corridors and/or wildlife nursery sites. The consideration of conservation measures may include the following measures, in addition to the measures outlined in MM-BIO-1(b), where applicable: — Wildlife movement buffer zones — Corridor realignment — Appropriately spaced breaks in center barriers — Stream rerouting — Culverts — Creation of artificial movement corridors such as freeway under- or overpasses — Other comparable measures p) Where the lead agency has identified that a RTP/SCS project, or other regionally significant project, has the potential to impact other open space or nursery site areas, seek comparable coverage for these areas in consultation with the USFWS, CDFW, NMFS, or other local jurisdictions. q) Incorporate applicable and appropriate guidance (e.g. FHWA-HEP-16-059), as well as best	

Project Level Mitigation Measure	Applicability to the Project
management practices, to benefit pollinators with a focus on native plants.	
PMM BIO-5: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce conflicts with local policies and ordinances protecting biological resources, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Consult with the appropriate local agency responsible for the administration of the policy or ordinance protecting biological resources. b) Prioritize retention of trees on-site consistent with local regulations. Provide adequate protection during the construction period for any trees that are to remain standing, as recommended by an International Society of Arboriculture (ISA) certified arborist. c) If specific project area trees are designated as "Protected Trees," "Landmark Trees," or "Heritage Trees," obtain approval for encroachment or removals through the appropriate entity, and develop appropriate mitigation measures at that time, to ensure that the trees are replaced. Mitigation trees shall be locally collected native species, as directed by a qualified biologist. d) Appoint an ISA certified arborist to monitor construction activities that may occur in areas with trees are designated as "Protected Trees," "Landmark Trees," or "Heritage Trees," to facilitate avoidance of resources not permitted for impact. Before the start of any clearing, excavation, construction or other work on the site, securely fence off every protected tree deemed to be potentially endangered by said site work. Keep such fences in place for duration of all such work. Clearly mark all trees to be removed. e) Establish a scheme for the removal and disposal of logs, brush, earth and other debris that will avoid injury to any protected tree. Where proposed development or other site work could encroach upon the protected perimeter of any protected tree, incorporate special measures to allow the roots to breathe and obtain water and nutrients. Minimize any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter. Require that no change in existing ground level occur from the base of any protected tree at any time. Require that no burning or use of equipment with an open flame occur near or within the protected perimeter of any protected tree. f) Require that no storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees occur from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. Require that no heavy construction equipment or construction materials be operated or stored within a distance from the base of any protected trees. Require that wires, ropes, or other devices not be	The proposed project would be subject to the provisions of PMC Chapter 8.52, the City Trees and Tree Protection Ordinance and by complying therewith, would be in compliance with this Mitigation Measure. Construction activities would also be subject to the provisions of PMC Chapter 8.52, the City Trees and Tree Protection Ordinance. Compliance with these provisions would ensure that there would be no potentially significant impacts to on-site biological resources.

Project Level Mitigation Measure	Applicability to the Project
attached to any protected tree, except as needed for support of the tree. Require that no sign, other than a tag showing the botanical classification, be attached to any protected tree. g) Thoroughly spray the leaves of protected trees with water periodically during construction to prevent buildup of dust and other pollution that would inhibit leaf transpiration, as directed by the certified arborist. h) If any damage to a protected tree should occur during or as a result of work on the site, the appropriate local agency will be immediately notified of such damage. If, such tree cannot be preserved in a healthy state, as determined by the certified arborist, require replacement of any tree removed with another tree or trees on the same site deemed adequate by the local agency to compensate for the loss of the tree that is removed. Remove all debris created as a result of any tree removal work from the property within two weeks of debris creation, and such debris shall be properly disposed of in accordance with all applicable laws, ordinances, and regulations. Design projects to avoid conflicts with local policies and ordinances protecting biological resources i) Where avoidance is determined to be infeasible, sufficient conservation measures to fulfill the requirements of the applicable policy or ordinance shall be developed, such as to support issuance of a tree removal permit. The consideration of conservation measures may include: — Avoidance strategies — Contribution of in-lieu fees — Planting of replacement trees — Re-landscaping areas with native vegetation post-construction — Other comparable measures developed in consultation with local agency and certified arborist.	
PMM BIO-6: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects on HCPs and NCCPs, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Consult with the appropriate federal, state, and/or local agency responsible for the administration of HCPs or NCCPs. b) Wherever practicable and feasible, the project shall be designed to avoid lands preserved under the conditions of an HCP or NCCP. c) Where avoidance is determined to be infeasible, sufficient conservation measures to fulfill the requirements of the HCP and/or NCCP, which would include but not be limited to applicable authorization for incidental take pursuant to Section 7 or 10(a) of the federal Endangered Species Act or Section 2081 of the California ESA, shall be developed to support issuance of an incidental take permit or any other permissions required for development within the	This Mitigation Measure is not relevant to the proposed project as no habitat conservation plan or natural community conservation plans encompass the site and no locally designated natural communities occur on or adjacent to the project site. See Section 4, Biological Resources, of the SCEA for further information.

Project Level Mitigation Measure	Applicability to the Project
HCP/NCCP boundaries. The consideration of additional conservation measures would include the measures outlined in SMM-BIO-2, where applicable.	
Cultural Resources	
PMM CULT-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to historical resources, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Pursuant to *CEQA Guidelines* Section 15064.5, conduct a record search during the project planning phase at the appropriate Information Center to determine whether the project area has been previously surveyed and whether historical resources were identified. b) During the project planning phase, retain a qualified architectural historian, defined as an individual who meets the Secretary of the Interior's (SOI) Professional Qualification Standards (PQS) in Architectural History, to conduct historic architectural surveys if a built environment resource greater than 45 years in age may be affected by the project or if recommended by the Information Center. c) Comply with Section 106 of the National Historic Preservation Act (NHPA) including, but not limited to, projects for which federal funding or approval is required for the individual project. This law requires federal agencies to evaluate the impact of their actions on resources included in or eligible for listing in the National Register. Federal agencies must coordinate with the State Historic Preservation Officer in evaluating impacts and developing mitigation. These mitigation measures may include, but are not limited to the following: — Employ design measures to avoid historical resources and undertake adaptive reuse where appropriate and feasible. If resources are to be preserved, as feasible, carry out the maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction in a manner consistent with the Secretary of the Interior's Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. If resources would be impacted, impacts should be minimized to the extent feasible. — Where feasible, noise buffers/walls and/or visual buffers/landscaping should be constructed to preserve the contextual setting of significant built resources. d) If a project requires the relocation, rehabilitation, or alteration of an eligible historical resource, the Secretary of the Interior's Standards for the Treatment of Historic Properties should be used to the maximum extent possible to ensure the historical significance of the resource is not impaired. The	The proposed project would not result in a substantial adverse change in the significance of the Old Pasadena Historic District or the Hotel Green/Castle Green or the building at 84 South Fair Oaks Avenue. Impacts on historical resources are less than significant and no mitigation measures are required. See Section 5, Cultural Resources, of the SCEA for further information.

Project Level Mitigation Measure	Applicability to the Project
application of the standards should be overseen by an architectural historian or historic architect meeting the SOI PQS. Prior to any construction activities that may affect the historical resource, a report, meeting industry standards, should identify and specify the treatment of character-defining features and construction activities and be provided to the Lead Agency for review and approval.	
e) If a project would result in the demolition or significant alteration of a historical resource eligible for or listed in the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), or local register, recordation should take the form of Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS) documentation, and should be performed by an architectural historian or historian who meets the SOI PQS. Recordation should meet the SOI Standards and Guidelines for Architectural and Engineering, which defines the products acceptable for inclusion in the HABS/HAER/HALS collection at the Library of Congress. The specific scope and details of documentation should be developed at the project level in coordination with the Lead Agency.	
f) During the project planning phase, obtain a qualified archaeologist, defined as one who meets the SOI PQS for archaeology, to conduct a record search at the appropriate Information Center of the California Historical Resources Information System (CHRIS) to determine whether the project area has been previously surveyed and whether resources were identified.	
g) Contact the NAHC to request a Sacred Lands File search and a list of relevant Native American contacts who may have additional information.	
h) During the project planning phase, obtain a qualified archaeologist or architectural historian (depending on applicability) to conduct archaeological and/or historic architectural surveys as recommended by the qualified professional, the Lead Agency, or the Information Center. In the event the qualified professional or Information Center will make a recommendation on whether a survey is warranted based on the sensitivity of the project area for archaeological resources. Survey shall be conducted where the records indicate that no previous survey has been conducted, or if survey has not been conducted within the past 10 years. If tribal resources are identified during tribal outreach, consultation, or the record search, a Native American representative traditionally affiliated with the project area, as identified by the NAHC, shall be given the opportunity to provide a representative or monitor to assist with archaeological surveys.	
i) If potentially significant archaeological resources are identified through survey, and impacts to these resources cannot be avoided, a Phase II Testing and Evaluation investigation should be performed by a qualified archaeologist prior to any construction-related ground-disturbing activities to determine	

Project Level Mitigation Measure	Applicability to the Project
significance. If resources determined significant or unique through Phase II testing, and avoidance is not possible, appropriate resource-specific mitigation measures should be established by the lead agency, in consultation with consulting tribes, where appropriate, and undertaken by qualified personnel. These might include a Phase III data recovery program implemented by a qualified archaeologist and performed in accordance with the OHP's Archaeological Resource Management Reports (ARMR): Recommended Contents and Format and Guidelines for Archaeological Research Designs. Additional options can include 1) interpretative signage, or 2) educational outreach that helps inform the public of the past activities that occurred in this area. Should the project require extended Phase I testing, Phase II evaluation, or Phase III data recovery, a Native American representative traditionally affiliated with the project area, as indicated by the NAHC, shall be given the opportunity to provide a representative or monitor to assist with the archaeological assessments. The long-term disposition of archaeological materials collected from a significant resource should be determined in consultation with the affiliated tribe(s), where relevant; this could include curation with a recognized scientific or educational repository, transfer to the tribe, or respectful reinternment in an area designated by the tribe.	
j) In cases where the project area is developed and no natural ground surface is exposed, sensitivity for subsurface resources should be assessed based on review of literature, geology, site development history, and consultation with tribal parties. If this archaeological desktop assessment indicates that the project is located in an area sensitive for archaeological resources, as determined by the Lead Agency in consultation with a qualified archaeologist, the project should retain an archaeological monitor and, in the case of sensitivity for tribal resources, a tribal monitor, to observe ground disturbing operations, including but not limited to grading, excavation, trenching, or removal of existing features of the subject property. The archaeological monitor should be supervised by an archaeologist meeting the SOI PQS	
k) Conduct construction activities and excavation to avoid cultural resources (if identified). If avoidance is not feasible, further work may be needed to determine the importance of a resource. Retain a qualified archaeologist, and/or as appropriate, a qualified architectural historian who should make recommendations regarding the work necessary to assess significance. If the cultural resource is determined to be significant under state or federal guidelines, impacts to the cultural resource will need to be mitigated.	
l) Stop construction activities and excavation in the area where cultural resources are found until a qualified archaeologist can determine whether these resources are significant, and tribal consultation can be conducted, in the case of tribal resources. If the	

Project Level Mitigation Measure	Applicability to the Project
archaeologist determines that the discovery is significant, its long-term disposition should be determined in consultation with the affiliated tribe(s); this could include curation with a recognized scientific or educational repository, transfer to the tribe, or respectful reinternment in an area designated by the tribe.	
PMM CULT-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to human remains, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) In the event of discovery or recognition of any human remains during construction or excavation activities associated with the project, in any location other than a dedicated cemetery, cease further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of the county in which the remains are discovered has been informed and has determined that no investigation of the cause of death is required. b) If any discovered remains are of Native American origin, as determined by the county Coroner, an experienced osteologist, or another qualified professional: — Contact the County Coroner to contact the NAHC to designate a Native American Most Likely Descendant (MLD). The MLD should make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods. This may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains. In some cases, it is necessary for the Lead Agency, qualified archaeologist, or developer to also reach out to the NAHC to coordinate and ensure notification in the event the Coroner is not available. — If the NAHC is unable to identify a MLD, or the MLD fails to make a recommendation within 48 hours after being notified by the commission, or the landowner or his representative rejects the recommendation of the MLD and the mediation by the NAHC fails to provide measures acceptable to the landowner, obtain a culturally affiliated Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance.	There are no known human remains on the site. The project site is not part of a formal cemetery and is not known to have been used for disposal of historic or prehistoric human remains. Thus, human remains are not expected to be encountered during construction of the proposed project. In the unlikely event that human remains are encountered during project construction, State Health and Safety Code Section 7050.5 requires the project to halt until the County Coroner has made the necessary findings as to the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98. Compliance with these regulations would ensure the proposed project would satisfy applicable requirements of this mitigation measure.
Geology and Soils	

Project Level Mitigation Measure	Applicability to the Project
PMM-GEO-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to historical resources, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Consistent with the CBC and local regulatory agencies with oversight of development associated with the Plan, ensure that site-specific geotechnical investigations conducted by a qualified geotechnical expert are conducted to ascertain soil types prior to preparation of project designs. These investigations can and should identify areas of potential failure and recommend remedial geotechnical measures to eliminate any problems. b) Consistent with the requirements of the State Water Resources Control Board (SWRCB) for projects over one acre in size, obtain coverage under the General Construction Activity Storm Water Permit (General Construction Permit) issued by the SWRCB and prepare a stormwater pollution prevention plan (SWPPP) and submit the plan for review and approval by the Regional Water Quality Control Board (RWQCB). At a minimum, the SWPPP should include a description of construction materials, practices, and equipment storage and maintenance; a list of pollutants likely to contact stormwater; site-specific erosion and sedimentation control practices; a list of provisions to eliminate or reduce discharge of materials to stormwater; best management practices (BMPs); and an inspection and monitoring program. c) Consistent with the requirements of the SWRCB and local regulatory agencies with oversight of development associated with the Plan, ensure that project designs provide adequate slope drainage and appropriate landscaping to minimize the occurrence of slope instability and erosion. Design features should include measures to reduce erosion caused by storm water. Road cuts should be designed to maximize the potential for revegetation. d) Consistent with the CBC and local regulatory agencies with oversight of development associated with the Plan, ensure that, prior to preparing project designs, new and abandoned wells are identified within construction areas to ensure the stability of nearby soils.	As analyzed and concluded in Section 7, Geology and Soils, of the SCEA, the project does not have the potential for significant effects related to the exposure of people and infrastructure to the effects of earthquakes, seismic related ground-failure, liquefaction, and seismically induced landslides. The proposed project is not located adjacent to an active fault and is not in within an area subject to risk of liquefaction, landslide, or unstable or expansive soil. Further, the proposed project already complies to this Mitigation Measure as it is subject to the building construction protocols for reducing seismic hazards as provided in the Pasadena Municipal Code. Compliance would help avoid or reduce the potentially significant effects on the potential for projects to result in the exposure of people and infrastructure to the effects of earthquakes, seismic related ground-failure, liquefaction, and seismically induced landslides, that are in the jurisdiction and responsibility of public agencies, regulatory agencies, and/or Lead Agencies. The proposed project would also comply with all seismic standards provided in the California Building Code as approved as approved by the Department of Building and Safety.
PMM GEO-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to paleontological resources. Such measures may include the following or other comparable measures identified by the **Lead** Agency: a) Ensure compliance with the Paleontological Resources Preservation Act, the Federal Land Policy and Management Act, the Antiquities Act, Section 5097.5 of the Public Resources Code (PRC), adopted county and city general plans, and other federal, state and local regulations, as applicable and feasible, by adhering to and incorporating the performance	The proposed project is not known to contain paleontological resources. Therefore, the project is not expected to encounter a unique paleontological resource or unique geologic feature. As such, this mitigation measure is not applicable to the project. See Section 7, Geology and Soils, of the SCEA for further information.

Project Level Mitigation Measure	Applicability to the Project
standards and practices from the 2010 Society for Vertebrate Paleontology (SVP) standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. b) Obtain review by a qualified paleontologist (e.g. who meets the SVP standards for a Principal Investigator or Project Paleontologist or the Bureau of Land Management (BLM) standards for a Principal Investigator), to determine if the project has the potential to require ground disturbance of parent material with potential to contain unique paleontological or resources, or to require the substantial alteration of a unique geologic feature. The assessment should include museum records searches, a review of geologic mapping and the scientific literature, geotechnical studies (if available), and potentially a pedestrian survey, if units with paleontological potential are present at the surface. c) Avoid exposure or displacement of parent material with potential to yield unique paleontological resources. d) Where avoidance of parent material with the potential to yield unique paleontological resources is not feasible:	
PMM-GHG-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to greenhouse gas emissions, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Integrate green building measures consistent with CALGreen (California Building Code Title 24), local building codes and other applicable laws, into project design including: i. Use energy efficient materials in building design, construction, rehabilitation, and retrofit. ii. Install energy-efficient lighting, heating, and cooling systems (cogeneration); water heaters; appliances; equipment; and control systems. iii. Reduce lighting, heating, and cooling needs by taking advantage of light-colored roofs, trees for shade, and sunlight. iv. Incorporate passive environmental control systems that account for the characteristics of the natural environment. v. Use high-efficiency lighting and cooking devices. vi. Incorporate passive solar design. vii. Use high-reflectivity building materials and multiple glazing. viii. Prohibit gas-powered landscape maintenance equipment. ix. Install electric vehicle charging stations. x. Reduce wood burning stoves or fireplaces.	Impacts regarding the generation of greenhouse gas emissions were analyzed in Section 8, Greenhouse Gas Emissions, in the SCEA. The proposed project would be consistent with the Pasadena Climate Action Plan by incorporating applicable actions intended to ensure that the project contributes its fair share to the City's cumulative GHG reduction goals. The project would have a less than significant GHG impact and therefore mitigation is not required.

Project Level Mitigation Measure	Applicability to the Project
xi. Provide bike lanes accessibility and parking at residential developments. b) Reduce emissions resulting from projects through implementation of project features, project design, or other measures, such as those described in Appendix F of the State CEQA Guidelines. c) Include off-site measures to mitigate a project's emissions. d) Measures that consider incorporation of Best Available Control Technology (BACT) during design, construction and operation of projects to minimize GHG emissions, including but not limited to: i. Use energy and fuel-efficient vehicles and equipment; ii. Deployment of zero- and/or near zero emission technologies; iii. Use lighting systems that are energy efficient, such as LED technology; iv. Use the minimum feasible amount of GHG-emitting construction materials; v. Use cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production; vi. Incorporate design measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse; vii. Incorporate design measures to reduce energy consumption and increase use of renewable energy; viii. Incorporate design measures to reduce water consumption; ix. Use lighter-colored pavement where feasible; x. Recycle construction debris to maximum extent feasible; xi. Plant shade trees in or near construction projects where feasible; and xii. Solicit bids that include concepts listed above. e) Measures that encourage transit use, carpooling, bike-share and car-share programs, active transportation, and parking strategies, including, but not limited to the following: i. Promote transit-active transportation coordinated strategies; ii. Increase bicycle carrying capacity on transit and rail vehicles; iii. Improve or increase access to transit; iv. Increase access to common goods and services, such as groceries, schools, and day care; v. Incorporate affordable housing into the project;	

Project Level Mitigation Measure	Applicability to the Project
vi. Incorporate the neighborhood electric vehicle network; vii. Orient the project toward transit, bicycle and pedestrian facilities; viii. Improve pedestrian or bicycle networks, or transit service; ix. Provide traffic calming measures; x. Provide bicycle parking; xi. Limit or eliminate park supply; xii. Unbundle parking costs; xiii. Provide parking cash-out programs; xiv. Implement or provide access to commute reduction program; f) Incorporate bicycle and pedestrian facilities into project designs, maintaining these facilities, and providing amenities incentivizing their use; and planning for and building local bicycle projects that connect with the regional network; g) Improving transit access to rail and bus routes by incentives for construction of transit facilities within developments, and/or providing dedicated shuttle service to transit stations; and h) Adopting employer trip reduction measures to reduce employee trips such as vanpool and carpool programs, providing end-of-trip facilities, and telecommuting programs including but not limited to measures that: i. Provide car-sharing, bike sharing, and ride-sharing programs; ii. Provide transit passes; iii. Shift single occupancy vehicle trips to carpooling or vanpooling, for example providing ride-matching services; iv. Provide incentives or subsidies that increase that use of modes other than single-occupancy vehicle; v. Provide on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, and showers and locker rooms; vi. Provide employee transportation coordinators at employment sites; vii. Provide a guaranteed ride home service to users of non-auto modes. i) Designate a percentage of parking spaces for ride-sharing vehicles or high-occupancy vehicles, and provide adequate passenger loading and unloading for those vehicles; j) Land use siting and design measures that reduce GHG emissions, including: i. Developing on infill and brownfields sites; ii. Building compact and mixed-use developments near transit; iii. Retaining on-site mature trees and vegetation, and planting new canopy trees;	

Project Level Mitigation Measure	Applicability to the Project
iv. Measures that increase vehicle efficiency, encourage use of zero and low emissions vehicles, or reduce the carbon content of fuels, including constructing or encouraging construction of electric vehicle charging stations or neighborhood electric vehicle networks, or charging for electric bicycles; and v. Measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse. k) Consult the SCAG Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities. The measures provided above are also intended to be applied in low income and minority communities as applicable and feasible.	
Hazards and Hazardous Materials	
PMM HAZ-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to the routine transport, use, or disposal of hazardous materials, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Where the construction or operation of projects involves the transport of hazardous material, provide a written plan of proposed routes of travel demonstrating use of roadways designated for the transport of such materials. b) Specify Project requirements for interim storage and disposal of hazardous materials during construction and operation. Storage and disposal strategies must be consistent with applicable federal, state, and local statutes and regulations. Specify the appropriate procedures for interim storage and disposal of hazardous materials, anticipated to be required in support of operations and maintenance activities, in conformance with applicable federal, state, and local statutes and regulations, in the business plan for projects as applicable and appropriate. c) Submit a Hazardous Materials Business/Operations Plan for review and approval by the appropriate local agency. Once approved, keep the plan on file with the Lead Agency (or other appropriate government agency) and update, as applicable. The purpose of the Hazardous Materials Business/Operations Plan is to ensure that employees are adequately trained to handle the materials and provides information to the local fire protection agency should emergency response be required. The Hazardous Materials Business/Operations Plan should include the following: — The types of hazardous materials or chemicals stored and/or used on-site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids.	The project does not involve the use or storage of hazardous substances other than the small amounts of pesticides, fertilizers and cleaning agents required for normal maintenance of the structure and landscaping. The project must adhere to applicable zoning and fire regulations regarding the use and storage of any hazardous substances. Impacts were found to be less than significant as analyzed in Section 9, Hazards and Hazardous Materials, of the SCEA and mitigation is not required.

Project Level Mitigation Measure	Applicability to the Project
— The location of such hazardous materials. — An emergency response plan including employee training information. — A plan that describes the way these materials are handled, transported and disposed. d) Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction. e) Avoid overtopping construction equipment fuel gas tanks. f) Properly contain and remove grease and oils during routine maintenance of construction equipment. g) Properly dispose of discarded containers of fuels and other chemicals. h) Prior to shipment remove the most volatile elements, including flammable natural gas liquids, as feasible. i) Identify and implement more stringent tank car safety standards. j) Improve rail transportation route analysis, and modification of routes based on that analysis. k) Use the best available inspection equipment and protocols and implement positive train control. l) Reduce train car speeds to 40 miles per hour when passing through urbanized areas of any size. m) Limit storage of crude oil tank cars in urbanized areas of any size and provide appropriate security in storage yards for all shipments. n) Notify in advance county and city emergency operations offices of all crude oil shipments, including a contact number that can provide real-time information in the event of an oil train derailment or accident. o) Report quarterly hazardous commodity flow information, including classification and characterization of materials being transported, to all first response agencies (49 Code Fed. Regs. 15.5) along the mainline rail routes used by trains carrying crude oil identified. p) Fund training and outfitting emergency response crews that includes the cost of backfilling personnel while in training. q) Undertake annual emergency responses scenario/field based training including Emergency Operations Center Training activations with local emergency response agencies.	
PMM HAZ-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce hazards related to the reasonably foreseeable upsets and accidents involving the release of hazardous materials, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Removal of the most volatile elements, including flammable natural gas liquids, prior to shipment; b) More stringent tank car safety standards;	The proposed project does not involve hazardous materials. There is no significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions. This mitigation measure is therefore not applicable to the project.

Project Level Mitigation Measure	Applicability to the Project
c) Improved rail transportation route analysis, and modification of routes based on that analysis; d) Utilization of the best available inspection equipment and protocols, and implementation of positive train control; e) Reduced train car speeds to 40 miles per hour when passing through urbanized areas of any size; f) Limitations on storage of hazardous materials tank cars in urbanized areas of any size and provide appropriate security in storage yards for all shipments; g) Advance notification to county and city emergency operations offices of all crude oil and hazardous materials shipments, including a contact number that can provide real-time information in the event of an oil train derailment or accident; h) Quarterly hazardous commodity flow information, including classification and characterization of materials being transported, to all first response agencies (49 Code Fed. Regs. 15.5) along the mainline rail routes used by trains carrying hazardous materials.	
PMM HAZ-3: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to the release of hazardous materials within one-quarter mile of schools, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Where the construction and operation of projects involves the transport of hazardous materials, avoid transport of such materials within one-quarter mile of schools, when school is in session, wherever feasible. b) Where it is not feasible to avoid transport of hazardous materials, within one-quarter mile of schools on local streets, provide notifications of the anticipated schedule of transport of such materials.	The project does not involve hazardous emissions or the handling of hazardous materials, substance, or waste and is not within one-quarter mile of an existing or proposed school; the closest schools are the Waverly School and St. Andrews Elementary School, both of which are approximately one-half mile away. Therefore, the proposed project would have no hazardous material related impacts to schools. This mitigation measure is not applicable to the project.
PMM HAZ-4: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to projects that are located on a site which is included on the Cortese List, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) For any listed sites or sites that have the potential for residual hazardous materials as a result of historic land uses, complete a Phase I Environmental Site Assessment, including a review and consideration of data from all known databases of contaminated sites, during the process of planning, environmental clearance, and construction for projects. b) Where warranted due to the known presence of contaminated materials, submit to the appropriate agency responsible for hazardous materials/wastes oversight a Phase II Environmental Site Assessment report if warranted by a Phase I report for the project site. The reports should make recommendations for	Searches conducted using the California State Water Resources Control Board Geotracker and the Department of Toxic Substances Control EnviroStor did not reveal any potentially hazardous sites within 1000 feet of the project site. The site is not known or anticipated to have been contaminated with hazardous materials and no hazardous material storage facilities are known to exist onsite. This mitigation measure is not applicable.

Project Level Mitigation Measure	Applicability to the Project
remedial action, if appropriate, and be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer. c) Implement the recommendations provided in the Phase II Environmental Site Assessment report, where such a report was determined to be necessary for the construction or operation of the project, for remedial action. d) Submit a copy of all applicable documentation required by local, state, and federal environmental regulatory agencies, including but not limited to: permit applications, Phase I and II Environmental Site Assessments, human health and ecological risk assessments, remedial action plans, risk management plans, soil management plans, and groundwater management plans. e) Conduct soil sampling and chemical analyses of samples, consistent with the protocols established by the U.S. EPA to determine the extent of potential contamination beneath all underground storage tanks (USTs), elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition or construction activities would potentially affect a particular development or building. f) Consult with the appropriate local, state, and federal environmental regulatory agencies to ensure sufficient minimization of risk to human health and environmental resources, both during and after construction, posed by soil contamination, groundwater contamination, or other surface hazards including, but not limited to, underground storage tanks, fuel distribution lines, waste pits and sumps. g) Obtain and submit written evidence of approval for any remedial action if required by a local, state, or federal environmental regulatory agency. h) Cease work if soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums, or other hazardous materials or wastes are encountered), in the vicinity of the suspect material. Secure the area as necessary and take all appropriate measures to protect human health and the environment, including but not limited to, notification of regulatory agencies and identification of the nature and extent of contamination. Stop work in the areas affected until the measures have been implemented consistent with the guidance of the appropriate regulatory oversight authority. i) Soil generated by construction activities should be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Complete sampling and handling and transport procedures for reuse or disposal, in accordance with applicable local, state and federal laws and policies. j) Groundwater pumped from the subsurface should be contained on-site in a secure and safe manner, prior	

Project Level Mitigation Measure	Applicability to the Project
to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Utilize engineering controls, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building. k) As needed and appropriate, prior to issuance of any demolition, grading, or building permit, submit for review and approval by the Lead Agency (or other appropriate government agency) written verification that the appropriate federal, state and/or local oversight authorities, including but not limited to the Regional Water Quality Control Board (RWQCB), have granted all required clearances and confirmed that the all applicable standards, regulations, and conditions have been met for previous contamination at the site. l) Develop, train, and implement appropriate worker awareness and protective measures to assure that worker and public exposure is minimized to an acceptable level and to prevent any further environmental contamination as a result of construction. m) If asbestos-containing materials (ACM) are found to be present in building materials to be removed, submit specifications signed by a certified asbestos consultant for the removal, encapsulation, or enclosure of the identified ACM in accordance with all applicable laws and regulations, including but not necessarily limited to: California Code of Regulations, Title 8; Business and Professions Code; Division 3; California Health and Safety Code Section 25915-25919.7; and other local regulations. n) Where projects include the demolitions or modification of buildings constructed prior to 1978, complete an assessment for the potential presence or lack thereof of ACM, lead based paint, and any other building materials or stored materials classified as hazardous waste by state or federal law. o) Where the remediation of lead-based paint has been determined to be required, provide specifications to the appropriate agency, signed by a certified Lead Supervisor, Project Monitor, or Project Designer for the stabilization and/or removal of the identified lead paint in accordance with all applicable laws and regulations, including but not necessarily limited to: California Occupational Safety and Health Administration's (Cal OSHA's) Construction Lead Standard, Title 8 California Code of Regulations (CCR) Section 1532.1 and Department of Health Services (DHS) Regulation 17 CCR Sections 35001–36100, as may be amended. If other materials classified as hazardous waste by state or federal law are present, the project sponsor should submit written confirmation to the appropriate local agency that all state and federal laws and regulations should be followed when profiling, handling, treating, transporting, and/or disposing of such materials.	
PMM HAZ-5: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should	The construction and operation of the proposed project would not place any permanent or temporary physical barriers on any existing public streets. To ensure compliance with zoning,

Project Level Mitigation Measure	Applicability to the Project
consider mitigation measures to reduce substantial adverse effects which may impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Continue to coordinate locally and regionally based on ongoing review and integration of projected transportation and circulation conditions. b) Develop new methods of conveying projected and real time information to citizens using emerging electronic communication tools including social media and cellular networks; c) Continue to evaluate lifeline routes for movement of emergency supplies and evacuation.	building and fire codes, the applicant is required to submit appropriate plans for plan review prior to the issuance of a building permit. Adherence to these requirements ensures that the project will not have a significant impact on emergency response and evacuation plans. This mitigation measure is not applicable.
Hydrology and Water Quality	
PMM HYD-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects from violation of any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Complete, and have approved, a Stormwater Pollution Prevention Plan (SWPPP) prior to initiation of construction. b) Implement Best Management Practices to reduce the peak stormwater runoff from the project site to the maximum extent practicable. c) Comply with the Caltrans storm water discharge permit as applicable; and identify and implement Best Management Practices to manage site erosion, wash water runoff, and spill control. d) Complete, and have approved, a Standard Urban Stormwater Management Plan, prior to occupancy of residential or commercial structures. e) Ensure adequate capacity of the surrounding stormwater system to support stormwater runoff from new or rehabilitated structures or buildings. f) Prior to construction within an area subject to Section 404 of the Clean Water Act, obtain all required permit approvals and certifications for construction within the vicinity of a watercourse: g) Where feasible, restore or expand riparian areas such that there is no net loss of impervious surface as a result of the project. h) Install structural water quality control features, such as drainage channels, detention basins, oil and grease traps, filter systems, and vegetated buffers to prevent pollution of adjacent water resources by polluted runoff where required by applicable urban storm water runoff discharge permits, on new facilities. i) Provide operational best management practices for street cleaning, litter control, and catch basin cleaning are implemented to prevent water quality degradation in compliance with applicable storm water runoff	Though the proposed project would add typical, urban, nonpoint source pollutants to stormwater runoff, the proposed project will comply with local regulations as required by the countywide MS4 permit regarding stormwater runoff. This would ensure the proposed project complies with this Mitigation Measure and would help avoid or reduce the potential impacts on water quality or related waste discharge requirements that are within the jurisdiction and authority of the Regional Water Quality Control Boards and other regulatory agencies. See Section 10, Hydrology and Water Quality, of the SCEA for further information.

Project Level Mitigation Measure	Applicability to the Project
discharge permits; and ensure treatment controls are in place as early as possible, such as during the acquisition process for rights-of-way, not just later during the facilities design and construction phase. j) Comply with applicable municipal separate storm sewer system discharge permits as well as Caltrans' storm water discharge permit including long-term sediment control and drainage of roadway runoff. k) Incorporate as appropriate treatment and control features such as detention basins, infiltration strips, and porous paving, other features to control surface runoff and facilitate groundwater recharge into the design of new transportation projects early on in the process to ensure that adequate acreage and elevation contours are provided during the right-of-way acquisition process. l) Upgrade stormwater drainage facilities to accommodate any increased runoff volumes. These upgrades may include the construction of detention basins or structures that will delay peak flows and reduce flow velocities, including expansion and restoration of wetlands and riparian buffer areas. System designs shall be completed to eliminate increases in peak flow rates from current levels. m) Encourage Low Impact Development (LID) and incorporation of natural spaces that reduce, treat, infiltrate and manage stormwater runoff flows in all new developments, where practical and feasible.	
PMM HYD-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects from violation of any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Avoid designs that require continual dewatering where feasible. For projects requiring continual dewatering facilities, implement monitoring systems and long-term administrative procedures to ensure proper water management that prevents degrading of surface water and minimizes adverse impacts on groundwater for the life of the project, Construction designs shall comply with appropriate building codes and standard practices including the Uniform Building Code. a) Maximize, where practical and feasible, permeable surface area in existing urbanized areas to protect water quality, reduce flooding, allow for groundwater recharge, and preserve wildlife habitat. Minimize new impervious surfaces, including the use of in-lieu fees and off-site mitigation. b) Avoid construction and siting on groundwater recharge areas, to prevent conversion of those areas to impervious surface. c) Reduce hardscape to the extent feasible to facilitate groundwater recharge as appropriate.	Though the proposed project would add typical, urban, nonpoint source pollutants to stormwater runoff, the proposed project will comply with local regulations as required by the countywide MS4 permit regarding stormwater runoff. This would ensure the proposed project complies with this Mitigation Measure and would help avoid or reduce the potential impacts on water quality or related waste discharge requirements that are within the jurisdiction and authority of the Regional Water Quality Control Boards and other regulatory agencies. See Section 10, Hydrology and Water Quality, of the SCEA for further information.

Project Level Mitigation Measure	Applicability to the Project
PMM HYD-4: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures capable of avoiding or reducing the potential impacts of locating structures that would impede or redirect flood flows, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Ensure that all roadbeds for new highway and rail facilities be elevated at least one foot above the 100-year base flood elevation. Since alluvial fan flooding is not often identified on FEMA flood maps, the risk of alluvial fan flooding should be evaluated and projects should be sited to avoid alluvial fan flooding. Delineation of floodplains and alluvial fan boundaries should attempt to account for future hydrologic changes caused by global climate change.	The proposed project would not substantially change the site's drainage patterns and would not alter a discernable drainage course resulting in flooding. The proposed project would be required to submit a drainage plan to the Building Division and the Department of Public Works for review and approval. Compliance with the City's drainage plan review and approval process would reduce the likelihood that the proposed project would lead to on-site or off-site flooding. This mitigation measure is not applicable.
Land Use and Planning	
PMM LU-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects that physically divide a community, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Facilitate good design for land use projects that build upon and improve existing circulation patterns b) Encourage implementing agencies to orient transportation projects to minimize impacts on existing communities by: — Selecting alignments within or adjacent to existing public rights of way. — Design sections above or below-grade to maintain viable vehicular, cycling, and pedestrian connections between portions of communities where existing connections are disrupted by the transportation project. — Wherever feasible incorporate direct crossings, overcrossings, or under crossings at regular intervals for multiple modes of travel (e.g., pedestrians, bicyclists, vehicles). c) Where it has been determined that it is infeasible to avoid creating a barrier in an established community, consider other measures to reduce impacts, including but not limited to: — Alignment shifts to minimize the area affected. — Reduction of the proposed right-of-way take to minimize the overall area of impact. — Provisions for bicycle, pedestrian, and vehicle access across improved roadways.	The proposed project consists of an infill development within a highly urbanized area of the City of Pasadena. The project would not physically divide an existing community. This mitigation measure is not applicable to the project.
PMM LU-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse	This mitigation measure is not applicable to the project as the proposed project would not physically divide an existing community and would not conflict with any land use plan,

Project Level Mitigation Measure	Applicability to the Project
effects that physically divide a community, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) When an inconsistency with the adopted general plan policy or land use regulation (adopted for the purpose of avoiding or mitigating an impact) is identified modify the transportation or land use project to eliminate the conflict; or, determine if the environmental, social, economic, and engineering benefits of the project warrant an amendment to the general plan or land use regulation.	policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.
Mineral Resources	
PMM MIN-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce the use of mineral resources that could be of value to the region, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Provide for the efficient use of known aggregate and mineral resources or locally important mineral resource recovery sites, by ensuring that the consumptive use of aggregate resources is minimized and that access to recoverable sources of aggregate is not precluded, as a result of construction, operation and maintenance of projects. b) Where avoidance is infeasible, minimize impacts to the efficient and effective use of recoverable sources of aggregate through measures that have been identified in county and city general plans, or other comparable measures such as: 1) Recycle and reuse building materials resulting from demolition, particularly aggregate resources, to the maximum extent practicable. 2) Identify and use building materials, particularly aggregate materials, resulting from demolition at other construction sites in the SCAG region, or within a reasonable hauling distance of the project site. 3) Design transportation network improvements in a manner (such as buffer zones or the use of screening) that does not preclude adjacent or nearby extraction of known mineral and aggregate resources following completion of the improvement and during long-term operations. 4) Avoid or reduce impacts on known aggregate and mineral resources and mineral resource recovery sites through the evaluation and selection of project sites and design features (e.g., buffers) that minimize impacts on land suitable for aggregate and mineral resource extraction by maintaining portions of MRZ-2 areas in open space or other general plan land use categories and zoning that allow for mining of mineral resources.	No active mining operations exist in the City of Pasadena. The project site is not within any of the areas designated by the City of Pasadena that may contain mineral resources. No active mining operations exist in the City of Pasadena and mining is not currently allowed within any of the City's designated land uses. This mitigation measure is not applicable.

Project Level Mitigation Measure	Applicability to the Project
Noise	
PMM NOISE-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Install temporary noise barriers during construction. b) Include permanent noise barriers and sound-attenuating features as part of the project design. Barriers could be in the form of outdoor barriers, sound walls, buildings, or earth berms to attenuate noise at adjacent sensitive uses. c) Schedule construction activities consistent with the allowable hours pursuant to applicable general plan noise element or noise ordinance d) Post procedures and phone numbers at the construction site for notifying the Lead Agency staff, local Police Department, and construction contractor (during regular construction hours and off-hours), along with permitted construction days and hours, complaint procedures, and who to notify in the event of a problem. e) Notify neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of anticipated times when noise levels are expected to exceed limits established in the noise element of the general plan or noise ordinance. f) Designate an on-site construction complaint and enforcement manager for the project. g) Ensure that construction equipment are properly maintained per manufacturers' specifications and fitted with the best available noise suppression devices (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds silencers, wraps). All intake and exhaust ports on power equipment shall be muffled or shielded. h) Use hydraulically or electrically powered tools (e.g., jack hammers, pavement breakers, and rock drills) for project construction to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust should be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves should be used, if such jackets are commercially available, and this could achieve a further reduction of 5 dBA. Quieter procedures should be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. i) Where feasible, design projects so that they are depressed below the grade of the existing noise-sensitive receptor, creating an effective barrier between the roadway and sensitive receptors. j) Where feasible, improve the acoustical insulation of	There would be no significant noise impacts associated with the proposed project, therefore this Mitigation Measure is not applicable. The proposed project is subject to the following regulatory compliance measures that avoid or reduce the significant effects of noise impacts that are in the jurisdiction and responsibility of public agencies and/or Lead Agencies: The project must comply with the City of Pasadena Noise Ordinance (Chapter 9.36 of the Pasadena Municipal Code) which establishes exterior noise standards by land use and the maximum duration of time that the noise standards may be exceeded without being considered a nuisance punishable by law. See Section 13, Noise, of the SCEA for more information

Project Level Mitigation Measure	Applicability to the Project
dwelling units where setbacks and sound barriers do not provide sufficient noise reduction. k) Using rubberized asphalt or "quiet pavement" to reduce road noise for new roadway segments, roadways in which widening or other modifications require re-pavement, or normal reconstruction of roadways where re-pavement is planned l) Projects that require pile driving or other construction noise above 90 dBA in proximity to sensitive receptors, should reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90 dBA; a set of site-specific noise attenuation measures should be completed under the supervision of a qualified acoustical consultant. m) Use land use planning measures, such as zoning, restrictions on development, site design, and buffers to ensure that future development is compatible with adjacent transportation facilities and land uses; n) Monitor the effectiveness of noise reduction measures by taking noise measurements and installing adaptive mitigation measures to achieve the standards for ambient noise levels established by the noise element of the general plan or noise ordinance. o) Use equipment and trucks with the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds, wherever feasible) for project construction. p) Stationary noise sources can and should be located as far from adjacent sensitive receptors as possible and they should be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the Lead Agency (or other appropriate government agency) to provide equivalent noise reduction. q) Use of portable barriers in the vicinity of sensitive receptors during construction. r) Implement noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings (for instance by the use of sound blankets), and implement if such measures are feasible and would noticeably reduce noise impacts. s) Monitor the effectiveness of noise attenuation measures by taking noise measurements. t) Maximize the distance between noise-sensitive land uses and new roadway lanes, roadways, rail lines, transit centers, park-and-ride lots, and other new noise-generating facilities. u) Construct sound reducing barriers between noise sources and noise-sensitive land uses. v) Stationary noise sources can and should be located as far from adjacent sensitive receptors as possible and they should be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the Lead Agency (or other appropriate government agency) to provide equivalent noise reduction.	

Project Level Mitigation Measure	Applicability to the Project
w) Use techniques such as grade separation, buffer zones, landscaped berms, dense plantings, sound walls, reduced-noise paving materials, and traffic calming measures. x) Locate transit-related passenger stations, central maintenance facilities, decentralized maintenance facilities, and electric substations away from sensitive receptors to the maximum extent feasible. y) Consult the SCAG Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities.	
PMM NOISE-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to vibration, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) For projects that require pile driving or other construction techniques that result in excessive vibration, such as blasting, determine the potential vibration impacts to the structural integrity of the adjacent buildings within 50 feet of pile driving locations. b) For projects that require pile driving or other construction techniques that result in excessive vibration, such as blasting, determine the threshold levels of vibration and cracking that could damage adjacent historic or other structure, and design means and construction methods to not exceed the thresholds. c) For projects where pile driving would be necessary for construction due to geological conditions, utilize quiet pile driving techniques such as predrilling the piles to the maximum feasible depth, where feasible. Predrilling pile holes will reduce the number of blows required to completely seat the pile and will concentrate the pile driving activity closer to the ground where pile driving noise can be shielded more effectively by a noise barrier/curtain. d) Restrict construction activities to permitted hours in accordance with local jurisdiction regulation. e) Properly maintain construction equipment and outfit construction equipment with the best available noise suppression devices (e.g., mufflers, silences, wraps). f) Prohibit idling of construction equipment for extended periods of time in the vicinity of sensitive receptors.	Implementation of Mitigation Measures NOI-1 and NOI-2, listed in Section 13, Noise, of the SCEA, would reduce potential vibration impacts during project construction to a less than significant level. These mitigation measures are comparable to PMM NOISE-2 of the SCAG Connect SoCal EIR.
Population and Housing	
PMM-POP-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce the displacement of existing housing, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Evaluate alternate route alignments and transportation facilities that minimize the displacement of homes and businesses. Use an	The project site does not contain any existing dwelling units. Therefore, the project would not displace existing housing and this mitigation measure is not applicable.

Project Level Mitigation Measure	Applicability to the Project
iterative design and impact analysis where impacts to homes or businesses are involved to minimize the potential of impacts on housing and displacement of people. b) Prioritize the use existing ROWs, wherever feasible. c) Develop a construction schedule that minimizes potential neighborhood deterioration from protracted waiting periods between right-of-way acquisition and construction. d) Review capacities of available urban infrastructure and augment capacities as needed to accommodate demand in locations where growth is desirable to the local lead Agency and encouraged by the SCS (primarily TPAs, where applicable). e) When General Plans and other local land use regulations are amended or updated, use the most recent growth projections and RHNA allocation plan.	
Public Services	
PMM PSP-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects of constructing new emergency response facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: • Coordinate with emergency response agencies to ensure that there are adequate governmental facilities to maintain acceptable service ratios, response times or other performance objectives for emergency response services and that any required additional construction of buildings is incorporated in to the project description. • Where current levels of services at the project site are found to be inadequate, provide fair share contributions towards infrastructure improvements, as appropriate and applicable, to mitigate identified CEQA impacts. • Project sponsors can and should develop traffic control plans for individual projects. Traffic control plans should include information on lane closures and the anticipated flow of traffic during the construction period. The basic objective of each traffic control plan (TCP) is to permit the contractor to work within the public right of way efficiently and effectively while maintaining a safe, uniform flow of traffic. The construction work and the public traveling through the work zone in vehicles, bicycles or as pedestrians must be given equal consideration when developing a traffic control plan.	This mitigation measure is not applicable to the project as the proposed project would not require the construction or alteration of emergency response facilities. See Section 15, Public Services, of the SCEA for further information.
PMM PSS-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects of constructing new or physically altered school facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Where construction or expansion of school facilities is required to meet public school service ratios, require school district fees, as applicable.	This mitigation measure is addressed as the project would require fees to reduce impacts as to a less than significant impact. A fee is collected by the City's Building Official for PSUD on each residential unit constructed, as well as a fee for non-residential development. Payment of this fee mitigates any impacts on schools.

Project Level Mitigation Measure	Applicability to the Project
P**MM PSL-1:** In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects of construction of new or altered library facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Where construction or expansion of library facilities is required to meet public library service ratios, require library fees, as appropriate and applicable, to mitigate identified CEQA impacts.	This mitigation measure is not applicable as the project would not cause a significant impact with regard to library services. The City as a whole is well served by its Public Information (library) System; and the project would not significantly impact library services and no new or expanded library facilities would be needed.
Recreation	
PMM REC-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects on the use of existing neighborhood and regional parks or other recreational facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Prior to the issuance of permits, where projects require the construction or expansion of recreational facilities or the payment of equivalent Quimby fees, consider increasing the accessibility to natural areas and lands for outdoor recreation from the proposed project area, in coordination with local and regional open space planning and/or responsible management agencies. b) Prior to the issuance of permits, where projects require the construction or expansion of recreational facilities or the payment of equivalent Quimby fees, encourage patterns of urban development and land use which reduce costs on infrastructure and make better use of existing facilities, using strategies such as: i. Increasing the accessibility to natural areas for outdoor recreation ii. Utilizing “green” development techniques iii. Promoting water-efficient land use and development iv. Encouraging multiple uses, such as the joint use of schools v. Including trail systems and trail segments in General Plan recreation standards.	In accordance with Ordinance No. 6252, the City collects a park impact fee for each residential unit constructed and on each residential addition over 400 sq. ft. in size. These fees are used to fund land acquisition and capital improvements. The project itself would not lead to substantial physical deterioration of any recreational facilities, and would have no related significant impacts.
Transportation	
PMM-TRA-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to transportation-related impacts, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: • Transportation demand management (TDM) strategies should be incorporated into individual land use and transportation projects and plans, as part of the planning process. Local agencies should incorporate strategies identified in the Federal Highway Administration’s publication: Integrating	The project would be subject to City standards for vehicle miles traveled (VMT) per capita, proximity and quality of bicycle network, proximity and quality of transit network, and pedestrian accessibility, as well as the Congestion Management Plan. Transportation impacts were concluded to be less than significant. See Section 17, Transportation, of the SCEA for further information.

Project Level Mitigation Measure	Applicability to the Project
Demand Management into the Transportation Planning Process: A Desk Reference (August 2012) into the planning process (FHWA 2012). For example, the following strategies may be included to encourage use of transit and non-motorized modes of transportation and reduce vehicle miles traveled on the region's roadways: — include TDM mitigation requirements for new developments; — incorporate supporting infrastructure for non-motorized modes, such as, bike lanes, secure bike parking, sidewalks, and crosswalks; — provide incentives to use alternative modes and reduce driving, such as, universal transit passes, road and parking pricing; — implement parking management programs, such as parking cash-out, priority parking for carpools and vanpools; — develop TDM-specific performance measures to evaluate project-specific and system-wide performance; — incorporate TDM performance measures in the decision-making process for identifying transportation investments; — implement data collection programs for TDM to determine the effectiveness of certain strategies and to measure success over time; and — set aside funding for TDM initiatives. — The increase in per capita VMT on facilities experiencing LOS F represents a significant impact compared to existing conditions. To assess whether implementation of these specific mitigation strategies would result in measurable traffic congestion reductions, implementing actions may need to be further refined within the overall parameters of the proposed Plan and matched to local conditions in any subsequent project-level environmental analysis.	
PMM TRA-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects which may substantially impair implementation of an adopted emergency response plan or emergency evacuation plan, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Prior to construction, project implementation agencies can and should ensure that all necessary local and state road and railroad encroachment permits are obtained. The project implementation agency can and should also comply with all applicable conditions of approval. As deemed necessary by the governing jurisdiction, the road	The ingress and egress for the site have been evaluated by the PasDOT and found to be adequate for emergency access or access to nearby uses. The project does not involve the elimination of a through-route, does not involve the narrowing of a roadway, and all proposed roadways, access roads and drive lanes meet the Pasadena Fire Department's access standards. The project must comply with all State and local Building, Fire and Safety Codes and plans are subject to review and approval by the Public Works and the Transportation Departments, and the Building Division and Fire Department. Therefore, there will would be no significant impacts related to inadequate emergency access.

Project Level Mitigation Measure	Applicability to the Project
encroachment permits may require the contractor to prepare a traffic control plan in accordance with professional engineering standards prior to construction. Traffic control plans can and should include the following requirements: — Identification of all roadway locations where special construction techniques (e.g., directional drilling or night construction) would be used to minimize impacts to traffic flow. — Development of circulation and detour plans to minimize impacts to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone. — Scheduling of truck trips outside of peak morning and evening commute hours. — Limiting of lane closures during peak hours to the extent possible. — Usage of haul routes minimizing truck traffic on local roadways to the extent possible. — Inclusion of detours for bicycles and pedestrians in all areas potentially affected by project construction. — Installation of traffic control devices as specified in the California Department of Transportation Manual of Traffic Controls for Construction and Maintenance Work Zones. — Development and implementation of access plans for highly sensitive land uses such as police and fire stations, transit stations, hospitals, and schools. The access plans would be developed with the facility owner or administrator. To minimize disruption of emergency vehicle access, affected jurisdictions can and should be asked to identify detours for emergency vehicles, which will then be posted by the contractor. Notify in advance the facility owner or operator of the timing, location, and duration of construction activities and the locations of detours and lane closures. — Storage of construction materials only in designated areas. — Coordination with local transit agencies for temporary relocation of routes or bus stops in work zones, as necessary. — Ensure the rapid repair of transportation infrastructure in the event of an emergency through cooperation among public agencies and by identifying critical infrastructure needs necessary for: a) emergency responders to enter the region, b) evacuation of affected facilities, and c) restoration of utilities.	

Project Level Mitigation Measure	Applicability to the Project
— Enhance emergency preparedness awareness among public agencies and with the public at large.	
Tribal Cultural Resources	
PMM TCR-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects on tribal cultural resources, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria; b) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following: protecting the cultural character and integrity of the resource; protecting the traditional use of the resource; and protecting the confidentiality of the resource; c) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places; and protecting the resource.	In compliance with this mitigation measure, the Lead Agency has considered mitigation measures consistent with Section 15064.5 of the State CEQA Guidelines and, accordingly, incorporated a comparable mitigation measure. Mitigation Measure TCR-1, in Section 18, Tribal Cultural Resources, of the SCEA would reduce impacts to tribal cultural resources to a less than significant level.
Utilities and Service Systems	
PMM USSW-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce the generation of solid waste, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: Integrate green building measures with CALGreen (California Building Code Title 24) into project design, including but not limited to the following: a) Reuse and minimization of construction and demolition (C&D) debris and diversion of C&D waste from landfills to recycling facilities. b) Inclusion of a waste management plan that promotes maximum C&D diversion. c) Source reduction through (1) use of materials that are more durable and easier to repair and maintain, (2) design to generate less scrap material through dimensional planning, (3) increased recycled content, (4) use of reclaimed materials, and (5) use of structural materials in a dual role as finish material (e.g., stained concrete flooring, unfinished ceilings, etc.). d) Reuse of existing structure and shell in renovation projects. e) Development of indoor recycling program and space. f) Discourage the siting of new landfills unless all other	This Mitigation Measure is not applicable to the proposed project. Solid waste generated from construction and operation of the proposed project would be able to be sufficiently served by available landfills, and the proposed project would comply with AB 939, which requires California cities to achieve at least a 50 percent diversion rate for all solid waste, and would be subject to PMC Chapters 8.61 and 8.62 relating to waste recycling and construction waste. Further, the proposed project would be required to meet the standards of California Green Building Standards Code, and would be required to comply with design requirements for refuge storage areas (PMC Section 17.40.120).

Project Level Mitigation Measure	Applicability to the Project
waste reduction and prevention actions have been fully explored. If landfill siting or expansion is necessary, site landfills with an adequate landfill-owned, undeveloped land buffer to minimize the potential adverse impacts of the landfill in neighboring communities. g) Discourage exporting of locally generated waste outside of the SCAG region during the construction and implementation of a project. Encourage disposal within the county where the waste originates as much as possible. Promote green technologies for long-distance transport of waste (e.g., clean engines and clean locomotives or electric rail for waste-by-rail disposal systems) and consistency with SCAQMD and Connect SoCal policies can and should be required. h) Encourage waste reduction goals and practices and look for opportunities for voluntary actions to exceed the 80 percent waste diversion target. i) Encourage the development of local markets for waste prevention, reduction, and recycling practices by supporting recycled content and green procurement policies, as well as other waste prevention, reduction and recycling practices. j) Develop ordinances that promote waste prevention and recycling activities such as: requiring waste prevention and recycling efforts at all large events and venues; implementing recycled content procurement programs; and developing opportunities to divert food waste away from landfills and toward food banks and composting facilities. k) Develop and site composting, recycling, and conversion technology facilities that have minimum environmental and health impacts. l) Integrate reuse and recycling into residential industrial, institutional and commercial projects. m) Provide education and publicity about reducing waste and available recycling services. n) Implement or expand city or county-wide recycling and composting programs for residents and businesses. This could include extending the types of recycling services offered (e.g., to include food and green waste recycling) and providing public education and publicity about recycling services.	
PMM-USWW-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects on utilities and service systems, particularly for construction of wastewater facilities, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: • During the design and CEQA review of individual future projects, implementing agencies and projects sponsors shall determine whether sufficient wastewater capacity exists for the proposed projects. There CEQA determinations must ensure that the proposed development can be served by its existing or planned treatment capacity. If adequate capacity does not exist, project sponsors shall	The proposed project would be subject to a County Sanitation Districts' sewer connection fee when the project is hooked up to a sewer line. In order to cover current and future infrastructure costs for sewer facilities located in the City, the proposed project may also be subject to a Sewer Facility Fee Charge as specified under PMC 4.53, if it is determined that there is an increase in the average daily flow compared to existing conditions. Therefore, impacts on available wastewater treatment capacity of the wastewater treatment plants that serve the project site would be less than significant.

Project Level Mitigation Measure	Applicability to the Project
coordinate with the relevant service provider to ensure that adequate public services and utilities could accommodate the increased demand, and if not, infrastructure improvements for the appropriate public service or utility shall be identified in each project's CEQA documentation. The relevant public service provider or utility shall be responsible for undertaking project-level review as necessary to provide CEQA clearance for new facilities.	
PMM USWS-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to ensure sufficient water supplies, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Reduce exterior consumptive uses of water in public areas, and should promote reductions in private homes and businesses, by shifting to drought-tolerant native landscape plantings, using weather-based irrigation systems, educating other public agencies about water use, and installing related water pricing incentives. b) Promote the availability of drought-resistant landscaping options and provide information on where these can be purchased. Use of reclaimed water especially in median landscaping and hillside landscaping can and should be implemented where feasible. c) Implement water conservation best practices such as low-flow toilets, water-efficient clothes washers, water system audits, and leak detection and repair. d) For projects located in an area with existing reclaimed water conveyance infrastructure and excess reclaimed water capacity, use reclaimed water for non- potable uses, especially landscape irrigation. For projects in a location planned for future reclaimed water service, projects should install dual plumbing systems in anticipation of future use. Large developments could treat wastewater onsite to tertiary standards and use it for non-potable uses onsite.	This mitigation measure is not applicable for the proposed project. Impacts from the project on water supply are analyzed in Section 19, Utilities and Service Systems, of the SCEA. Impacts were found to be less than significant and therefore, mitigation is not required.
Wildfire	
PMM WF-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to wildfire risk, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Launch fire prevention education for local cities and counties such that local fire agencies, homeowners, as well as commercial and industrial businesses are aware of potential sources of fire ignition and the related procedures to curb or lessen any activities that might initiate fire ignition. b) Ensure structures in high fire risk areas are built to current state and federal standards which serve to greatly increase the chances the structure will survive a wildfire and also allow for people to shelter-in-place. c) Improve road access for emergency response and evacuation so people can evacuate safely and timely	This mitigation measure is not applicable to the proposed project as impacts would be less than significant. The project site is in a low fire hazard zone. In the event a fire begins during construction or operation of the project, the nearest fire station is the City of Pasadena Fire Station No. 31, located approximately 130 feet from the project site. Being in a developed urban area, there are several fire protection facilities in the project vicinity that could respond to an emergency at the site. There would be a less than significant impact and no mitigation is required.

Project Level Mitigation Measure	Applicability to the Project
when necessary. d) Improve, and educate regarding, local emergency communications and notifications with residents and businesses. e) Enforce defensible space regulations to keep overgrown and unmanaged vegetation, accumulations of trash and other flammable material away from structures. f) Provide public education about wildfire risk and fire prevention measures, and safety procedures and practices to allow for safe evacuation and/or options to shelter-in-place	
PMM WF-2: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to wildfire risk, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency: a) New development or infrastructure activity within very high hazard severity zones or SRAs shall be required to — Submit a fire protection plan including the designation of fire watch staff; — Maintain water and other fire suppression equipment designated solely for firefighting on site for any construction and maintenance activities; — Locate construction and maintenance equipment in designated "safe areas" such that they do not discharge combustible materials; and — Designate trained fire watch staff during project construction to reduce risk of fire hazards.	This mitigation measure is not applicable to the proposed project as impacts would be less than significant. The project site is in a low fire hazard zone. In the event a fire begins during construction or operation of the project, the nearest fire station is the City of Pasadena Fire Station No. 31, located approximately 130 feet from the project site. Being in a developed urban area, there are several fire protection facilities in the project vicinity that could respond to an emergency at the site. There would be a less than significant impact and no mitigation is required.

Source: SCAG Connect SoCal (2020 – 2045 Regional Transportation Plan/ Sustainable Communities Strategy.

Table 2
2015 Pasadena General Plan EIR Applicable Mitigation Measures

Mitigation Measure	Applicability to the Project
Air Quality	
2-1. Prior to issuance of any construction permits, development project applicants shall prepare and submit to the City of Pasadena Planning Division a technical assessment evaluating potential project constructionrelated air quality impacts. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (SCAQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the SCAQMD-adopted thresholds of significance, the City of Pasadena Planning Division shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Division. Mitigation measures to reduce construction-related emissions include, but are not limited to:	The proposed project is subject to the South Coast Air Quality Management District (SCAQMD) rules and regulations mentioned in Section 3, Air Quality of the SCEA. Upon compliance, the project would satisfy the applicable requirements of this mitigation measure. The projects impacts to Air Quality were analyzed in Section 3, Air Quality, of the SCEA and were found to be less than significant and the project would not require any mitigation measures for this impact.

• Requiring fugitive-dust control measures that exceed SCAQMD's Rule 403, such as: • Use of nontoxic soil stabilizers to reduce wind erosion • Applying water every four hours to active soil-disturbing activities. • Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials. • Using construction equipment rated by the United States Environmental Protection Agency as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emission limits, applicable for engines between 50 and 750 horsepower. • Ensuring that construction equipment is properly serviced and maintained to the manufacturer's standards. • Limiting nonessential idling of construction equipment to no more than five consecutive minutes. • Using Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the SCAQMD's website at http://www.aqmd.gov/prdas/brochures/SuperCompliant_AIM.pdf.	
2.2. Prior to future discretionary project approval, development project applicants shall prepare and submit to the City of Pasadena Planning Division a technical assessment evaluating potential project operation phase-related air quality impacts. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (SCAQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the SCAQMD-adopted thresholds of significance, the City of Pasadena Planning Division shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the Standard Conditions of Approval. Below are possible mitigation measures to reduce long-term emissions: • For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plugin of the anticipated number of refrigerated trailers to reduce idling time and emissions. • Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use. • Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 § 2485). • Site-specific development shall demonstrate that an adequate number of electrical vehicle Level 2 charging stations are provided onsite. The location of the electrical outlets shall be specified on building plans, and proper installation shall be verified by the Building Division prior to issuance of a Certificate of Occupancy. • Applicant-provided appliances shall be Energy Star appliances (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star appliances shall be verified by the Building & Safety Division during plan check. • Applicants for future development projects along existing and planned transit routes shall coordinate with the City of Pasadena, Metro, and Foothill Transit to ensure that bus pads and shelters are incorporated, as appropriate.	The proposed project complies with this Mitigation Measure as the analysis required by this measure has been included in the analysis for the proposed project. The project's construction and operational emissions do not exceed applicable thresholds with compliance with SCAQMD regulations and implementation of project-specific mitigation. See Section 3, Air Quality, of the SCEA for further detail.

2-3. Prior to future discretionary project approval, applicants for new industrial or warehousing land uses that 1) have the potential to generate 100 or more diesel truck trips per day or have 40 or more trucks with operating diesel-powered transport refrigeration units, and 2) are within 1,000 feet of a sensitive land use (e.g., residential, schools, hospitals, or nursing homes), as measured from the property line of the project to the property line of the nearest sensitive use, shall submit a health risk assessment (HRA) to the City of Pasadena Planning Division. The HRA shall be prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment and the South Coast Air Quality Management District. If the HRA shows that the incremental cancer risk and/or noncancer hazard index exceeds the respective thresholds, as established by the SCAQMD at the time a project is considered, the applicant will be required to identify and demonstrate that best available control technologies for toxics (T-BACTs), including appropriate enforcement mechanisms, are capable of reducing potential cancer and noncancer risks to an acceptable level. T-BACTs may include, but are not limited to, restricting idling onsite or electrifying warehousing docks to reduce diesel particulate matter, or requiring use of newer equipment and/or vehicles. T-BACTs identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.	This Mitigation Measure is not relevant to the project because the project does not involve new industrial or warehousing land uses.
2.4. Prior to future discretionary approval, the City of Pasadena Planning Division shall evaluate new development proposals for sensitive land uses (e.g., residences, schools, and day care centers) within the City for potential incompatibilities with regard to the California Air Resources Board's Air Quality and Land Use Handbook: A Community Health Perspective (April 2005). In addition, applicants for siting or expanding sensitive land uses that are within the recommended buffer distances listed in Table 1-1 of the CARB Handbook shall submit a health risk assessment (HRA) to the City of Pasadena. The HRA shall be prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment (OEHHA) and the South Coast Air Quality Management District (SCAQMD). The latest OEHHA guidelines shall be used for the analysis, including age sensitivity factors, breathing rates, and body weights appropriate for children. If the HRA shows that the incremental cancer risk and/or noncancer hazard index exceeds the respective thresholds, as established by the SCAQMD at the time a project is considered, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and noncancer risks to an acceptable level (i.e., below the aforementioned thresholds as established by the SCAQMD), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to: • Air intakes oriented away from high-volume roadways and/or truck loading zones. • Heating, ventilation, and air conditioning systems of the buildings provided with appropriately sized maximum efficiency rating value (MERV) filters. • Heating, ventilation, and air conditioning systems for units that are installed with MERV filters shall maintain positive pressure within the building's filtered ventilation system to reduce infiltration of unfiltered outdoor air Mitigation measures identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of the proposed project. The air intake design and MERV filter requirements shall be noted and/or reflected on all building plans submitted to the City and shall be verified by the City's Planning Division. The intent of this mitigation measure is to reflect current CARB and SCAQMD Guidance/Standards as well as CEQA legislation and case law, and the City implementation of the measure shall adhere to current standards/law at the time such analyses are undertaken.	This Mitigation Measure is not relevant to the project's CEQA document as a result of the 2015 California Supreme Court's decision in the California Building Industry Association v. Bay Area Air Quality Management District (2015) case.
2.5. Prior to future discretionary approval, if it is determined that a project has the potential to emit nuisance odors beyond the property line, an odor	This Mitigation Measure is not relevant to the proposed project as the development of mixed-

management plan shall be prepared by the project applicant, subject to review and approval by the Planning & Community Development Director or their designee. Facilities that have the potential to generate nuisance odors include but are not limited to: • Wastewater treatment plants • Composting, green waste, or recycling facilities • Fiberglass manufacturing facilities • Painting/coating operations • Large-capacity coffee roasters • Food-processing facilities The odor management plan shall show compliance with the South Coast Air Quality Management District's Rule 402 for nuisance odors. The Odor Management Plan shall identify the best available control technologies for toxics (T-BACTs) that will be utilized to reduce potential odors to acceptable levels, including appropriate enforcement mechanisms. T-BACTs may include but are not limited to scrubbers (i.e., air pollution control devices) at the industrial facility. TBACTs identified in the odor management plan shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.	use projects involving residential and commercial and residential uses are not typically associated with odor nuisances or complaints. Further, the project would comply with SCAQMD Rule 402, which prohibits the discharge of air contaminants that would cause injury, detriment, nuisance, or annoyance to the public.
Biological Resources	
3.1. The City of Pasadena shall require applicants of future development projects that disturb undeveloped land in the San Rafael Hills and tract of land at the northwest intersection of Crestford Drive and Florecita Drive, shown on Figure 5.3-2, to prepare a biological resources survey. The survey shall be conducted by a qualified biologist and shall be a reconnaissance level field survey of the project site for the presence and quality of biological resources potentially affected by project development. These resources include, but are not limited to, special status species or their habitat, sensitive habitats such as wetlands or riparian areas, and jurisdictional waters. If sensitive or protected biological resources are absent from the project site and adjacent lands potentially affected by the project, the biologist shall submit a written report substantiating such to the City of Pasadena before issuance of a grading permit by the City, and the project may proceed without any further biological investigation. If sensitive or protected biological resources are present on the project site or may be potentially affected by the project, implementation of Mitigation Measure 3-2 shall be required.	This Mitigation Measure is not relevant to the proposed project is not located near undeveloped land in the San Rafael Hills or tract of land at the northwest intersection of Crestford Drive and Florecita Drive, shown on Figure 5.3-2 of the General Plan EIR. The project site is in an urbanized area within the City of Pasadena. The project site does not contain any critical habitat or support any species identified or designated as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. Further the project site is not located on protected wetlands that are in the jurisdiction and responsibility of the U.S. Army Corps of Engineers, public agencies and/or Lead Agencies.
3.2. A qualified biologist shall evaluate impacts to sensitive or protected biological resources from development. The impact assessment may require focused surveys that determine absence or presence and distribution of biological resources on the site. These surveys may include, but are not limited to: 1) focused special status animal surveys if suitable habitat is present; 2) appropriately timed focused special status plant surveys that will maximize detection and accurate identification of target plant species; and 3) a delineation of jurisdictional boundaries around potential wetlands, riparian habitat, and waters of the United States or State. The results of these surveys will assist in assessing actual project impacts, and with the development of project specific mitigation measures. Alternatively, the project applicant may forgo focused plant and animal surveys and assume presence of special status species in all suitable habitats on the project site. The qualified biologist shall substantiate the impact evaluation or the assumed presence of special-status species in all suitable habitats onsite in a written report submitted to the City of Pasadena before issuance of a grading permit by the City.	This Mitigation Measure is not relevant to the proposed project is not located near undeveloped land in the San Rafael Hills or tract of land at the northwest intersection of Crestford Drive and Florecita Drive, shown on Figure 5.3-2 of the General Plan EIR. The project site is located in an urbanized area of the City, and therefore the project site is not located within or adjacent to migratory fish, wildlife species, or established native resident and/or migratory wildlife corridors, and native wildlife nursery sites.
3.3. The City of Pasadena shall require applicants of development project to avoid potential impacts to sensitive or protected biological resources to the greatest extent feasible. Depending on the resources potentially present on the project site, avoidance may include: 1) establishing appropriate no-disturbance buffers around onsite or adjacent resources, and/or 2) initiating	This Mitigation Measure is not applicable to the proposed project as the project is located in a developed urban area and does not involve the dispersal of wildlife nor would the project result in a barrier to migration or movement. This

construction at a time when special status or protected animal species will not be vulnerable to project-related mortality (e.g., outside the avian nesting season or bat maternal or wintering roosting season). Consultation with relevant regulatory agencies may be required in order to establish suitable buffer areas. If the project avoids all sensitive or protected biological resources, no further action is required. If avoidance of all significant impacts to sensitive or protected biological resources is not feasible, the project shall implement Mitigation Measure 3-4.	Mitigation Measure is not relevant to the proposed project as the project site does not contain any critical habitat or support any species identified or designated as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. The project site is located in an urbanized area of the City and is not identified as a vegetation zone that could serve as species' habitat. The project would also comply with the Migratory Bird Treaty Act which governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests.
3.4. The City of Pasadena shall require applicants to design development projects to minimize potential impacts to sensitive or protected biological resources to the greatest extent feasible, in consultation with a qualified biologist and/or appropriate regulatory agency staff. Minimization measures may include 1) exclusion and/or silt fencing, 2) relocation of impacted resources, 3) construction monitoring by a qualified biologist, and 4) an informative training program conducted by a qualified biologist for construction personnel on sensitive biological resources that may be impacted by project construction. If minimization of all significant impacts to sensitive or protected biological resources is infeasible, the project shall implement Mitigation Measure 3-5.	This Mitigation Measure is not applicable to the proposed project as the project is located in a developed urban area and does not involve the dispersal of wildlife nor would the project result in a barrier to migration or movement. This Mitigation Measure is not relevant to the proposed project as the project site does not contain any critical habitat or support any species identified or designated as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. The project site is located in an urbanized area of the City and is not identified as a vegetation zone that could serve as species' habitat. The project would also comply with the Migratory Bird Treaty Act which governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests.
3.5. A qualified biologist will develop appropriate mitigations that will reduce project impacts to sensitive or protected biological resources to a less than significant level, if feasible. The type and amount of mitigation will depend on the resources impacted, the extent of the impacts, and the quality of habitats to be impacted. Mitigations may include, but are not limited to: 1) compensation for lost habitat or waters in the form of preservation or creation of in-kind habitat or waters, either onsite or offsite, protected by conservation easement; 2) purchase of appropriate credits from an approved mitigation bank servicing the Pasadena area; and 3) payment of in-lieu fees.	This Mitigation Measure is not applicable to the proposed project as the project is located in a developed urban area and does not involve the dispersal of wildlife nor would the project result in a barrier to migration or movement. This Mitigation Measure is not relevant to the proposed project as the project site does not contain any critical habitat or support any species identified or designated as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. The project site is located in an urbanized area of the City and is not identified as a vegetation zone that could serve as species' habitat. The project would also comply with the Migratory Bird Treaty Act which governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests.
3.6. Applicants of projects developed pursuant to the General Plan Update shall obtain appropriate permit authorization(s) for impacts to jurisdictional waters, wetlands, and/or riparian habitats. The types of permits potentially required for impacts to jurisdictional waters are a Clean Water Act (Section 404) permit issued by the US Army Corps of Engineers, a California Water Certificate or Waste Discharge Order issued by the Regional Water Quality Control Board, and a Stream Alteration Agreement issued by the California Department of Fish and Wildlife	This Mitigation Measure is not relevant to the proposed project as the project site is not located on protected wetlands or other jurisdictional waters that are in the jurisdiction and responsibility of the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, or the California Department of Fish and Wildlife.

Cultural Resources	
4.1. If cultural resources are discovered during construction of land development projects in Pasadena that may be eligible for listing in the California Register for Historic Resources, all ground disturbing activities in the immediate vicinity of the find shall be halted until the find is evaluated by a Registered Professional Archaeologist. If testing determines that significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates as applicable, and other special studies; and provide a comprehensive final report including site record to the City and the South Central Coastal Information Center at California State University Fullerton. No further grading shall occur in the area of the discovery until Planning Department approves the report.	The proposed project would not result in a substantial adverse change in the significance of the Old Pasadena Historic District or the Hotel Green/Castle Green or the building at 84 South Fair Oaks Avenue. Impacts on historical resources are less than significant and no mitigation measures are required. See Section 5, Cultural Resources, of the SCEA for further information.
4.2. The City shall require applicants for development permits that involve grading in areas within the paleontologically sensitive Topanga formation (see Figure 5.4-2 of the DEIR) to provide studies by a qualified paleontologist assessing the sensitivity of the project for buried paleontological resources. On properties determined to be moderately to highly sensitive for paleontological resources, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified paleontologist. The mitigation plan shall include the following requirements: • A paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities more than six feet below the ground surface. • Should any potentially significant fossil resources be discovered, no further grading shall occur in the area of the discovery until the Planning and Community Development Director concurs in writing that adequate provisions are in place to protect any significant resources. Work may continue outside a minimum radius of 25 feet from the discovery pending review by the Director. • Unanticipated discoveries shall be evaluated for significance by a qualified paleontologist. If evaluation determines that significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates as applicable, and other special studies; and provide a comprehensive final report, including catalog with museum numbers.	This Mitigation Measure is not relevant to the proposed project is not located within the Topanga formation , as shown on Figure 5.4-2 of the City's General Plan EIR.
Greenhouse Gas Emissions	
5.1. Within approximately 18 months of adoption of the proposed General Plan Update, the City of Pasadena shall prepare and present to the City Council for adoption a community climate action plan/greenhouse gas reduction plan (Plan). The Plan shall identify strategies to be implemented to reduce GHG emissions associated with the City, and shall include as one alternative a program that achieves the AB 32 targets. In addition, the City shall monitor GHG emissions by updating its community-wide GHG emissions inventory every five years upon adoption of the initial Plan. Upon the next update to the Plan, the inventory, GHG reduction measures, and GHG reductions shall be forecast to year 2035 to ensure progress toward achieving the interim target that aligns with the longterm GHG reduction goals of Executive Order S-03-04. The Plan update shall take into account the reductions achievable from federal and state actions and measures as well as ongoing work by the City and the private sector. The 2035 Plan update shall be completed by January 1, 2021, with a plan to achieve GHG reductions for 2035 or 2040, provided the state has an actual plan to achieve reductions for 2035 or 2040. New reduction programs in similar sectors as the proposed Plan (building energy, transportation, waste, water, wastewater, agriculture, and others) will likely be necessary. Future targets shall be considered in alignment with state reduction targets, to the maximum extent feasible, but it is premature at this time to determine whether or not such targets can be feasibly met through the combination of federal, state, and local action given technical, logistical and financial constraints. Future updates to the Plan shall account for the horizon beyond 2035 as the state	This Mitigation Measure is not relevant to the proposed project as the development of a community action plan/greenhouse reduction plan is a City-directed measure and is under City jurisdiction. It is not applicable at the project level. Furthermore, impacts regarding the generation of greenhouse gas emissions were analyzed in Section 8, Greenhouse Gas Emissions, in the SCEA. The proposed project would be consistent with the Pasadena Climate Action Plan by incorporating applicable actions intended to ensure that the project contributes its fair share to the City's cumulative GHG reduction goals. The project would have a less than significant GHG impact and therefore mitigation is not required.

adopts actual plans to meet post-2035 targets. In all instances, the Plan and any updates shall be consistent with state and federal law	
Noise	
9.1. Prior to issuance of building and occupancy permits, applicants of industrial projects that involve vibration-intensive machinery or activities adjacent to sensitive receptors shall prepare a study to evaluate potential vibration impacts. The study shall prepared by an acoustical engineer and be submitted to the City of Pasadena Planning Division. The study shall evaluate the vibration levels associated with operation of project-related equipment and activities experienced by nearby sensitive receptors. If it is determined that vibration impacts to nearby receptors exceed the Federal Transit Administration (FTA) vibration-annoyance criterion, the study shall recommend and the applicant shall implement the identified measures with the purpose of reducing vibration impacts to a less than significant level. The City of Pasadena shall verify implementation of all identified measures.	Implementation of Mitigation Measures NOI-1 and NOI-2, listed in Section 13, Noise, of the SCEA, would reduce potential vibration impacts during project construction to a less than significant level.
9.2. Prior to issuance of building permits for the new construction of habitable area, applicants for development projects shall adhere to the appropriate Vibration Category 2 and Vibration Category 3 screening distances for light rail transit as recommended in Table 9- 2 of the Federal Transit Administration's (FTA) Transit Noise and Vibration Impact Assessment (FTA 2006) in evaluating vibration impacts related to trains on the Metro Gold Line. Applicants for development projects that fall within the screening distances shall prepare and submit to the City of Pasadena Planning Division a study evaluating vibration impacts to the proposed development from train operations. The study shall be prepared by an acoustical engineer who shall identify measures to reduce impacts to habitable structures to below the FTA vibration annoyance criterion. The identified measures shall be incorporated into all design plans submitted to the City of Pasadena.	This Mitigation Measure is not relevant to the proposed project since the project site would not be within the FTA screening distances for light rail transit. FTA recommended screening distance for light rail transit in relation to residential uses is 150 feet between the rail tracks and the property line. The nearest station is approximately one-quarter mile and therefore, the proposed project would be outside of the appropriate screening distances for light rail transit and would not be affected by vibration impacts from train operations.
9.3. Prior to issuance of any grading and construction permits, applicants for individual projects that involve vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, within 25 feet of sensitive receptors (e.g., residences and historic structures) shall prepare and submit to the City of Pasadena Planning Division a study to evaluate potential construction-related vibration impacts. The study shall be prepared by an acoustical engineer and shall identify measures to reduce impacts to habitable structures to below the FTA vibration annoyance criterion. If construction-related vibration is determined to be perceptible at vibration-sensitive uses, additional requirements, such as use of less-vibration-intensive equipment or construction technique, shall be implemented during construction (e.g., drilled piles, static rollers, and nonexplosive rock blasting). Identified measures shall be included on all construction and building documents and submitted for verification to the City of Pasadena Planning Division.	Implementation of Mitigation Measures NOI-1 and NOI-2, listed in Section 13, Noise, of the SCEA, would reduce potential vibration impacts during project construction to a less than significant level.
9.4. Prior to issuance of any construction permits, applicants for individual projects that involve vibration-intensive construction activities, such as pile drivers, jack hammers, bulldozers, and vibratory rollers, within 25 feet of sensitive receptors (e.g., residences) or 50 feet of historic structures, shall prepare and submit to the City of Pasadena Planning Division a study to evaluate potential construction-related vibration impacts. The vibration assessment shall be prepared by an acoustical engineer and be based on the FTA vibration-induced architectural damage criterion. If the study determines a potential exceedance of the FTA thresholds, measures shall be identified that ensure vibration levels are reduced to below the thresholds. Measures to reduce vibration levels can include use of less-vibration-intensive equipment (e.g., drilled piles and static rollers) and/or construction techniques (e.g., nonexplosive rock blasting and use of hand tools) and preparation of a preconstruction survey report to assess the condition of the affected sensitive structure. Notwithstanding the above, pile drivers shall not be allowed within 150 feet of any historic structures. Identified measures shall be included on all construction and building documents and submitted for verification to the City of Pasadena Planning Division.	Implementation of Mitigation Measures NOI-1 and NOI-2, listed in Section 13, Noise, of the SCEA, would reduce potential vibration impacts during project construction to a less than significant level.

Prior to issuance of construction permits, applicants for new development projects within 500 feet of noise-sensitive receptors shall implement the following best management practices to reduce construction noise levels: • Consider the installation of temporary sound barriers for construction activities immediately adjacent to occupied noise-sensitive structures. • Equip construction equipment with mufflers. • Restrict haul routes and construction-related traffic. • Reduce nonessential idling of construction equipment to no more than five minutes The identified best management practices shall be noted on all site plans and/or construction management plans and submitted for verification to the City of Pasadena Planning Division.	The project would comply with this measure as noise levels from construction equipment would comply to PMC Section 9.36, which restricts noise from construction equipment to 85 dBA, and limits hours of operation.
Transportation	
13.1. The City of Pasadena shall update its existing transportation impact fee program by 2020. The City shall prepare a "Nexus" Study that will serve as the basis for requiring development impact fees under AB 1600 legislation, as codified by California Code Government Section 66000 et seq. The established procedures under AB 1600 require that a "reasonable relationship" or nexus exist between the traffic improvements and facilities required to mitigate the traffic impacts of new development pursuant to the proposed project. After approval of the Nexus Study, the City shall update the transportation impact fee program to fund all citywide circulation improvements, including the pedestrian and bicycle network. The fee program shall stipulate that fees are assessed when there is new construction or when there is an increase in square footage within an existing building or the conversion of existing square footage to a more intensive use. Fees are calculated by multiplying the proposed square footage or dwelling unit by the rate identified. The fees are included with any other applicable fees payable at the time the building permit is issued. The City will use the development fees to fund construction (or to recoup fees advanced to fund construction).	This Mitigation Measure is not relevant to the proposed project as updating the City's transportation impact fee program is a City directed measure and is under City jurisdiction. It is not applicable at the project level.

Source: City of Pasadena General Plan EIR 2015.

Table 3
Central District Specific Plan EIR Applicable Mitigation Measures

Mitigation Measure	Applicability to the Project
Aesthetics	
The following mitigation measure will be applied at the individual project level to avoid potential new light and glare effects. 1. For development proposals subject to environmental review and/or design review, the City will examine potential light and glare effects associated with structures and on-site activities, and will ensure that features are incorporated into projects to avoid any adverse light and glare impacts. 2. The Zoning Code will limit the use of reflective and glare-producing building materials. 3. The Zoning Code will require that all nighttime lighting be focused down onto the site and not onto adjacent properties. 4. The City will establish a program to encourage the use of low wattage bulbs in nighttime lighting by offering an incentive that discounting the cost of energy- conserving nighttime lighting.	This Mitigation Measure is not relevant to the proposed project as Public Resources Code Section 21099, enacted by Senate Bill 743, provides that "aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." The project site is located in an urbanized area within the City of Pasadena. The proposed project is a 6-story plus mezzanine transit-oriented mixed-use development that includes retail, restaurants, and work/live units at the ground level and mixed-rate apartment units on levels 2-6. The project site is located less than one-quarter mile from the Metro Del Mar L Line (formerly Gold Line) station and less than one-half a mile to the Memorial Park Station. Therefore, the proposed project is located in a transit priority area as defined in Public Resources Code Section 21099. The proposed

	project's aesthetic impacts shall not be considered significant impacts on the environment pursuant to Public Resources Code Section 21099.
Air Quality	
At the individual development project level, the City will apply the following mitigation measures which will work toward regional emissions reductions: The City will encourage the incorporation of energy conservation techniques (i.e. installation of energy saving devices, construction of electric vehicle charging stations, use of sunlight-filtering window coatings or double-paned windows, utilization of light-colored roofing materials as opposed to dark-colored roofing materials, and placement of shady trees next to habitable structures) in new developments.	The proposed project is subject to the South Coast Air Quality Management District (SCAQMD) rules and regulations mentioned in Section 3, Air Quality of the SCEA. Upon compliance, the project would satisfy the applicable requirements of this mitigation measure. The projects impacts to Air Quality were analyzed in Section 3, Air Quality, of the SCEA and were found to be less than significant and the project would not require any mitigation measures for this impact.
Noise	
1. If a 15-20 dBA reduction is needed, the following shall be included in development projects as directed by the Building Official: • Air conditioning or a mechanical ventilation system • Windows and sliding glass doors should be double-paned glass and mounted in low air infiltration rate frames (0.5 cfm or less, per American National Standard Institute [ANSI] specifications) • Solid core exterior doors with perimeter weather stripping and threshold seals 2. If a 20-25 dBA reduction is needed, the following shall be included in development projects as directed by the Building Official: • Same as No. 1(a) – (c) • Exterior walls consist of stucco or brick veneer. Wood siding with a 1/2" minimum thickness fiberboard underlayer may also be used • Glass in both windows and doors should not exceed 20% of the floor area in a room • Roof or attic vents facing the noise source should be baffled 3. If a 25-30 dBA reduction is needed, the following shall be included in development projects as directed by the Building Official: • Same as No. 2(a) – (d) • The interior sheetrock of exterior wall assemblies should be attached to studs by resilient channels. Staggered studs or double walls are acceptable alternatives • Window assemblies should have a laboratory-tested STC rating of 30 or greater (Windows that provide superior noise reduction capability and that are laboratory-tested are sometimes called "sound-rated" windows. In general, these windows have thicker glass and/or increased air space between panes. In contrast, standard energy conservation double-pane glazing with a 1/8" or 1/4" air space may be less effective in reducing noise from some noise sources than single pane glazing).	This proposed project is not anticipated to have a significant noise impact and therefore would not require noise mitigation for nearby receptors.

Source: City of Pasadena, 2004 Land Use and Mobility Elements, Zoning Code Revisions, and Central District Specific Plan EIR

APPENDIX B

Air Quality

Air Quality Impact Assessment

1.0 INTRODUCTION

This study describes the existing air quality of the proposed mixed-use development at 86 S. Fair Oaks Avenue, and evaluates the potential air quality impacts. This report has been prepared by Impact Sciences, Inc., under contract to the City of Pasadena, in support of the environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA). This analysis considers both the temporary air quality impacts that would result from project construction and the long-term impacts associated with the operation of the project.

1.1 Project Location

The 86 S. Fair Oaks Avenue project site in the City of Pasadena is bounded by S. Fair Oaks Avenue to the west, Dayton Street to the south, Castle Green to the east, and the Green Hotel Apartments to the north. The Project site is located within the boundaries of the Old Pasadena National Register Historic District and the Hotel Green National Register listing. Major transportation facilities in the vicinity of the proposed project site include the Del Mar Metro Gold Line Station located 800 feet from the site and the Memorial Park Metro Gold Line Station located 0.4 miles from the site.

1.2 Project Description

The proposed project is a 6-story plus mezzanine transit-oriented mixed-use development that includes retail, restaurants, and work/live units at the ground level and mixed-rate apartment units on levels 2-6. Along Fair Oaks Avenue, the ground floor of the proposed building includes approximately 6,200 square feet of retail and food uses. Four work/live units, approximately 1,300 square feet each, are proposed in the ground floor along Dayton Street, facing Central Park. The proposed project contains 84 apartment units (24 studios, 37 one-bedroom flats, three (3) one-bedroom townhouses, 18 two-bedroom flats, and two (2) two-bedroom townhouses), including eight (8) on-site residences for very low-income residents. All parking for the proposed project would be located in four (4) levels of underground parking that accommodate 195 parking spaces, including replacement of existing parking spaces for the adjacent Green Hotel Apartments, which currently utilizes the surface parking located on the project site.

The proposed project would include amenity space for project residents, including a swimming pool and spa with cabana and changing rooms, gym, lounge and multiple roof decks/terraces.

The proposed project would provide 16,231 sf of open space, which would be divided between approximately 12,037 sf of hardscape and 4,194 sf of landscape (softscape). Landscaping for the proposed project would include native and adaptive species that are drought tolerant. The proposed project would include 38 new trees, including one 96″ box tree, 10 - 60″ box trees, 21 - 24″ box trees and 6 – 36″ box trees.

2.0 AIR QUALITY

2.1 Air Quality Setting

South Coast Air Basin

South Coast Air Basin Characteristics

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. The City of Pasadena is located within the South Coast Air Basin (SCAB), which incorporates approximately 12,000 square miles consisting of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The SCAB is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the southwest and high mountains around the rest of its perimeters.

Temperature and Precipitation

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. It is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. This usually mild climatological pattern is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. The annual average temperature varies little throughout the SCAB region, ranging from the low 60s to the high 80s, measures in degrees Fahrenheit (F°). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas.

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rains fall between November and April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains.

Humidity

Although the SCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the

coast, are frequent, and low clouds, often referred to as high fog, are a characteristic climate feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SCAB.

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is higher during the dry summer months than during the rainy winter.

Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall, surface high-pressure systems over the SCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentration of air pollutants during prolonged periods of stable atmospheric conditions.

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two similarly distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions is a critical determinant leading to highly degraded air quality in the summer and generally good air quality in the winter in Pasadena.

Air Pollutants of Concern

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards for outdoor concentrations. The federal and state ambient air quality standards have been set at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons such as children, pregnant women, and the elderly, from illness or discomfort. Criteria air pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter 2.5 microns or less in diameter (PM2.5), particulate matter ten microns or less in diameter (PM10), and lead (Pb). Note that

Reactive Organic Gases (ROGs), which are also known as reactive organic compounds (ROCs) or volatile organic compounds (VOCs), and Nitrogen oxide (NOx) are not classified as criteria pollutants. However, ROGs and NOx are widely emitted from land development projects and participate in photochemical reactions in the atmosphere to form O_3; therefore, NOx and ROGs are relevant to the proposed project and are of concern in the air basin and are listed below along with the criteria pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in **Table 1, Criteria Pollutants Summary of Common Sources and Effects**.

Table 1
Criteria Pollutants Summary of Common Sources and Effects

Pollutant	Major Man-Made Sources	Human Health & Welfare Effects
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuels is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO_2)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include moto vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Ozone (O_3)	Formed by a chemical reaction between volatile organic compounds (VOC) and nitrous oxides (NOx) in the presence of sunlight. VOCs are also commonly referred to as reactive organic gases (ROGs). Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, gasoline storage and transport, solvents, paints, and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles, and dyes.
Particulate Matter (PM10 & PM2.5)	Produced by power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles, and others.	Increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Sulfur Dioxide (SO_2)	A colorless, nonflammable gas formed when fuel containing sulfur is burned; when gasoline is extracted from ore. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant; aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron, and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.

Source: CAPCOA, 2013.

Ambient Air Quality

Criteria Air Pollutant Monitoring Data

Ambient air quality in Pasadena can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. Existing levels of ambient air quality and historical trends and projections in the vicinity of Pasadena are documented by measurements made by the South Coast Air Quality Management District (SCAQMD), the air pollution regulatory agency in the SCAB regions maintains air quality monitoring stations which process ambient air quality measurements.

The purpose of the monitoring station is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS). Ozone and particulate meter (PM10 and PM2.5) are pollutants of particular concern in the SCAB. The monitoring stations located closest to the proposed project site and most representative of air quality near the project site are the Pasadena South Wilson Avenue station, located approximately 1.5 miles southeast of the project site, and the Los Angeles North Main Street station, located approximately 7.0 miles southwest of the project site. Ambient emission concentrations vary due to localized variations in emissions sources and climate and should be considered "generally" representative of ambient concentrations in Pasadena. The Pasadena South Wilson Avenue station monitors O_3, PM2.5, and NO_2, see **Table 2, Pasadena South Wilson Avenue Air Monitoring Station Ambient Pollutant Concentrations**. The Los Angles North Main Street station monitors O_3, PM2.5, PM10, and NO_2, see **Table 3, Los Angeles North Main Street Air Monitoring Station Ambient Pollutant Concentrations**.

Table 2
Pasadena South Wilson Avenue Air Monitoring Station Ambient Pollutant Concentrations

Pollutant	Standards[1]	Year		
		2016	2017	2018
OZONE (O_3)				
Maximum 1-hour concentration monitored (ppm)		0.126	0.139	0.112
Maximum 8-hour concentration monitored (ppm)		0.090	0.100	0.090
Number of days exceeding state 1-hour standard	0.09 ppm	12	18	8
Number of days exceeding federal/state 8-hour standard	0.070 ppm	18	36	19
NITROGEN DIOXIDE (NO_2)				
Maximum 1-hour concentration monitored (ppm)		0.0719	0.0723	0.0682
Annual average concentration monitored (ppm)		0.015	0.015	0.014
Number of days exceeding state 1-hour standard	0.18 ppm	0	0	0
FINE PARTICULATE MATTER ($PM_{2.5}$)				

Pollutant	Standards[1]	Year		
		2016	2017	2018
Maximum 24-hour concentration monitored (μg/m³)		29.2	22.8	32.5
Annual average concentration monitored (μg/m³)		9.5	9.6	10.2
Number of samples exceeding federal standard	35 μg/m³	0	0	0

Source: California Air Resources Board, "Air Quality Data Statistics," http://www.arb.ca.gov/adam/. 2019.
NA = not available
[1] *Parts by volume per million of air (ppm), micrograms per cubic meter of air (μg/m³), or annual arithmetic mean (aam).*
[2] *The 8-hour federal O_3 standard was revised from 0.075 ppm to 0.070 ppm in 2015. The statistics shown are based on the 2015 standard of 0.070 ppm.*

Table 3
Los Angeles North Main Street Air Monitoring Station Ambient Pollutant Concentrations

Pollutant	Standards[1]	Year		
		2016	2017	2018
OZONE (O_3)				
Maximum 1-hour concentration monitored (ppm)		0.103	0.116	0.098
Maximum 8-hour concentration monitored (ppm)		0.078	0.086	0.073
Number of days exceeding state 1-hour standard	0.09 ppm	2	6	2
Number of days exceeding federal/state 8-hour standard	0.070 ppm	4	14	4
NITROGEN DIOXIDE (NO_2)				
Maximum 1-hour concentration monitored (ppm)		0.065	0.081	0.070
Annual average concentration monitored (ppm)		0.021	0.021	0.019
Number of days exceeding state 1-hour standard	0.18 ppm	0	0	0
RESPIRABLE PARTICULATE MATTER (PM_{10})				
Maximum 24-hour concentration monitored (μg/m³)		74.6	96.2	81.2
Annual average concentration monitored (μg/m³)		25.8	25.7	30.2
Number of samples exceeding state standard	50 μg/m³	21	40	31
Number of samples exceeding federal standard	150 μg/m³	0	0	0
FINE PARTICULATE MATTER ($PM_{2.5}$)				
Maximum 24-hour concentration monitored (μg/m³)		44.3	54.9	61.4
Annual average concentration monitored (μg/m³)		11.7	12.0	12.8
Number of samples exceeding federal standard	35 μg/m³	2	6	6

Source: California Air Resources Board, "Air Quality Data Statistics," http://www.arb.ca.gov/adam/. 2019.
NA = not available
[1] *Parts by volume per million of air (ppm), micrograms per cubic meter of air (μg/m³), or annual arithmetic mean (aam).*
[2] *The 8-hour federal O_3 standard was revised from 0.075 ppm to 0.070 ppm in 2015. The statistics shown are based on the 2015 standard of 0.070 ppm.*

The attainment status for the SCAB region is included in **Table 4, Attainment Status of Criteria Pollutants in the South Coast Air Basin**. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The SCAB region is designated as a nonattainment area for federal ozone, PM2.5, and lead standards and are designated as nonattainment for state ozone, PM10, and PM2.5 standards.

Table 4
Attainment Status of the South Coast Air Basin (SCAB)

Pollutant	State	Federal
Ozone (O_3)	Non-Attainment	Non-Attainment
Particulate Matter (PM10)	Non-Attainment	Attainment
Particulate Matter (PM2.5)	Non-Attainment	Non-Attainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO_2)	Attainment	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead	Attainment	Non-Attainment (Partial)[1]

Source: SCAQMD. 2016. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin.
[1] The Los Angeles County portion of the Basin is designated as a non-attainment area for the federal lead standard on the basis of source-specific monitoring at two locations as determined by U.S. EPA using 2007-2009 data. However, all stations in the Basin, including the near-source monitoring in Los Angeles County, have remained below the lead NAAQS for the 2012 through 2015 period. The SCAQMD will request that the U.S. EPA re-designated the Los Angeles County portion of the Basin as attainment for lead.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes, such as petroleum refining and chrome-plating operations; commercial operations, such as gasoline stations and dry cleaners; and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage, or short-term acute affects such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches.

To date, CARB has designated 244 compounds as TACs. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to a relatively few compounds.

CARB identified diesel particulate matter (DPM) as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particulates and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM very between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiovascular diseases.

Residential areas are considered to be sensitive receptors to air pollutions because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Children are considered more susceptible to health effects of air pollution due to their immature immune systems and developing organs (OEHHA 2007). As such, schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation.

2.2 Regulatory Framework

Federal

Clean Air Act

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the U.S. Environmental Protection Agency (EPA) to establish NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the Supreme Court found that carbon

dioxide is an air pollutant covered by the CAA; however, no NAAQS have been established for carbon dioxide.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those "sensitive receptors" most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The EPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designations. **Table 4** lists the federal attainment status of the SCAB for the criteria pollutants.

National Emissions Standards for Hazardous Air Pollutants Program

Under federal law, 187 substances are currently listed as hazardous air pollutants (HAPs). Major sources of specific HAPs are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAPS) program. The EPA is establishing regulatory schemes for specific source categories and requires implementation of the Maximum Achievable Control Technologies (MACT) for major sources of HAPs in each source category. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and is aimed at HAPs that are a problem is California. The state has formally identified 244 substances as TACs and is adopting appropriate control measures for each. Once adopted at the state level, each air district will be required to adopt a measure that is equally or more stringent.

National Ambient Air Quality Standards

The federal CAA required the U.S. EPA to establish NAAQS. The NAAQS set primary standards and secondary standards for specific air pollutants**.** Primary standards define limits for the intention of protecting public health, which include sensitive populations such as asthmatics, children, and the elderly. Secondary Standards define limits to protect public welfare to include protection against decreased visibility, damage to animals, crops, vegetation, and buildings. A summary of the federal ambient air quality standards is shown in **Table 5, National Ambient Air Quality Standards**.

Table 5
National Ambient Air Quality Standards

Pollutant		Primary/Secondary	Averaging Time	Level
Carbon Monoxide		Primary	8 hours	9 ppm
			1 hour	35 ppm
Lead		Primary and secondary	Rolling 3-month average	0.15 µg/m^3
Nitrogen dioxide		Primary	1 hour	100 ppb
		Primary and secondary	Annual	0.053 ppm
Ozone		Primary and secondary	8 hours	0.070 ppm
Particulate Matter	PM2.5	Primary	Annual	12 µg/m^3
		Secondary	Annual	15 µg/m^3
		Primary and secondary	24 hours	35 µg/m^3
	PM10	Primary and secondary	24 hours	150 µg/m^3
Sulfur dioxide		Primary	1 hour	75 ppb
		Secondary	3 hours	0.5 ppm

Source:
California Air Resources Board. May 2016. Ambient Air Quality Standards. Available online at: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf, accessed November 16, 2018.

State

California Clean Air Act of 1988

The California CAA of 1988 (CCAA) allows states to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. The California Air Resources Board (CARB), a part of the California Environmental Protection Agency (Cal EPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. The CCAA, amended in 1992, requires all air quality management districts (AQMDs) in the state to achieve and maintain the CAAQS. The CAAQS are generally stricter than national standards for the same pollutants and has also established state standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles, for which there are no national standards. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

California Ambient Air Quality Standards

The federal CAA permits states to adopt additional or more protective air quality standards if needed. California has set standards for certain pollutants, such as particulate matter and ozone, which are more protective of public health than respective federal standards. California has also set standards for some pollutants that are not addressed by federal standards. The state standards for ambient air quality are summarized in **Table 6, California Ambient Air Quality Standards**.

Table 6
California Ambient Air Quality Standards

Pollutant		Averaging Time	Level
Carbon monoxide		8 hours	9 ppm
		1 hour	20 ppm
Lead		30-day average	1.5 µg/m^3
Nitrogen dioxide		1 hour	0.180 ppm
		Annual	0.030 ppm
Ozone		8 hours	0.070 ppm
		1 hour	0.09 ppm
Particulate matter	PM2.5	Annual	12 µg/m^3
	PM10	24 hours	50 µg/m^3
		Annual	20 µg/m^3
Sulfur dioxide		1 hour	0.25 ppm
		24 hours	0.04 ppm
Sulfates		24 hours	25 µg/m^3
Hydrogen sulfide		1 hour	0.03 ppm
Vinyl chloride		24 hours	0.01 ppm

Source:
California Air Resources Board. 2016. Ambient Air Quality Standards. May. Available online at: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf, accessed November 16, 2018.

California State Implementation Plan

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as a SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The EPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the EPA for approval and publication in the Federal Register. The 2016 Air Quality Management Plan (2016 AQMP) is the SIP for SCAB. The 2016 AQMP is a regional blueprint for achieving air quality standards and healthful air in the SCAB and those portions of the Salton Sea Air Basin (SSAB) that are under the SCAQMD's jurisdictions. The 2016 AQMP represents a new approach, focusing on available, proven, and cost effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnerships with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The most effective way to reduce air pollution impacts is to reduce emissions from mobile sources. The AQMP relies on regional and multi-level partnerships of governmental agencies at the federal, state, regional, and local level. Those agencies (EPA, CARB, local governments, Southern California Association of Governments [SCAG] and the SCAQMD) are the primary agencies that implement the AQMP programs. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's 2016-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. The 2016 AQMP includes integrated strategies and measures to meet the NAAQS.

California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588)

The California Air Toxics Program is supplemented by the Air Toxics "Hot Spots" program, which became law (AB 2588, Statutes of 1987) in 1987. In 1992, the AB 2588 program was amended by Senate Bill 1731 to require facilities that pose a significant health risk to the community to perform a risk reduction audit and reduce their emissions through implementation of a risk management plan. Under this program, which is required under the Air Toxics "Hot Spots" Information and Assessment Act (Section 44363 of the California Health and Safety Code), facilities are required to report their air toxics emissions, assess health risks, and notify nearby residents and workers of significant risks when present.

Typically, land development projects generate diesel emissions from construction vehicles during the construction phase, as well as some diesel emissions from small trucks during the operational phase. Diesel exhaust is mainly composed of particulate matter and gases, which contain potential cancer-causing substances. Emissions from diesel engines currently include over 40 substances that are listed by EPA as hazardous air pollutants and by CARB as TACs. On August 27, 1998, CARB identified particulate matter in diesel exhaust as a TAC, based on data linking diesel particulate emissions to increased risks of lung cancer and respiratory disease.

In March 2015, the OEHHA adopted "The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments" in accordance with the Health and Safety Code, Section 44300. The Final Guidance Manual incorporates the scientific basis from three earlier developed Technical Support Documents to assess risk from exposure to facility emissions. The 2015 OEHHA Final Guidance has key changes including greater age sensitivity in particular for children, decreased exposure durations, and higher breathing rate profiles. Because cancer risk could be up to three times greater using this new guidance, it may result in greater mitigation requirements, more agency backlog, and increased difficulty in getting air permits. Regardless of the change in calculation methodology, actual emissions and cancer risk within South Coast Air Basin has declined by more than 50 percent since 2005.

The CARB provides a computer program, the Hot Spots Analysis and Reporting Program (HARP), to assist in a coherent and consistent preparation of an HRA. HARP2, an update to HARP, was released in March 2015. HARP2 has a more refined risk characterization in HRA and CEQA documents and incorporates the 2015 OEHHA Final Guidance.

Regional

South Coast Air Quality Management District

The SCAQMD is the air pollution control district for Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The agency's primary responsibility is ensuring that the SCAB region meets attainment for the federal and state standards. The SCAQMD is responsible for preparing an air quality management plan in order to meet federal attainment status. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

SCAQMD Rules and Regulations

The following is a list of noteworthy SCAQMD rules that are required of construction activities associated with the proposed project:

- **Rule 402 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural

tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM10 emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM10 suppression techniques are summarized blow.

    a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.

    b) All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.

    c) All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.

    d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.

    e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end-uses of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

2.3 Impacts and Mitigation Measures

Thresholds of Significance

The impact analysis provided below is based on the application of the California Environmental Quality Act (CEQA) Guidelines Appendix G, which indicates that a project would have a significant impact on air quality if it would:

1) Conflict with or obstruct implementation of any applicable air quality plan.

2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.

3) Expose sensitive receptors to substantial pollutant concentrations.

4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if the proposed project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality for construction and operational activities of land use development projects, shown in **Table 7 – South Coast Air Quality Management District Regional Significance Thresholds – Pounds per Day**.

Table 7
South Coast Air Quality Management District Regional Significance Thresholds – Pounds per Day

Mass Daily Thresholds [a]		
Pollutant	**Construction** [b]	**Operation** [c]
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to South Coast AQMD Rule 402	
GHG	10,000 MT/yr CO_2eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants [d]		
NO_2	South coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards:	
1-hour average	0.18 ppm (state)	
annual arithmetic mean	0.03 ppm (state) and 0.0534 ppm (federal)	
PM10		
24-hour average	10.4 μg/m^3 (construction) [e] & 2.5 μg/m^3 (operation)	
annual average	1.0 μg/m3	

PM2.5	
24-hour average	10.4 μg/m^3 (construction) [e] & 2.5 μg/m^3 (operation)
SO_2	
1-hour average	0.25 ppm (state) & 0.075 ppm (federal - 99th percentile)
24-hour average	0.04 ppm (state)
Sulfate	
24-hour average	25 μg/m^3 (state)
CO	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards:
1-hour average	20 ppm (state) and 35 ppm (federal)
8-hour average	9.0 ppm (state/federal)
Lead	
30-day Average	1.5 μg/m^3 (state)
Rolling 3-month average	0.15 μg/m^3 (federal)

[a] ***SOURCE:*** *South Coast AQMD CEQA Handbook (South Coast AQMD, 1993)*

[b] *Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).*

[c] *For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.*

[d] *Ambient air quality thresholds for criteria pollutants based on South Coast AQMD Rule 1303, Table A-2 unless otherwise stated.*

[e] *Ambient air quality threshold based on South Coast AQMD Rule 403.*

CO Hotspot Analysis

In addition to the daily thresholds listed above, development associated with the proposed project would also be subject to the ambient air quality standards. These are addressed through an analysis of localized CO impacts. The California 1-hour and 8-hour CO standards are:

- 1-hour = 20 parts per million
- 8-hour = 9 parts per million

The significance of localized impacts depends on whether ambient CO levels in the vicinity of the project site are above state and federal CO standards. Carbon monoxide concentrations in Pasadena no longer exceed either the CAAQS or the NAAQS criteria. Additionally, the SCAB region is designated as attainment under the 1-hour and 8-hour standards (see **Table 4**).

Localized Significance Thresholds

In addition to regional emissions and the CO hotspot analysis, the SCAQMD has developed a set of mass emissions rate look-up tables called localized significance thresholds (LSTs) that can be used to evaluate localized impacts that may result from construction and operational-period emissions. If the on-site emissions from proposed construction activities are below the emission levels found in the LST mass rate look-up tables for the project site receptor area (SRA), then emissions would not have the potential to cause a significant localized air quality impact. When quantifying mass emissions for LST analysis, only

emissions that occur on site are considered. Consistent with SCAQMD LST guidance, emissions from offsite delivery hauling trucks, or employee trips are not considered in the evaluation of localized impacts.

The City of Pasadena lies within SCAQMD SRA 8 and the project site is approximately 0.74-acres. Therefore, **Table 8, Local Significance Thresholds – Pounds per Day** shows the LST screening threshold for a 1-acre project site in SRA 8 with sensitive receptors located within 25 meters of the project site.

Table 8
Local Significance Thresholds – Pounds per Day

Phase	Nitrogen Oxide (NO_x)	Carbon Monoxide (CO)	Coarse Particulate Matter (PM10)	Fine Particulate Matter (PM2.5)
Construction	69	535	4	3
Operation	69	535	1	1

Source:
SCAQMD. 2009. Appendix C Mass Rate Look Up Table. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2.

Toxic Air Contaminant Thresholds

Certain groups of people are more affected by air pollution than others. The California Air Resources Board (CARB) has identified the following persons who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. The closest sensitive receptors to the site are residences located adjacent to the Project. However, due to the limited scale and the short duration of construction, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations during construction. Additionally, the proposed Project would not include any operational sources of TACs, and operational emissions were estimated to be far below significance thresholds. Therefore, the proposed Project would not expose sensitive receptors to a potential health risk during operation.

Methodology

Air quality impacts were evaluated in accordance with the methodologies recommended by CARB and the SCAQMD. Where criteria air pollutant quantification was required, emissions modeled using the California Emissions Estimator Model version 2016.3.2 (CalEEMod). CalEEMod is a statewide land use

emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects.

Project Impacts and Mitigation Measures

Conflict with the 2016 Air Quality Management Plan

Impact 1 Implementation of the proposed project would not conflict with or obstruct implementation of the 2016 Air Quality Management Plan. Therefore, the project would cause no impact related to conflicts with the Air Quality Management Plan.

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and state ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, the project site is located within the SCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the SCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2016 Air Quality Management Plan (AQMP). The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving California and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, SCAG, and the U.S. EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) The project is subject to the SCAQMD's AQMP.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's 1993 CEQA Air Quality Handbook, and include the following:

- Consistency Criterion No. 1: The proposed project will not result in an increase in the frequency or severity of an existing air quality violation, or cause or contribute to new violations, or delay the

timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

- Consistency Criterion No. 2: The proposed project will not exceed the assumptions in the AQMP or increments based on the years of the project build-out phase.

The violations to which Consistency Criterion No. 1 refers are the CAAQS and the NAAQS. As evaluated under Impacts 2 and 3 below, the project would not exceed the short-term construction standards or long-term operational standards and in so doing would not violate any air quality standards (see **Table 9** and **Table 10**). Thus, no impact is expected, and the project would be consistent with first criterion.

Concerning Consistency Criterion No. 2, the 2016 AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed project is consistent with the land use designation and development density prepared in the City of Pasadena's General Plan and therefore would not exceed the population or job growth projections used by the SCAMQD to develop the 2016 AQMP. Thus, no impact would occur, as the project is also consistent with the second criterion.

Short-Term Construction-Generated and Long-Term Operation-Generated Pollutant Emissions Resulting in Violation of Air Quality Standards or Contributing to Existing Violations

Impact 2 Project-generated construction and operational emissions would not exceed applicable significance thresholds and therefore would not contribute to regional nonattainment conditions. As a result, the project's short-term construction and long-term operational emissions of air pollutants are considered a less than significant impact.

Regional Construction Significance Analysis

Construction associated with the proposed project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the project area include ozone-precursor pollutants (i.e., ROG and NOx), PM10, and PM2.5. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Construction results in the temporary generation of emissions resulting from site grading and excavation, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the

movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water.

The duration of construction activities associated with the proposed project is estimated to last approximately 28 months, beginning in 2022. Construction-generated emissions associated with the proposed project were calculated using the SCAQMD and CARB-approved California Emissions Estimator Model (CalEEMod) model. CalEEMod is designed to model construction and operational emissions for land use development projects. The model incorporates typical construction requirements such as construction equipment, demolition debris, and hauling trips. The CalEEMod model assumed that construction of the proposed project would include approximately 45,500 cubic yards of grading soil export and construction equipment was based on information provided by the project applicant, including the use of Tier 3 construction equipment. Predicted maximum daily construction-generated emissions for the proposed project are summarized in **Table 9, Construction-Related Criteria Pollutant and Precursor Emissions – Maximum Pounds per Day.**

During construction, the contractors are required to comply with SCAQMD Rule 402 (Nuisance) and Rule 403 (Fugitive Dust), among others, which assist in reducing short-term construction-related air pollutant emissions. Rule 402 prohibits emissions that would cause a public nuisance and Rule 403 requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. As shown below, all criteria pollutant emissions would remain below their respective thresholds. The proposed project would be subject to Rules 402, 403, and 113, described in the Regulatory Framework subsection above. In addition, the project would utilize Tier 3 construction equipment (or better) which would reduce NOx and particulate matter.

Table 9
Construction-Related Criteria Pollutant and Precursor Emissions – Maximum Pounds per Day

Construction Year	ROG	NOx	CO	SO2	PM10	PM2.5
2022	3.3	60.1	68.7	0.2	4.6	3.3
2023	1.3	20.3	26.7	0.1	2.2	1.5
2024	15.1	21.6	28.9	0.1	2.5	1.6
Regional Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed?	*No*	*No*	*No*	*No*	*No*	*No*

*Source: Impact Sciences, CalEEMod modeling, 2020. See **Appendix A.***
The emissions include measures within CalEEMod and as required by the SCAQMD through Rule 403. This includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hours. Reductions percentages from the SCAQMD

CEQA Handbook (Tables XI-A through XI-E) were applied. Consistent with CARB fleet requirements, construction equipment was assumed to meet minimum Tier 3 standards.

Regional Operational Significance Analysis

Project-generated emissions would be associated with motor vehicle use and area sources, such as the use of natural-gas-fired appliances, landscape maintenance equipment, and architectural coatings associated with the operation of an 84-unit apartment building with 6,200 square feet of retail space and 4 work/live units. Long-term operational emissions attributable to the proposed project are summarized in **Table 10, Long-Term Operational Emissions – Maximum Pounds per Day**.

Table 10
Long-Term Operational Emissions – Maximum Pounds per Day

Source	ROG	NOx	CO	SO2	PM10	PM2.5
Area Source	24.2	1.8	49.7	0.11	6.5	6.46
Energy Use	0.03	0.24	0.10	.002	0.02	0.02
Mobile Source	1.23	5.3	15.5	0.06	5.4	1.49
Total	25.5	7.4	65.3	0.17	11.92	7.96
Regional Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed?	*No*	*No*	*No*	*No*	*No*	*No*

*Source: Impact Sciences, CalEEMod modeling, 2020. See **Appendix A**.*

As shown in **Table 9** and **Table 10**, neither the project's construction nor operational emissions would exceed the SCAQMD's thresholds for any criteria air pollutants. Therefore, regional construction and operation operational emissions would not result in a significant long-term regional air quality impact.

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age, gender]). In particular, O_3 precursors, VOCs, and NOx affect air quality on a regional scale. Health effects related to O_3 are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the project's less than significant increases in regional air pollution from criteria air

pollutants would not have measurable effect on the human health implications of the Basin's ambient air quality.

As noted in the Brief of Amicus Curiae by the SCAQMD (April 6, 2015) for the *Sierra Club vs. County of Fresno*, the SCAMQD acknowledged it would be extremely difficult, if not impossible to quantify health impact of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Further, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD) (April 13, 2015) for the *Sierra Club vs. County of Fresno*, SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

The SCAQMD acknowledges that quantifying the health impacts from O_3 is difficult. The health impacts an individual may face from O_3 depends on the ambient levels of O_3 that an individual person breathes. However, measuring changes in ambient levels of O_3 presents a challenge. SCAQMD's Brief of Amicus Curiae states that it would take a large amount of additional emissions to cause a modeled increase in ambient O_3 levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's *2012 Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NOx and a reduction of 187 tons (374,000 pounds) per day of VOC would reduce O3 levels at the highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify O_3-related health impacts caused by NOx or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. Thus, as the project would not exceed SCAQMD thresholds for construction and operational air emissions, the project would have a less than significant impact for air quality health impacts.

Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

Impact 3 Implementation of the project would not expose sensitive receptors to substantial air pollutant concentrations. This is considered a less than significant impact.

Localized Significance Thresholds

Localized Construction Significance Analysis

The nearest receptors to the project site are residents located adjacent to the north and east of the project site. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing Localized Significance Thresholds (LSTs) for construction.

LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAMQD provided the *Final Localized Significance Threshold Methodology* for guidance (SCAQMD 2008). The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific analysis.

As detailed above, the SRA for the LST is the West San Gabriel Valley area (SRA 8) since this area includes the project site. LSTs apply to CO, NO_2, PM10, and PM2.5. The SCAMQD produced look-up tables for projects that disturb areas less than or equal to 5 acres in size. The project site is approximately 0.74-acres, therefore, the LST threshold for one acre was utilized for the construction LST analysis.

The SCAQMD's methodology clearly states that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered. The nearest sensitive receptors to the project site are the residents adjacent to the north and east. LST screening thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. According to SCAQMD methodology, "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters." Therefore, LSTs for receptors located at 25 meters were utilized in this analysis.

Table 11, Localized Significance of Construction Emissions – Maximum Pounds per Day, presents the results of the localized emissions during construction activity of the proposed project. As shown in **Table 10**, the on-site air pollutant emissions on the peak day of construction would not exceed the applicable LST. Therefore, impacts would be less than significant.

Table 11
Localized Significance of Construction Emissions – Maximum Pounds per Day

Construction Year	NOx	CO	PM10	PM2.5
2022	31.02	38.49	1.44	1.42
2023	18.48	23.20	0.95	0.95
2024	18.47	23.20	0.95	0.95
LST Screening Threshold	**69**	**535**	**4**	**3**
Exceed?	***No***	***No***	***No***	***No***

Localized Operational Significance Analysis

According to the SCAQMD LST methodology, LSTs would apply to operational phase of a proposed project only if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The project is proposing a mixed-use

residential and commercial development and, therefore, does not include such land uses. Thus, due to the lack of queuing and idling emissions, no long-term localized significance threshold analysis is needed. Operational LST impacts would be less than significant in this regard.

Localized Air Quality Health Impacts

As evaluated above, the project's air emissions would not exceed the SCAQMD's LST thresholds. Therefore, the project would not cause or contribute to an exceedance of the most stringent applicable NAAQS or CAAQS for emissions of CO, NOx, PM10, or PM2.5. It should be noted that the ambient air quality standards are developed and represent levels at which the most susceptible persons are protected. In other words, the ambient air quality standards are purposely set in a stringent manner to protect children, the elderly, and those with existing respiratory problems. Thus, air quality health impacts would be less than significant in this regard.

Carbon Monoxide Hotspots

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadways or intersections may reach unhealthful levels (i.e., adversely affecting residents, school children, hospital patients, the elderly, etc.).

The SCAB is designated as an attainment/maintenance area for the federal CO standards and an attainment area for state standards. There has been a decline in CO emissions even though vehicle miles traveled (VMT) on U.S. urban and rural roads have increased nationwide; estimated anthropogenic CO emissions have decreased 68 percent between 1990 and 2014. In 2014, mobile sources accounted for 82 percent of the nation's total anthropogenic CO emissions (EPA 2018). Three major control programs have contributed to the reduced per-vehicle CO emissions: exhaust standards, cleaner burner fuels, and motor vehicle inspection/maintenance programs.

According to the SCAQMD CEQA Air Quality Handbook, a potential CO hotspot may occur at any location where the background CO concentration already exceeds 9.0 ppm, the CAAQS for 8-hour ozone. The SCAQMD prepared a detailed CO analysis in the *Federal Attainment Plan for Carbon Monoxide* as part of the 2003 AQMP. The 2003 AQMP is the most recent AQMP that addresses CO concentrations. The CO analysis included microscale modeling of CO at the worst-case intersections in SCAB. Of these locations, the Wilshire Boulevard and Veteran Avenue intersection in Los Angeles experienced the highest CO concentration of 4.6 ppm. At the time of analysis, the Wilshire Boulevard and Veteran Avenue intersection was the most congested intersection in Los Angeles County with an average daily traffic volume of approximately 100,000 vehicles per day. As CO impacts at the Wilshire Boulevard and Veteran Avenue

intersection did not exceed the 8-hour CAAQS, it can be inferred that the intersections near the project site would not create any CO hotspots. Furthermore, as previously discussed, the site is located in SRA 8, West San Gabriel Valley. Communities within SRAs are expected to have similar climatology and ambient air pollutant concentrations. The monitoring station representative of SRA 8 is the Pasadena-South Wilson Avenue air quality monitoring station located approximately 1.5 miles southeast of the site. According to data obtained from the EPA's AirData database for CO pollutants, the highest eight-hour concentration reported for the Pasadena station in 2018 was 1.4 ppm. As such, the background CO concentration in combination with the CO concentration at worst-case scenario intersection in SCAB do not exceed 9.0 ppm and a CO hotspot would not occur. Therefore, CO hotspot impacts would be less than significant in this regard.

Diesel Particulate Matter

Construction would result in the generation of diesel particulate matter (diesel PM) emissions from the use of off-road diesel equipment required for grading and excavation, paving, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short and exhaust from construction equipment dissipates rapidly. Current methodology for conducting health risk assessments are associated with long term exposure periods (9, 30, and 70 years). Therefore, short-term construction activities would not generate a significant health risk.

Additionally, the project site is approximately 0.74-acres and, as a result, construction activities would occur in an area of less than 5 acres. CARB generally considers construction projects contained in a site of such size to represent less than significant health risk impacts due to limitations of the off-road diesel equipment able to operate and thus a reduced amount of generated diesel particulate matter (DPM), the reduced amount of dust-generating ground-disturbance possible compared to larger construction sites, and the reduced duration of construction activities compared to the development of larger sites. Furthermore, construction would be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than 5 minutes, which would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. For these reasons, DPM generated by construction activities, in and of itself, would not be expected to expose sensitive receptors to substantial amounts of air toxics and the project would have a less than significant impact.

Result in Other Emissions (Such as those Leading to Odors) Adversely Affecting a Substantial Number of People

Impact 4 The proposed project would not include sources that could create other emissions (such as those leading to odors) adversely affecting a substantial number of people. Thus, the project would cause a less than significant impact in this regard.

The SCAQMD *CEQA Air Quality Handbook* (1993) identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed project would not include any of the land uses that have been identified by the SCAQMD as odor sources.

Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon project completion. In addition, the project would be required to comply with the California Code of Regulations, Title 13, sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would reduce the detectable odors from heavy-duty equipment exhaust. The project would also be required to comply with the SCAQMD Rule 1113 – Architectural Coating, which would minimize odor impacts from ROG emissions during architectural coating. Any odor impacts to existing adjacent land uses would be short-term and not substantial. As such, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

2.4 Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

The cumulative setting for air quality includes Pasadena and SCAB. SCAB is designated as nonattainment area for state standards of ozone, PM2.5, and PM10. SCAB is designated as a nonattainment area for federal standards of ozone and PM2.5. SCAB is designated as being unclassified and/or attainment for all other pollutants. Cumulative growth in population and vehicle use could inhibit efforts to improve regional air quality and attain the ambient air quality standards.

Cumulative Impacts and Mitigation Measures

Result in a Cumulatively Considerable Net Increase in Nonattainment Criteria Pollutants

Impact 5 Implementation of the proposed project would not result in a cumulatively considerable net increase of criteria air pollutants for which the SCAB is designated nonattainment. This is considered a less than cumulatively considerable impact.

The SCAQMD's approach to assessing cumulative impacts is based on the 2016 AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the CAA and the CCAA. The SCAQMD neither recommends quantified analyses of cumulative construction or operational emissions, nor does it provide separate methodologies or thresholds of significance to be used to assess cumulative construction or operational impacts. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed using the same significance criteria as those for project-specific impacts. Therefore, individual development projects that generate construction-related or operational emissions that exceed the SCAQMD recommended daily thresholds for project-specific impacts would also cause a cumulative considerable increase in emissions for those pollutants for which the Basin is nonattainment.

As discussed in **Impact 1**, the proposed project would be consistent with the 2016 AQMP, which is intended to bring the SCAB into attainment for all criteria pollutants. Furthermore, operational and construction emissions calculated for the proposed project do not exceed the applicable SCAQMD daily significance thresholds that are designed to assist the region in attaining the applicable ambient air quality standards (see **Table 9, Construction-Related Criteria Pollutant and Precursor Emissions** and **Table 10, Long-Term Operational Emissions**).

Additionally, with respect to the proposed project's construction-related air quality emissions and cumulative basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the 2016 AQMP pursuant to federal CAA mandates. As such, the proposed project would comply with SCAQMD Rule 403 requirements and with adopted 2016 AQMP emissions control measures. Per SCAQMD rules and mandates, these same requirements (i.e., Rule 403 compliance and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects throughout the SCAB, which would include related projects.

The proposed project would also not result in cumulative operational air quality impacts because emissions would not exceed the SCAQMD-adopted operational thresholds and the project's contribution is not a significant proportion of the cumulative total emissions. Cumulative projects would likewise be required

to reduce their emissions per SCAQMD rules and mandates. The project's emissions would not considerably contribute to an exceedance of the NAAQS or CAAQS and would, therefore, comply with the goals of the 2016 AQMP. Therefore, the project's contribution to regional pollutant concentrations would not be cumulatively considerable and cumulative impacts would not be significant.

References

U.S. Environmental Protection Agency. 2018. *Monitor Values Report*. Available: https://www.epa.gov/outdoor-air-quality-data/monitor-values-report.

U.S. Environmental Protection Agency. *Carbon Monoxide Emissions*. Available: https://cfpub.epa.gov/roe/indicator.cfm?i=10.

South Coast Air Quality Management District. 2005. *Rule 403. Fugitive Dust*. Available: http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf.

South Coast Air Quality Management District. 2017. *Final 2016 Air Quality Management Plan*. Available: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15.

South Coast Air Quality Management District. 2016. *Rule 1113. Architectural Coatings*. Available: http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf?sfvrsn=24.

South Coast Air Quality Management District. 2008. *Final Localized Significance Threshold Methodology*. Available: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2.

South Coast Air Quality Management District. 2009. *Appendix C – Mass Rate LST Look-Up Tables*. Available: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2.

South Coast Air Quality Management District. 1993. *CEQA Air Quality Handbook*.

South Coast Air Quality Management District. 2014. *Application of the South Coast Air Quality Management District for Leave to File of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Clube, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno.*

South Coast Air Quality Management District. 2017. *Rule 1401. New Source Review of Toxic Air Contaminants*. Available: http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401.pdf?sfvrsn=4.

South Coast Air Quality Management District. 2019. *South Coast AQMD Air Quality Significance Thresholds*. Available: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2.

South Coast Air Quality Management District. *National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin*. Available: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf.

South Coast Air Quality Management District. 2003. *Final 2003 AQMP Appendix V Modeling and Attainment Demonstrations*. Available: www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2003-air-quality-management-plan/2003-aqmp-appendix-v.pdf?sfvrsn=2.

South Coast Air Quality Management District. 1976. *Rule 402. Nuisance*. Available: http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf?sfvrsn=4.

California Air Resources Board. 2016. *Ambient Air Quality Standards*. Available online at: https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf.

California Air Resources Board. *Hotspots Analysis and Reporting Program (HARP)*. Accessed online at: https://ww3.arb.ca.gov/toxics/harp/harp.htm.

California Air Resources Board. *Air Quality Data Statistics*. Available: http://www.arb.ca.gov/adam/.

Office of Environmental Health Hazard Assessment. 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines*. Available online at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, accessed December 18, 2019.

86 Fair Oaks

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	195.00	Space	0.00	78,000.00	0
Apartments Mid Rise	84.00	Dwelling Unit	0.74	84,000.00	240
Strip Mall	7.50	1000sqft	0.00	7,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	12			**Operational Year**	2024
Utility Company	Pasadena Water & Power				
CO2 Intensity (lb/MWhr)	1664.14	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2e intensity factor updated per SoCal Edison's 2018 Sustainability Report, see: https://www.edison.com/content/dam/eix/documents/sustainability/eix-2018-sustainability-report.pdf

Land Use - 4 work/live units (1,300 sf) included as a retail land use.

Construction Phase - Schedule per the Applicant's Construction Questionnaire.

Off-road Equipment - Construction equipment per the Applicant's Construction Questionnaire. Any hours changed based on Appendix D of CalEEMod Users Guide for a lot under 1 acre.

Off-road Equipment - Construction equipment per the Construction Questionnaire.

Off-road Equipment - From construction questionnaire.

Trips and VMT - haul route round trip = 26 miles

Demolition -

Grading - size of the project site

Construction Off-road Equipment Mitigation - Tier 3 equipment per the Construction Questionnaire. Soil stabilizers and ground cover reductions from SCAQMD CEQA Guidelines.

Mobile Land Use Mitigation - Project site near two Metro Gold Line stations.

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Off-road Equipment -

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstructionPhase	NumDays	5.00	45.00
tblConstructionPhase	NumDays	100.00	458.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	2.00	130.00
tblConstructionPhase	PhaseEndDate	6/14/2022	3/1/2024
tblConstructionPhase	PhaseEndDate	6/7/2022	3/1/2024
tblConstructionPhase	PhaseEndDate	1/14/2022	1/31/2022
tblConstructionPhase	PhaseEndDate	1/18/2022	8/1/2022
tblConstructionPhase	PhaseStartDate	6/8/2022	1/1/2024
tblConstructionPhase	PhaseStartDate	1/19/2022	6/1/2022
tblConstructionPhase	PhaseStartDate	1/15/2022	2/1/2022
tblGrading	AcresOfGrading	0.00	0.74
tblGrading	MaterialExported	0.00	45,500.00
tblLandUse	LotAcreage	1.75	0.00
tblLandUse	LotAcreage	2.21	0.74
tblLandUse	LotAcreage	0.17	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment

tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	13.00
tblTripsAndVMT	HaulingTripLength	20.00	13.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.6732	6.6554	6.6216	0.0154	0.1596	0.2794	0.4390	0.0424	0.2593	0.3017	0.0000	1,370.4627	1,370.4627	0.3430	0.0000	1,379.0370
2023	0.5091	4.7310	5.3396	0.0114	0.1558	0.2131	0.3688	0.0418	0.1977	0.2395	0.0000	1,005.6403	1,005.6403	0.2517	0.0000	1,011.9335
2024	0.3984	0.8000	0.9727	2.0700e-003	0.0317	0.0355	0.0671	8.4800e-003	0.0330	0.0415	0.0000	182.7857	182.7857	0.0439	0.0000	183.8832
Maximum	**0.6732**	**6.6554**	**6.6216**	**0.0154**	**0.1596**	**0.2794**	**0.4390**	**0.0424**	**0.2593**	**0.3017**	**0.0000**	**1,370.4627**	**1,370.4627**	**0.3430**	**0.0000**	**1,379.0370**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.2387	4.3534	5.0035	0.0154	0.1567	0.1774	0.3340	0.0420	0.1772	0.2192	0.0000	936.3437	936.3437	0.2056	0.0000	941.4826
2023	0.1685	2.6403	3.4485	0.0114	0.1558	0.1252	0.2810	0.0418	0.1251	0.1669	0.0000	608.2794	608.2794	0.1258	0.0000	611.4236
2024	0.3400	0.4879	0.6453	2.0700e-003	0.0317	0.0238	0.0555	8.4800e-003	0.0238	0.0323	0.0000	114.0135	114.0135	0.0221	0.0000	114.5661
Maximum	**0.3400**	**4.3534**	**5.0035**	**0.0154**	**0.1567**	**0.1774**	**0.3340**	**0.0420**	**0.1772**	**0.2192**	**0.0000**	**936.3437**	**936.3437**	**0.2056**	**0.0000**	**941.4826**

86 Fair Oaks - South Coast Air Basin, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**52.73**	**38.61**	**29.66**	**0.00**	**0.83**	**38.18**	**23.36**	**0.45**	**33.43**	**28.18**	**0.00**	**35.18**	**35.18**	**44.66**	**0.00**	**35.24**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2022**	**3-31-2022**	1.4984	1.0806
2	**4-1-2022**	**6-30-2022**	2.2776	1.5780
3	**7-1-2022**	**9-30-2022**	2.0919	1.1989
4	**10-1-2022**	**12-31-2022**	1.4601	0.7294
5	**1-1-2023**	**3-31-2023**	1.2960	0.6948
6	**4-1-2023**	**6-30-2023**	1.3086	0.7008
7	**7-1-2023**	**9-30-2023**	1.3230	0.7085
8	**10-1-2023**	**12-31-2023**	1.3248	0.7103
9	**1-1-2024**	**3-31-2024**	1.1607	0.8020
		Highest	2.2776	1.5780

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6679	0.0318	1.4025	1.4100e-003		0.0850	0.0850		0.0850	0.0850	8.9224	18.5658	27.4882	0.0280	6.1000e-004	28.3682
Energy	5.0400e-003	0.0431	0.0186	2.7000e-004		3.4800e-003	3.4800e-003		3.4800e-003	3.4800e-003	0.0000	728.3444	728.3444	0.0128	3.3600e-003	729.6653
Mobile	0.2001	0.9555	2.5896	0.0104	0.9285	7.5900e-003	0.9361	0.2488	7.0500e-003	0.2558	0.0000	961.9549	961.9549	0.0433	0.0000	963.0366
Waste						0.0000	0.0000		0.0000	0.0000	9.4431	0.0000	9.4431	0.5581	0.0000	23.3950
Water						0.0000	0.0000		0.0000	0.0000	1.9126	91.0436	92.9562	0.1980	4.9700e-003	99.3868
Total	**0.8731**	**1.0304**	**4.0107**	**0.0121**	**0.9285**	**0.0961**	**1.0246**	**0.2488**	**0.0956**	**0.3443**	**20.2781**	**1,799.9087**	**1,820.1868**	**0.8401**	**8.9400e-003**	**1,843.8518**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6679	0.0318	1.4025	1.4100e-003		0.0850	0.0850		0.0850	0.0850	8.9224	18.5658	27.4882	0.0280	6.1000e-004	28.3682
Energy	4.7900e-003	0.0410	0.0177	2.6000e-004		3.3100e-003	3.3100e-003		3.3100e-003	3.3100e-003	0.0000	695.4182	695.4182	0.0122	3.2100e-003	696.6786
Mobile	0.1869	0.8808	2.2508	8.8200e-003	0.7779	6.4900e-003	0.7844	0.2084	6.0300e-003	0.2145	0.0000	816.2253	816.2253	0.0376	0.0000	817.1651
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	1.9126	91.0436	92.9562	0.1980	4.9700e-003	99.3868
Total	**0.8596**	**0.9536**	**3.6709**	**0.0105**	**0.7779**	**0.0948**	**0.8728**	**0.2084**	**0.0944**	**0.3028**	**10.8350**	**1,621.2529**	**1,632.0878**	**0.2758**	**8.7900e-003**	**1,641.5987**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.54**	**7.45**	**8.47**	**13.09**	**16.21**	**1.32**	**14.82**	**16.21**	**1.25**	**12.06**	**46.57**	**9.93**	**10.33**	**67.17**	**1.68**	**10.97**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2022	1/31/2022	5	21	
2	Grading	Grading	2/1/2022	8/1/2022	5	130	
3	Building Construction	Building Construction	6/1/2022	3/1/2024	5	458	
4	Architectural Coating	Architectural Coating	1/1/2024	3/1/2024	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.74

Acres of Paving: 0

Residential Indoor: 170,100; Residential Outdoor: 56,700; Non-Residential Indoor: 11,250; Non-Residential Outdoor: 3,750; Striped Parking Area: 4,680 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Off-Highway Trucks	1	8.00	402	0.38
Demolition	Other Construction Equipment	3	8.00	172	0.42
Demolition	Rough Terrain Forklifts	1	8.00	100	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Signal Boards	2	8.00	6	0.82
Building Construction	Forklifts	0	6.00	89	0.20
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Off-Highway Trucks	2	8.00	402	0.38

Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Other Construction Equipment	5	8.00	172	0.42
Grading	Rough Terrain Forklifts	1	8.00	100	0.40
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Signal Boards	2	8.00	6	0.82
Building Construction	Cranes	1	4.00	231	0.29
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Building Construction	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Other Construction Equipment	5	8.00	172	0.42
Building Construction	Paving Equipment	1	7.00	132	0.36
Building Construction	Rollers	1	7.00	80	0.38
Building Construction	Rough Terrain Forklifts	1	6.00	100	0.40
Building Construction	Rubber Tired Loaders	1	8.00	203	0.36
Building Construction	Signal Boards	2	8.00	6	0.82
Building Construction	Surfacing Equipment	2	8.00	263	0.30
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	11	28.00	0.00	12.00	14.70	6.90	13.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	5,688.00	14.70	6.90	13.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	96.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3400e-003	0.0000	1.3400e-003	2.0000e-004	0.0000	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0300	0.2784	0.2986	5.9000e-004		0.0129	0.0129		0.0120	0.0120	0.0000	51.7292	51.7292	0.0150	0.0000	52.1043
Total	**0.0300**	**0.2784**	**0.2986**	**5.9000e-004**	**1.3400e-003**	**0.0129**	**0.0142**	**2.0000e-004**	**0.0120**	**0.0122**	**0.0000**	**51.7292**	**51.7292**	**0.0150**	**0.0000**	**52.1043**

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.1500e-003	2.5000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.3091	0.3091	2.0000e-005	0.0000	0.3097
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	8.2000e-004	9.4700e-003	3.0000e-005	3.2300e-003	2.0000e-005	3.2500e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.7118	2.7118	7.0000e-005	0.0000	2.7135
Total	**1.1800e-003**	**1.9700e-003**	**9.7200e-003**	**3.0000e-005**	**3.3000e-003**	**2.0000e-005**	**3.3200e-003**	**8.8000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**3.0209**	**3.0209**	**9.0000e-005**	**0.0000**	**3.0232**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.4000e-004	0.0000	4.4000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1500e-003	0.1868	0.2363	5.9000e-004		9.4100e-003	9.4100e-003		9.4100e-003	9.4100e-003	0.0000	33.6916	33.6916	9.3800e-003	0.0000	33.9260
Total	**9.1500e-003**	**0.1868**	**0.2363**	**5.9000e-004**	**4.4000e-004**	**9.4100e-003**	**9.8500e-003**	**7.0000e-005**	**9.4100e-003**	**9.4800e-003**	**0.0000**	**33.6916**	**33.6916**	**9.3800e-003**	**0.0000**	**33.9260**

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.1500e-003	2.5000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.3091	0.3091	2.0000e-005	0.0000	0.3097
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	8.2000e-004	9.4700e-003	3.0000e-005	3.2300e-003	2.0000e-005	3.2500e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.7118	2.7118	7.0000e-005	0.0000	2.7135
Total	**1.1800e-003**	**1.9700e-003**	**9.7200e-003**	**3.0000e-005**	**3.3000e-003**	**2.0000e-005**	**3.3200e-003**	**8.8000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**3.0209**	**3.0209**	**9.0000e-005**	**0.0000**	**3.0232**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.9700e-003	0.0000	2.9700e-003	4.3000e-004	0.0000	4.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2967	2.7434	2.9338	6.2900e-003		0.1255	0.1255		0.1164	0.1164	0.0000	549.5642	549.5642	0.1671	0.0000	553.7408
Total	**0.2967**	**2.7434**	**2.9338**	**6.2900e-003**	**2.9700e-003**	**0.1255**	**0.1285**	**4.3000e-004**	**0.1164**	**0.1168**	**0.0000**	**549.5642**	**549.5642**	**0.1671**	**0.0000**	**553.7408**

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0150	0.5450	0.1198	1.4900e-003	0.0318	1.3300e-003	0.0331	8.7300e-003	1.2800e-003	0.0100	0.0000	146.5198	146.5198	0.0114	0.0000	146.8038
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	7.2400e-003	0.0838	2.7000e-004	0.0285	2.1000e-004	0.0287	7.5800e-003	1.9000e-004	7.7700e-003	0.0000	23.9821	23.9821	6.0000e-004	0.0000	23.9972
Total	**0.0252**	**0.5522**	**0.2036**	**1.7600e-003**	**0.0603**	**1.5400e-003**	**0.0619**	**0.0163**	**1.4700e-003**	**0.0178**	**0.0000**	**170.5019**	**170.5019**	**0.0120**	**0.0000**	**170.8010**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8000e-004	0.0000	9.8000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1011	2.0161	2.5018	6.2900e-003		0.0925	0.0925		0.0925	0.0925	0.0000	367.3389	367.3389	0.1094	0.0000	370.0742
Total	**0.1011**	**2.0161**	**2.5018**	**6.2900e-003**	**9.8000e-004**	**0.0925**	**0.0935**	**1.4000e-004**	**0.0925**	**0.0926**	**0.0000**	**367.3389**	**367.3389**	**0.1094**	**0.0000**	**370.0742**

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0150	0.5450	0.1198	1.4900e-003	0.0318	1.3300e-003	0.0331	8.7300e-003	1.2800e-003	0.0100	0.0000	146.5198	146.5198	0.0114	0.0000	146.8038
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	7.2400e-003	0.0838	2.7000e-004	0.0285	2.1000e-004	0.0287	7.5800e-003	1.9000e-004	7.7700e-003	0.0000	23.9821	23.9821	6.0000e-004	0.0000	23.9972
Total	**0.0252**	**0.5522**	**0.2036**	**1.7600e-003**	**0.0603**	**1.5400e-003**	**0.0619**	**0.0163**	**1.4700e-003**	**0.0178**	**0.0000**	**170.5019**	**170.5019**	**0.0120**	**0.0000**	**170.8010**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2868	2.8965	2.8982	5.5700e-003		0.1386	0.1386		0.1286	0.1286	0.0000	485.5620	485.5620	0.1445	0.0000	489.1740
Total	**0.2868**	**2.8965**	**2.8982**	**5.5700e-003**		**0.1386**	**0.1386**		**0.1286**	**0.1286**	**0.0000**	**485.5620**	**485.5620**	**0.1445**	**0.0000**	**489.1740**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7500e-003	0.1624	0.0410	4.4000e-004	0.0111	3.0000e-004	0.0114	3.2000e-003	2.9000e-004	3.4900e-003	0.0000	42.3444	42.3444	2.6600e-003	0.0000	42.4109
Worker	0.0287	0.0205	0.2367	7.5000e-004	0.0806	5.9000e-004	0.0812	0.0214	5.4000e-004	0.0219	0.0000	67.7401	67.7401	1.7100e-003	0.0000	67.7828
Total	**0.0334**	**0.1829**	**0.2776**	**1.1900e-003**	**0.0917**	**8.9000e-004**	**0.0926**	**0.0246**	**8.3000e-004**	**0.0254**	**0.0000**	**110.0845**	**110.0845**	**4.3700e-003**	**0.0000**	**110.1937**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0687	1.4134	1.7744	5.5700e-003		0.0730	0.0730		0.0730	0.0730	0.0000	251.7059	251.7059	0.0704	0.0000	253.4646
Total	**0.0687**	**1.4134**	**1.7744**	**5.5700e-003**		**0.0730**	**0.0730**		**0.0730**	**0.0730**	**0.0000**	**251.7059**	**251.7059**	**0.0704**	**0.0000**	**253.4646**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7500e-003	0.1624	0.0410	4.4000e-004	0.0111	3.0000e-004	0.0114	3.2000e-003	2.9000e-004	3.4900e-003	0.0000	42.3444	42.3444	2.6600e-003	0.0000	42.4109
Worker	0.0287	0.0205	0.2367	7.5000e-004	0.0806	5.9000e-004	0.0812	0.0214	5.4000e-004	0.0219	0.0000	67.7401	67.7401	1.7100e-003	0.0000	67.7828
Total	**0.0334**	**0.1829**	**0.2776**	**1.1900e-003**	**0.0917**	**8.9000e-004**	**0.0926**	**0.0246**	**8.3000e-004**	**0.0254**	**0.0000**	**110.0845**	**110.0845**	**4.3700e-003**	**0.0000**	**110.1937**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4573	4.4925	4.9064	9.4600e-003		0.2119	0.2119		0.1965	0.1965	0.0000	825.0794	825.0794	0.2451	0.0000	831.2077
Total	**0.4573**	**4.4925**	**4.9064**	**9.4600e-003**		**0.2119**	**0.2119**		**0.1965**	**0.1965**	**0.0000**	**825.0794**	**825.0794**	**0.2451**	**0.0000**	**831.2077**

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9900e-003	0.2070	0.0624	7.2000e-004	0.0188	2.4000e-004	0.0191	5.4400e-003	2.3000e-004	5.6700e-003	0.0000	69.7363	69.7363	3.9800e-003	0.0000	69.8358
Worker	0.0459	0.0315	0.3708	1.2300e-003	0.1369	9.8000e-004	0.1379	0.0364	9.0000e-004	0.0373	0.0000	110.8246	110.8246	2.6200e-003	0.0000	110.8900
Total	**0.0519**	**0.2385**	**0.4332**	**1.9500e-003**	**0.1558**	**1.2200e-003**	**0.1570**	**0.0418**	**1.1300e-003**	**0.0429**	**0.0000**	**180.5609**	**180.5609**	**6.6000e-003**	**0.0000**	**180.7258**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1167	2.4018	3.0153	9.4600e-003		0.1240	0.1240		0.1240	0.1240	0.0000	427.7185	427.7185	0.1192	0.0000	430.6978
Total	**0.1167**	**2.4018**	**3.0153**	**9.4600e-003**		**0.1240**	**0.1240**		**0.1240**	**0.1240**	**0.0000**	**427.7185**	**427.7185**	**0.1192**	**0.0000**	**430.6978**

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9900e-003	0.2070	0.0624	7.2000e-004	0.0188	2.4000e-004	0.0191	5.4400e-003	2.3000e-004	5.6700e-003	0.0000	69.7363	69.7363	3.9800e-003	0.0000	69.8358
Worker	0.0459	0.0315	0.3708	1.2300e-003	0.1369	9.8000e-004	0.1379	0.0364	9.0000e-004	0.0373	0.0000	110.8246	110.8246	2.6200e-003	0.0000	110.8900
Total	**0.0519**	**0.2385**	**0.4332**	**1.9500e-003**	**0.1558**	**1.2200e-003**	**0.1570**	**0.0418**	**1.1300e-003**	**0.0429**	**0.0000**	**180.5609**	**180.5609**	**6.6000e-003**	**0.0000**	**180.7258**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0759	0.7309	0.8498	1.6400e-003		0.0339	0.0339		0.0314	0.0314	0.0000	142.7959	142.7959	0.0424	0.0000	143.8560
Total	**0.0759**	**0.7309**	**0.8498**	**1.6400e-003**		**0.0339**	**0.0339**		**0.0314**	**0.0314**	**0.0000**	**142.7959**	**142.7959**	**0.0424**	**0.0000**	**143.8560**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0100e-003	0.0357	0.0105	1.2000e-004	3.2600e-003	4.0000e-005	3.3000e-003	9.4000e-004	4.0000e-005	9.8000e-004	0.0000	12.0265	12.0265	6.8000e-004	0.0000	12.0434
Worker	7.5200e-003	4.9600e-003	0.0599	2.1000e-004	0.0237	1.7000e-004	0.0239	6.2900e-003	1.5000e-004	6.4500e-003	0.0000	18.5476	18.5476	4.1000e-004	0.0000	18.5580
Total	**8.5300e-003**	**0.0407**	**0.0703**	**3.3000e-004**	**0.0270**	**2.1000e-004**	**0.0272**	**7.2300e-003**	**1.9000e-004**	**7.4300e-003**	**0.0000**	**30.5741**	**30.5741**	**1.0900e-003**	**0.0000**	**30.6014**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0202	0.4157	0.5219	1.6400e-003		0.0215	0.0215		0.0215	0.0215	0.0000	74.0238	74.0238	0.0206	0.0000	74.5389
Total	**0.0202**	**0.4157**	**0.5219**	**1.6400e-003**		**0.0215**	**0.0215**		**0.0215**	**0.0215**	**0.0000**	**74.0238**	**74.0238**	**0.0206**	**0.0000**	**74.5389**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0100e-003	0.0357	0.0105	1.2000e-004	3.2600e-003	4.0000e-005	3.3000e-003	9.4000e-004	4.0000e-005	9.8000e-004	0.0000	12.0265	12.0265	6.8000e-004	0.0000	12.0434
Worker	7.5200e-003	4.9600e-003	0.0599	2.1000e-004	0.0237	1.7000e-004	0.0239	6.2900e-003	1.5000e-004	6.4500e-003	0.0000	18.5476	18.5476	4.1000e-004	0.0000	18.5580
Total	**8.5300e-003**	**0.0407**	**0.0703**	**3.3000e-004**	**0.0270**	**2.1000e-004**	**0.0272**	**7.2300e-003**	**1.9000e-004**	**7.4300e-003**	**0.0000**	**30.5741**	**30.5741**	**1.0900e-003**	**0.0000**	**30.6014**

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3084					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0700e-003	0.0274	0.0407	7.0000e-005		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	5.7448	5.7448	3.2000e-004	0.0000	5.7529
Total	**0.3125**	**0.0274**	**0.0407**	**7.0000e-005**		**1.3700e-003**	**1.3700e-003**		**1.3700e-003**	**1.3700e-003**	**0.0000**	**5.7448**	**5.7448**	**3.2000e-004**	**0.0000**	**5.7529**

3.5 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4900e-003	9.8000e-004	0.0118	4.0000e-005	4.6900e-003	3.0000e-005	4.7200e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	3.6709	3.6709	8.0000e-005	0.0000	3.6729
Total	**1.4900e-003**	**9.8000e-004**	**0.0118**	**4.0000e-005**	**4.6900e-003**	**3.0000e-005**	**4.7200e-003**	**1.2500e-003**	**3.0000e-005**	**1.2800e-003**	**0.0000**	**3.6709**	**3.6709**	**8.0000e-005**	**0.0000**	**3.6729**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3084					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3400e-003	0.0305	0.0412	7.0000e-005		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	5.7448	5.7448	3.2000e-004	0.0000	5.7529
Total	**0.3098**	**0.0305**	**0.0412**	**7.0000e-005**		**2.1400e-003**	**2.1400e-003**		**2.1400e-003**	**2.1400e-003**	**0.0000**	**5.7448**	**5.7448**	**3.2000e-004**	**0.0000**	**5.7529**

3.5 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4900e-003	9.8000e-004	0.0118	4.0000e-005	4.6900e-003	3.0000e-005	4.7200e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	3.6709	3.6709	8.0000e-005	0.0000	3.6729
Total	**1.4900e-003**	**9.8000e-004**	**0.0118**	**4.0000e-005**	**4.6900e-003**	**3.0000e-005**	**4.7200e-003**	**1.2500e-003**	**3.0000e-005**	**1.2800e-003**	**0.0000**	**3.6709**	**3.6709**	**8.0000e-005**	**0.0000**	**3.6729**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1869	0.8808	2.2508	8.8200e-003	0.7779	6.4900e-003	0.7844	0.2084	6.0300e-003	0.2145	0.0000	816.2253	816.2253	0.0376	0.0000	817.1651
Unmitigated	0.2001	0.9555	2.5896	0.0104	0.9285	7.5900e-003	0.9361	0.2488	7.0500e-003	0.2558	0.0000	961.9549	961.9549	0.0433	0.0000	963.0366

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	558.60	536.76	492.24	1,865,765	1,563,250
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	332.40	315.30	153.23	579,075	485,184
Total	891.00	852.06	645.47	2,444,840	2,048,434

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553363	0.042540	0.203692	0.115607	0.014606	0.005830	0.021800	0.032323	0.002120	0.001725	0.004837	0.000711	0.000846
Enclosed Parking with Elevator	0.553363	0.042540	0.203692	0.115607	0.014606	0.005830	0.021800	0.032323	0.002120	0.001725	0.004837	0.000711	0.000846
Strip Mall	0.553363	0.042540	0.203692	0.115607	0.014606	0.005830	0.021800	0.032323	0.002120	0.001725	0.004837	0.000711	0.000846

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	647.9827	647.9827	0.0113	2.3400e-003	648.9612
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	678.4776	678.4776	0.0118	2.4500e-003	679.5022
NaturalGas Mitigated	4.7900e-003	0.0410	0.0177	2.6000e-004		3.3100e-003	3.3100e-003		3.3100e-003	3.3100e-003	0.0000	47.4355	47.4355	9.1000e-004	8.7000e-004	47.7173
NaturalGas Unmitigated	5.0400e-003	0.0431	0.0186	2.7000e-004		3.4800e-003	3.4800e-003		3.4800e-003	3.4800e-003	0.0000	49.8667	49.8667	9.6000e-004	9.1000e-004	50.1631

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	922167	4.9700e-003	0.0425	0.0181	2.7000e-004		3.4400e-003	3.4400e-003		3.4400e-003	3.4400e-003	0.0000	49.2104	49.2104	9.4000e-004	9.0000e-004	49.5028
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	12300	7.0000e-005	6.0000e-004	5.1000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6564	0.6564	1.0000e-005	1.0000e-005	0.6603
Total		**5.0400e-003**	**0.0431**	**0.0186**	**2.7000e-004**		**3.4900e-003**	**3.4900e-003**		**3.4900e-003**	**3.4900e-003**	**0.0000**	**49.8667**	**49.8667**	**9.5000e-004**	**9.1000e-004**	**50.1631**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	877581	4.7300e-003	0.0404	0.0172	2.6000e-004		3.2700e-003	3.2700e-003		3.2700e-003	3.2700e-003	0.0000	46.8311	46.8311	9.0000e-004	8.6000e-004	47.1094
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	11325.4	6.0000e-005	5.6000e-004	4.7000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.6044	0.6044	1.0000e-005	1.0000e-005	0.6080
Total		**4.7900e-003**	**0.0410**	**0.0177**	**2.6000e-004**		**3.3100e-003**	**3.3100e-003**		**3.3100e-003**	**3.3100e-003**	**0.0000**	**47.4355**	**47.4355**	**9.1000e-004**	**8.7000e-004**	**47.7173**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	340505	257.0271	4.4800e-003	9.3000e-004	257.4153
Enclosed Parking with Elevator	457080	345.0228	6.0100e-003	1.2400e-003	345.5438
Strip Mall	101250	76.4277	1.3300e-003	2.8000e-004	76.5431
Total		**678.4776**	**0.0118**	**2.4500e-003**	**679.5022**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	338055	255.1779	4.4500e-003	9.2000e-004	255.5633
Enclosed Parking with Elevator	422529	318.9424	5.5600e-003	1.1500e-003	319.4240
Strip Mall	97851.5	73.8624	1.2900e-003	2.7000e-004	73.9739
Total		**647.9827**	**0.0113**	**2.3400e-003**	**648.9612**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6679	0.0318	1.4025	1.4100e-003		0.0850	0.0850		0.0850	0.0850	8.9224	18.5658	27.4882	0.0280	6.1000e-004	28.3682
Unmitigated	0.6679	0.0318	1.4025	1.4100e-003		0.0850	0.0850		0.0850	0.0850	8.9224	18.5658	27.4882	0.0280	6.1000e-004	28.3682

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0308					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3357					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.2751	0.0218	0.5340	1.3600e-003		0.0802	0.0802		0.0802	0.0802	8.9224	17.1458	26.0682	0.0266	6.1000e-004	26.9139
Landscaping	0.0263	0.0100	0.8685	5.0000e-005		4.8100e-003	4.8100e-003		4.8100e-003	4.8100e-003	0.0000	1.4201	1.4201	1.3700e-003	0.0000	1.4543
Total	**0.6679**	**0.0318**	**1.4025**	**1.4100e-003**		**0.0850**	**0.0850**		**0.0850**	**0.0850**	**8.9224**	**18.5658**	**27.4882**	**0.0280**	**6.1000e-004**	**28.3682**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0308					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3357					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.2751	0.0218	0.5340	1.3600e-003		0.0802	0.0802		0.0802	0.0802	8.9224	17.1458	26.0682	0.0266	6.1000e-004	26.9139
Landscaping	0.0263	0.0100	0.8685	5.0000e-005		4.8100e-003	4.8100e-003		4.8100e-003	4.8100e-003	0.0000	1.4201	1.4201	1.3700e-003	0.0000	1.4543
Total	**0.6679**	**0.0318**	**1.4025**	**1.4100e-003**		**0.0850**	**0.0850**		**0.0850**	**0.0850**	**8.9224**	**18.5658**	**27.4882**	**0.0280**	**6.1000e-004**	**28.3682**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Landscaping

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	92.9562	0.1980	4.9700e-003	99.3868
Unmitigated	92.9562	0.1980	4.9700e-003	99.3868

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	5.47294 / 3.45033	84.4641	0.1798	4.5100e-003	90.3023
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	8.4921	0.0183	4.6000e-004	9.0846
Total		**92.9562**	**0.1980**	**4.9700e-003**	**99.3868**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	5.47294 / 3.45033	84.4641	0.1798	4.5100e-003	90.3023
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	8.4921	0.0183	4.6000e-004	9.0846
Total		**92.9562**	**0.1980**	**4.9700e-003**	**99.3868**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	9.4431	0.5581	0.0000	23.3950

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	38.64	7.8436	0.4635	0.0000	19.4321
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.88	1.5996	0.0945	0.0000	3.9629
Total		**9.4431**	**0.5581**	**0.0000**	**23.3950**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise		0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator		0.0000	0.0000	0.0000	0.0000
Strip Mall		0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

86 Fair Oaks

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	195.00	Space	0.00	78,000.00	0
Apartments Mid Rise	84.00	Dwelling Unit	0.74	84,000.00	240
Strip Mall	7.50	1000sqft	0.00	7,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	12			**Operational Year**	2024
Utility Company	Pasadena Water & Power				
CO2 Intensity (lb/MWhr)	1664.14	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

86 Fair Oaks - South Coast Air Basin, Summer

Project Characteristics - CO2e intensity factor updated per SoCal Edison's 2018 Sustainability Report, see: https://www.edison.com/content/dam/eix/documents/sustainability/eix-2018-sustainability-report.pdf

Land Use - 4 work/live units (1,300 sf) included as a retail land use.

Construction Phase - Schedule per the Applicant's Construction Questionnaire.

Off-road Equipment - Construction equipment per the Applicant's Construction Questionnaire. Any hours changed based on Appendix D of CalEEMod Users Guide for a lot under 1 acre.

Off-road Equipment - Construction equipment per the Construction Questionnaire.

Off-road Equipment - From construction questionnaire.

Trips and VMT - haul route round trip = 26 miles

Demolition -

Grading - size of the project site

Construction Off-road Equipment Mitigation - Tier 3 equipment per the Construction Questionnaire. Soil stabilizers and ground cover reductions from SCAQMD CEQA Guidelines.

Mobile Land Use Mitigation - Project site near two Metro Gold Line stations.

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Off-road Equipment -

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstructionPhase	NumDays	5.00	45.00
tblConstructionPhase	NumDays	100.00	458.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	2.00	130.00
tblConstructionPhase	PhaseEndDate	6/14/2022	3/1/2024
tblConstructionPhase	PhaseEndDate	6/7/2022	3/1/2024
tblConstructionPhase	PhaseEndDate	1/14/2022	1/31/2022
tblConstructionPhase	PhaseEndDate	1/18/2022	8/1/2022
tblConstructionPhase	PhaseStartDate	6/8/2022	1/1/2024
tblConstructionPhase	PhaseStartDate	1/19/2022	6/1/2022
tblConstructionPhase	PhaseStartDate	1/15/2022	2/1/2022
tblGrading	AcresOfGrading	0.00	0.74
tblGrading	MaterialExported	0.00	45,500.00
tblLandUse	LotAcreage	1.75	0.00
tblLandUse	LotAcreage	2.21	0.74
tblLandUse	LotAcreage	0.17	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment

tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	13.00
tblTripsAndVMT	HaulingTripLength	20.00	13.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	9.1355	90.6934	90.0197	0.2130	2.2100	3.7774	5.9874	0.5884	3.5046	4.0930	0.0000	20,896.1723	20,896.1723	5.1775	0.0000	21,025.6107
2023	3.9167	36.3491	41.2768	0.0883	1.2202	1.6390	2.8592	0.3270	1.5204	1.8474	0.0000	8,580.6041	8,580.6041	2.1348	0.0000	8,633.9734
2024	17.7056	35.5099	43.4662	0.0928	1.4326	1.5759	3.0085	0.3833	1.4659	1.8491	0.0000	9,015.8447	9,015.8447	2.1513	0.0000	9,069.6268
Maximum	**17.7056**	**90.6934**	**90.0197**	**0.2130**	**2.2100**	**3.7774**	**5.9874**	**0.5884**	**3.5046**	**4.0930**	**0.0000**	**20,896.1723**	**20,896.1723**	**5.1775**	**0.0000**	**21,025.6107**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.2759	60.1179	68.6844	0.2130	2.1795	2.4122	4.5917	0.5840	2.4103	2.9942	0.0000	14,436.1900	14,436.1900	3.1316	0.0000	14,514.4792
2023	1.2970	20.2670	26.7301	0.0883	1.2202	0.9632	2.1835	0.3270	0.9626	1.2895	0.0000	5,211.2590	5,211.2590	1.0667	0.0000	5,237.9270
2024	15.1101	21.6394	28.9144	0.0928	1.4326	1.0597	2.4923	0.3833	1.0589	1.4421	0.0000	5,646.5910	5,646.5910	1.0833	0.0000	5,673.6725
Maximum	**15.1101**	**60.1179**	**68.6844**	**0.2130**	**2.1795**	**2.4122**	**4.5917**	**0.5840**	**2.4103**	**2.9942**	**0.0000**	**14,436.1900**	**14,436.1900**	**3.1316**	**0.0000**	**14,514.4792**

86 Fair Oaks - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**36.01**	**37.24**	**28.86**	**0.00**	**0.63**	**36.57**	**21.83**	**0.34**	**31.72**	**26.49**	**0.00**	**34.29**	**34.29**	**44.19**	**0.00**	**34.35**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	24.2295	1.8229	49.6662	0.1094		6.4551	6.4551		6.4551	6.4551	786.8212	1,524.5227	2,311.3439	2.3585	0.0534	2,386.2217
Energy	0.0276	0.2361	0.1019	1.5100e-003		0.0191	0.0191		0.0191	0.0191		301.1981	301.1981	5.7700e-003	5.5200e-003	302.9880
Mobile	1.2341	5.2965	15.4900	0.0618	5.4007	0.0433	5.4440	1.4447	0.0403	1.4850		6,296.6839	6,296.6839	0.2743		6,303.5418
Total	**25.4913**	**7.3555**	**65.2580**	**0.1726**	**5.4007**	**6.5175**	**11.9182**	**1.4447**	**6.5144**	**7.9591**	**786.8212**	**8,122.4047**	**8,909.2259**	**2.6386**	**0.0589**	**8,992.7515**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	24.2295	1.8229	49.6662	0.1094		6.4551	6.4551		6.4551	6.4551	786.8212	1,524.5227	2,311.3439	2.3585	0.0534	2,386.2217
Energy	0.0263	0.2246	0.0968	1.4300e-003		0.0182	0.0182		0.0182	0.0182		286.5131	286.5131	5.4900e-003	5.2500e-003	288.2157
Mobile	1.1573	4.9027	13.3844	0.0524	4.5250	0.0371	4.5621	1.2105	0.0345	1.2449		5,343.5172	5,343.5172	0.2378		5,349.4620
Total	**25.4131**	**6.9502**	**63.1475**	**0.1632**	**4.5250**	**6.5103**	**11.0354**	**1.2105**	**6.5077**	**7.7181**	**786.8212**	**7,154.5530**	**7,941.3742**	**2.6018**	**0.0587**	**8,023.8994**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.31**	**5.51**	**3.23**	**5.47**	**16.21**	**0.11**	**7.41**	**16.21**	**0.10**	**3.03**	**0.00**	**11.92**	**10.86**	**1.40**	**0.46**	**10.77**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2022	1/31/2022	5	21	
2	Grading	Grading	2/1/2022	8/1/2022	5	130	
3	Building Construction	Building Construction	6/1/2022	3/1/2024	5	458	
4	Architectural Coating	Architectural Coating	1/1/2024	3/1/2024	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.74

Acres of Paving: 0

Residential Indoor: 170,100; Residential Outdoor: 56,700; Non-Residential Indoor: 11,250; Non-Residential Outdoor: 3,750; Striped Parking Area: 4,680 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Off-Highway Trucks	1	8.00	402	0.38
Demolition	Other Construction Equipment	3	8.00	172	0.42

Demolition	Rough Terrain Forklifts	1	8.00	100	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Signal Boards	2	8.00	6	0.82
Building Construction	Forklifts	0	6.00	89	0.20
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Off-Highway Trucks	2	8.00	402	0.38
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Other Construction Equipment	5	8.00	172	0.42
Grading	Rough Terrain Forklifts	1	8.00	100	0.40
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Signal Boards	2	8.00	6	0.82
Building Construction	Cranes	1	4.00	231	0.29
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Building Construction	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Other Construction Equipment	5	8.00	172	0.42
Building Construction	Paving Equipment	1	7.00	132	0.36
Building Construction	Rollers	1	7.00	80	0.38
Building Construction	Rough Terrain Forklifts	1	6.00	100	0.40
Building Construction	Rubber Tired Loaders	1	8.00	203	0.36
Building Construction	Signal Boards	2	8.00	6	0.82
Building Construction	Surfacing Equipment	2	8.00	263	0.30
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	11	28.00	0.00	12.00	14.70	6.90	13.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	5,688.00	14.70	6.90	13.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	96.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1274	0.0000	0.1274	0.0193	0.0000	0.0193			0.0000			0.0000
Off-Road	2.8580	26.5180	28.4394	0.0566		1.2279	1.2279		1.1439	1.1439		5,430.6342	5,430.6342	1.5754		5,470.0184
Total	**2.8580**	**26.5180**	**28.4394**	**0.0566**	**0.1274**	**1.2279**	**1.3552**	**0.0193**	**1.1439**	**1.1632**		**5,430.6342**	**5,430.6342**	**1.5754**		**5,470.0184**

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.9700e-003	0.1071	0.0231	3.0000e-004	6.4900e-003	2.7000e-004	6.7600e-003	1.7800e-003	2.5000e-004	2.0300e-003		32.7936	32.7936	2.4600e-003		32.8551
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1099	0.0691	0.9722	3.0000e-003	0.3130	2.2500e-003	0.3152	0.0830	2.0700e-003	0.0851		298.8337	298.8337	7.5500e-003		299.0225
Total	**0.1129**	**0.1761**	**0.9953**	**3.3000e-003**	**0.3195**	**2.5200e-003**	**0.3220**	**0.0848**	**2.3200e-003**	**0.0871**		**331.6272**	**331.6272**	**0.0100**		**331.8776**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0422	0.0000	0.0422	6.3900e-003	0.0000	6.3900e-003			0.0000			0.0000
Off-Road	0.8718	17.7889	22.4996	0.0566		0.8960	0.8960		0.8960	0.8960	0.0000	3,537.0132	3,537.0132	0.9846		3,561.6280
Total	**0.8718**	**17.7889**	**22.4996**	**0.0566**	**0.0422**	**0.8960**	**0.9382**	**6.3900e-003**	**0.8960**	**0.9023**	**0.0000**	**3,537.0132**	**3,537.0132**	**0.9846**		**3,561.6280**

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.9700e-003	0.1071	0.0231	3.0000e-004	6.4900e-003	2.7000e-004	6.7600e-003	1.7800e-003	2.5000e-004	2.0300e-003		32.7936	32.7936	2.4600e-003		32.8551
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1099	0.0691	0.9722	3.0000e-003	0.3130	2.2500e-003	0.3152	0.0830	2.0700e-003	0.0851		298.8337	298.8337	7.5500e-003		299.0225
Total	**0.1129**	**0.1761**	**0.9953**	**3.3000e-003**	**0.3195**	**2.5200e-003**	**0.3220**	**0.0848**	**2.3200e-003**	**0.0871**		**331.6272**	**331.6272**	**0.0100**		**331.8776**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0456	0.0000	0.0456	6.6500e-003	0.0000	6.6500e-003			0.0000			0.0000
Off-Road	4.5649	42.2054	45.1350	0.0968		1.9306	1.9306		1.7904	1.7904		9,319.8581	9,319.8581	2.8332		9,390.6887
Total	**4.5649**	**42.2054**	**45.1350**	**0.0968**	**0.0456**	**1.9306**	**1.9762**	**6.6500e-003**	**1.7904**	**1.7970**		**9,319.8581**	**9,319.8581**	**2.8332**		**9,390.6887**

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2276	8.1972	1.7713	0.0231	0.4971	0.0203	0.5174	0.1362	0.0194	0.1557		2,510.9766	2,510.9766	0.1886		2,515.6921
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1571	0.0986	1.3889	4.2800e-003	0.4471	3.2100e-003	0.4503	0.1186	2.9600e-003	0.1215		426.9053	426.9053	0.0108		427.1750
Total	**0.3846**	**8.2959**	**3.1601**	**0.0274**	**0.9442**	**0.0235**	**0.9677**	**0.2548**	**0.0224**	**0.2772**		**2,937.8819**	**2,937.8819**	**0.1994**		**2,942.8670**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0151	0.0000	0.0151	2.2000e-003	0.0000	2.2000e-003			0.0000			0.0000
Off-Road	1.5561	31.0176	38.4897	0.0968		1.4231	1.4231		1.4231	1.4231	0.0000	6,229.5746	6,229.5746	1.8554		6,275.9601
Total	**1.5561**	**31.0176**	**38.4897**	**0.0968**	**0.0151**	**1.4231**	**1.4383**	**2.2000e-003**	**1.4231**	**1.4253**	**0.0000**	**6,229.5746**	**6,229.5746**	**1.8554**		**6,275.9601**

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2276	8.1972	1.7713	0.0231	0.4971	0.0203	0.5174	0.1362	0.0194	0.1557		2,510.9766	2,510.9766	0.1886		2,515.6921
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1571	0.0986	1.3889	4.2800e-003	0.4471	3.2100e-003	0.4503	0.1186	2.9600e-003	0.1215		426.9053	426.9053	0.0108		427.1750
Total	**0.3846**	**8.2959**	**3.1601**	**0.0274**	**0.9442**	**0.0235**	**0.9677**	**0.2548**	**0.0224**	**0.2772**		**2,937.8819**	**2,937.8819**	**0.1994**		**2,942.8670**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7484	37.8633	37.8849	0.0728		1.8117	1.8117		1.6810	1.6810		6,996.6081	6,996.6081	2.0818		7,048.6540
Total	**3.7484**	**37.8633**	**37.8849**	**0.0728**		**1.8117**	**1.8117**		**1.6810**	**1.6810**		**6,996.6081**	**6,996.6081**	**2.0818**		**7,048.6540**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0607	2.0922	0.5064	5.7600e-003	0.1472	3.9100e-003	0.1511	0.0424	3.7400e-003	0.0461		617.2515	617.2515	0.0372		618.1811
Worker	0.3769	0.2367	3.3333	0.0103	1.0731	7.7100e-003	1.0808	0.2846	7.1000e-003	0.2917		1,024.5726	1,024.5726	0.0259		1,025.2199
Total	**0.4376**	**2.3289**	**3.8397**	**0.0160**	**1.2202**	**0.0116**	**1.2319**	**0.3270**	**0.0108**	**0.3378**		**1,641.8241**	**1,641.8241**	**0.0631**		**1,643.4010**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8975	18.4756	23.1949	0.0728		0.9539	0.9539		0.9539	0.9539	0.0000	3,626.9094	3,626.9094	1.0137		3,652.2511
Total	**0.8975**	**18.4756**	**23.1949**	**0.0728**		**0.9539**	**0.9539**		**0.9539**	**0.9539**	**0.0000**	**3,626.9094**	**3,626.9094**	**1.0137**		**3,652.2511**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0607	2.0922	0.5064	5.7600e-003	0.1472	3.9100e-003	0.1511	0.0424	3.7400e-003	0.0461		617.2515	617.2515	0.0372		618.1811
Worker	0.3769	0.2367	3.3333	0.0103	1.0731	7.7100e-003	1.0808	0.2846	7.1000e-003	0.2917		1,024.5726	1,024.5726	0.0259		1,025.2199
Total	**0.4376**	**2.3289**	**3.8397**	**0.0160**	**1.2202**	**0.0116**	**1.2319**	**0.3270**	**0.0108**	**0.3378**		**1,641.8241**	**1,641.8241**	**0.0631**		**1,643.4010**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5173	34.5577	37.7416	0.0728		1.6296	1.6296		1.5118	1.5118		6,996.1107	6,996.1107	2.0786		7,048.0743
Total	**3.5173**	**34.5577**	**37.7416**	**0.0728**		**1.6296**	**1.6296**		**1.5118**	**1.5118**		**6,996.1107**	**6,996.1107**	**2.0786**		**7,048.0743**

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0450	1.5772	0.4571	5.5800e-003	0.1472	1.8100e-003	0.1490	0.0424	1.7300e-003	0.0441		598.0839	598.0839	0.0329		598.9056
Worker	0.3544	0.2142	3.0782	9.9000e-003	1.0731	7.5100e-003	1.0806	0.2846	6.9200e-003	0.2915		986.4095	986.4095	0.0234		986.9934
Total	**0.3995**	**1.7914**	**3.5353**	**0.0155**	**1.2202**	**9.3200e-003**	**1.2296**	**0.3270**	**8.6500e-003**	**0.3356**		**1,584.4934**	**1,584.4934**	**0.0562**		**1,585.8991**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8975	18.4756	23.1949	0.0728		0.9539	0.9539		0.9539	0.9539	0.0000	3,626.7656	3,626.7656	1.0105		3,652.0279
Total	**0.8975**	**18.4756**	**23.1949**	**0.0728**		**0.9539**	**0.9539**		**0.9539**	**0.9539**	**0.0000**	**3,626.7656**	**3,626.7656**	**1.0105**		**3,652.0279**

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0450	1.5772	0.4571	5.5800e-003	0.1472	1.8100e-003	0.1490	0.0424	1.7300e-003	0.0441		598.0839	598.0839	0.0329		598.9056
Worker	0.3544	0.2142	3.0782	9.9000e-003	1.0731	7.5100e-003	1.0806	0.2846	6.9200e-003	0.2915		986.4095	986.4095	0.0234		986.9934
Total	**0.3995**	**1.7914**	**3.5353**	**0.0155**	**1.2202**	**9.3200e-003**	**1.2296**	**0.3270**	**8.6500e-003**	**0.3356**		**1,584.4934**	**1,584.4934**	**0.0562**		**1,585.8991**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3717	32.4842	37.7690	0.0728		1.5043	1.5043		1.3951	1.3951		6,995.8022	6,995.8022	2.0774		7,047.7373
Total	**3.3717**	**32.4842**	**37.7690**	**0.0728**		**1.5043**	**1.5043**		**1.3951**	**1.3951**		**6,995.8022**	**6,995.8022**	**2.0774**		**7,047.7373**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0441	1.5731	0.4441	5.5500e-003	0.1472	1.7900e-003	0.1490	0.0424	1.7100e-003	0.0441		595.8910	595.8910	0.0324		596.7008
Worker	0.3354	0.1952	2.8741	9.5700e-003	1.0731	7.4100e-003	1.0805	0.2846	6.8200e-003	0.2914		953.9089	953.9089	0.0214		954.4441
Total	**0.3795**	**1.7683**	**3.3182**	**0.0151**	**1.2202**	**9.2000e-003**	**1.2294**	**0.3270**	**8.5300e-003**	**0.3355**		**1,549.7999**	**1,549.7999**	**0.0538**		**1,551.1449**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8975	18.4756	23.1949	0.0728		0.9539	0.9539		0.9539	0.9539	0.0000	3,626.5486	3,626.5486	1.0094		3,651.7830
Total	**0.8975**	**18.4756**	**23.1949**	**0.0728**		**0.9539**	**0.9539**		**0.9539**	**0.9539**	**0.0000**	**3,626.5486**	**3,626.5486**	**1.0094**		**3,651.7830**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0441	1.5731	0.4441	5.5500e-003	0.1472	1.7900e-003	0.1490	0.0424	1.7100e-003	0.0441		595.8910	595.8910	0.0324		596.7008
Worker	0.3354	0.1952	2.8741	9.5700e-003	1.0731	7.4100e-003	1.0805	0.2846	6.8200e-003	0.2914		953.9089	953.9089	0.0214		954.4441
Total	**0.3795**	**1.7683**	**3.3182**	**0.0151**	**1.2202**	**9.2000e-003**	**1.2294**	**0.3270**	**8.5300e-003**	**0.3355**		**1,549.7999**	**1,549.7999**	**0.0538**		**1,551.1449**

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**13.8880**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.5 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0664	0.0386	0.5688	1.8900e-003	0.2124	1.4700e-003	0.2138	0.0563	1.3500e-003	0.0577		188.7945	188.7945	4.2400e-003		188.9004
Total	**0.0664**	**0.0386**	**0.5688**	**1.8900e-003**	**0.2124**	**1.4700e-003**	**0.2138**	**0.0563**	**1.3500e-003**	**0.0577**		**188.7945**	**188.7945**	**4.2400e-003**		**188.9004**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**13.7667**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.5 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0664	0.0386	0.5688	1.8900e-003	0.2124	1.4700e-003	0.2138	0.0563	1.3500e-003	0.0577		188.7945	188.7945	4.2400e-003		188.9004
Total	**0.0664**	**0.0386**	**0.5688**	**1.8900e-003**	**0.2124**	**1.4700e-003**	**0.2138**	**0.0563**	**1.3500e-003**	**0.0577**		**188.7945**	**188.7945**	**4.2400e-003**		**188.9004**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1573	4.9027	13.3844	0.0524	4.5250	0.0371	4.5621	1.2105	0.0345	1.2449		5,343.5172	5,343.5172	0.2378		5,349.4620
Unmitigated	1.2341	5.2965	15.4900	0.0618	5.4007	0.0433	5.4440	1.4447	0.0403	1.4850		6,296.6839	6,296.6839	0.2743		6,303.5418

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	558.60	536.76	492.24	1,865,765	1,563,250
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	332.40	315.30	153.23	579,075	485,184
Total	891.00	852.06	645.47	2,444,840	2,048,434

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553363	0.042540	0.203692	0.115607	0.014606	0.005830	0.021800	0.032323	0.002120	0.001725	0.004837	0.000711	0.000846
Enclosed Parking with Elevator	0.553363	0.042540	0.203692	0.115607	0.014606	0.005830	0.021800	0.032323	0.002120	0.001725	0.004837	0.000711	0.000846
Strip Mall	0.553363	0.042540	0.203692	0.115607	0.014606	0.005830	0.021800	0.032323	0.002120	0.001725	0.004837	0.000711	0.000846

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0263	0.2246	0.0968	1.4300e-003		0.0182	0.0182		0.0182	0.0182		286.5131	286.5131	5.4900e-003	5.2500e-003	288.2157
NaturalGas Unmitigated	0.0276	0.2361	0.1019	1.5100e-003		0.0191	0.0191		0.0191	0.0191		301.1981	301.1981	5.7700e-003	5.5200e-003	302.9880

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2526.49	0.0273	0.2328	0.0991	1.4900e-003		0.0188	0.0188		0.0188	0.0188		297.2336	297.2336	5.7000e-003	5.4500e-003	298.9999
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	33.6986	3.6000e-004	3.3000e-003	2.7800e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		3.9645	3.9645	8.0000e-005	7.0000e-005	3.9881
Total		**0.0276**	**0.2361**	**0.1019**	**1.5100e-003**		**0.0191**	**0.0191**		**0.0191**	**0.0191**		**301.1981**	**301.1981**	**5.7800e-003**	**5.5200e-003**	**302.9880**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2.40433	0.0259	0.2216	0.0943	1.4100e-003		0.0179	0.0179		0.0179	0.0179		282.8627	282.8627	5.4200e-003	5.1900e-003	284.5436
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.0310284	3.3000e-004	3.0400e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6504	3.6504	7.0000e-005	7.0000e-005	3.6721
Total		**0.0263**	**0.2246**	**0.0969**	**1.4300e-003**		**0.0181**	**0.0181**		**0.0181**	**0.0181**		**286.5131**	**286.5131**	**5.4900e-003**	**5.2600e-003**	**288.2157**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	24.2295	1.8229	49.6662	0.1094		6.4551	6.4551		6.4551	6.4551	786.8212	1,524.5227	2,311.3439	2.3585	0.0534	2,386.2217
Unmitigated	24.2295	1.8229	49.6662	0.1094		6.4551	6.4551		6.4551	6.4551	786.8212	1,524.5227	2,311.3439	2.3585	0.0534	2,386.2217

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1690					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8393					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	22.0110	1.7429	42.7184	0.1090		6.4166	6.4166		6.4166	6.4166	786.8212	1,512.0000	2,298.8212	2.3465	0.0534	2,373.3968
Landscaping	0.2102	0.0800	6.9478	3.7000e-004		0.0385	0.0385		0.0385	0.0385		12.5227	12.5227	0.0121		12.8249
Total	**24.2295**	**1.8229**	**49.6662**	**0.1094**		**6.4551**	**6.4551**		**6.4551**	**6.4551**	**786.8212**	**1,524.5227**	**2,311.3439**	**2.3585**	**0.0534**	**2,386.2217**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1690					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8393					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	22.0110	1.7429	42.7184	0.1090		6.4166	6.4166		6.4166	6.4166	786.8212	1,512.0000	2,298.8212	2.3465	0.0534	2,373.3968
Landscaping	0.2102	0.0800	6.9478	3.7000e-004		0.0385	0.0385		0.0385	0.0385		12.5227	12.5227	0.0121		12.8249
Total	**24.2295**	**1.8229**	**49.6662**	**0.1094**		**6.4551**	**6.4551**		**6.4551**	**6.4551**	**786.8212**	**1,524.5227**	**2,311.3439**	**2.3585**	**0.0534**	**2,386.2217**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Landscaping

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

86 Fair Oaks

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	195.00	Space	0.00	78,000.00	0
Apartments Mid Rise	84.00	Dwelling Unit	0.74	84,000.00	240
Strip Mall	7.50	1000sqft	0.00	7,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	12			**Operational Year**	2024
Utility Company	Pasadena Water & Power				
CO2 Intensity (lb/MWhr)	1664.14	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2e intensity factor updated per SoCal Edison's 2018 Sustainability Report, see: https://www.edison.com/content/dam/eix/documents/sustainability/eix-2018-sustainability-report.pdf

Land Use - 4 work/live units (1,300 sf) included as a retail land use.

Construction Phase - Schedule per the Applicant's Construction Questionnaire.

Off-road Equipment - Construction equipment per the Applicant's Construction Questionnaire. Any hours changed based on Appendix D of CalEEMod Users Guide for a lot under 1 acre.

Off-road Equipment - Construction equipment per the Construction Questionnaire.

Off-road Equipment - From construction questionnaire.

Trips and VMT - haul route round trip = 26 miles

Demolition -

Grading - size of the project site

Construction Off-road Equipment Mitigation - Tier 3 equipment per the Construction Questionnaire. Soil stabilizers and ground cover reductions from SCAQMD CEQA Guidelines.

Mobile Land Use Mitigation - Project site near two Metro Gold Line stations.

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Off-road Equipment -

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	13.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstructionPhase	NumDays	5.00	45.00
tblConstructionPhase	NumDays	100.00	458.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	2.00	130.00
tblConstructionPhase	PhaseEndDate	6/14/2022	3/1/2024
tblConstructionPhase	PhaseEndDate	6/7/2022	3/1/2024
tblConstructionPhase	PhaseEndDate	1/14/2022	1/31/2022
tblConstructionPhase	PhaseEndDate	1/18/2022	8/1/2022
tblConstructionPhase	PhaseStartDate	6/8/2022	1/1/2024
tblConstructionPhase	PhaseStartDate	1/19/2022	6/1/2022
tblConstructionPhase	PhaseStartDate	1/15/2022	2/1/2022
tblGrading	AcresOfGrading	0.00	0.74
tblGrading	MaterialExported	0.00	45,500.00
tblLandUse	LotAcreage	1.75	0.00
tblLandUse	LotAcreage	2.21	0.74
tblLandUse	LotAcreage	0.17	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment

tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	13.00
tblTripsAndVMT	HaulingTripLength	20.00	13.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	9.2028	90.7466	89.7817	0.2113	2.2100	3.7780	5.9880	0.5884	3.5052	4.0936	0.0000	20,726.7430	20,726.7430	5.1869	0.0000	20,856.4149
2023	3.9574	36.3615	41.0170	0.0875	1.2202	1.6391	2.8593	0.3270	1.5205	1.8475	0.0000	8,503.2248	8,503.2248	2.1352	0.0000	8,556.6055
2024	17.7526	35.5246	43.1640	0.0919	1.4326	1.5760	3.0086	0.3833	1.4659	1.8492	0.0000	8,928.8189	8,928.8189	2.1515	0.0000	8,982.6064
Maximum	**17.7526**	**90.7466**	**89.7817**	**0.2113**	**2.2100**	**3.7780**	**5.9880**	**0.5884**	**3.5052**	**4.0936**	**0.0000**	**20,726.7430**	**20,726.7430**	**5.1869**	**0.0000**	**20,856.4149**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.3431	60.1711	68.4464	0.2113	2.1795	2.4128	4.5923	0.5840	2.4109	2.9948	0.0000	14,266.7608	14,266.7608	3.1409	0.0000	14,345.2833
2023	1.3376	20.2794	26.4703	0.0875	1.2202	0.9633	2.1835	0.3270	0.9626	1.2896	0.0000	5,133.8798	5,133.8798	1.0672	0.0000	5,160.5591
2024	15.1571	21.6542	28.6122	0.0919	1.4326	1.0597	2.4923	0.3833	1.0590	1.4422	0.0000	5,559.5653	5,559.5653	1.0835	0.0000	5,586.6521
Maximum	**15.1571**	**60.1711**	**68.4464**	**0.2113**	**2.1795**	**2.4128**	**4.5923**	**0.5840**	**2.4109**	**2.9948**	**0.0000**	**14,266.7608**	**14,266.7608**	**3.1409**	**0.0000**	**14,345.2833**

86 Fair Oaks - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**35.83**	**37.22**	**28.99**	**0.00**	**0.63**	**36.57**	**21.83**	**0.34**	**31.72**	**26.49**	**0.00**	**34.59**	**34.59**	**44.14**	**0.00**	**34.65**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	24.2295	1.8229	49.6662	0.1094		6.4551	6.4551		6.4551	6.4551	786.8212	1,524.5227	2,311.3439	2.3585	0.0534	2,386.2217
Energy	0.0276	0.2361	0.1019	1.5100e-003		0.0191	0.0191		0.0191	0.0191		301.1981	301.1981	5.7700e-003	5.5200e-003	302.9880
Mobile	1.1798	5.3896	14.6029	0.0586	5.4007	0.0435	5.4443	1.4447	0.0405	1.4852		5,977.1684	5,977.1684	0.2746		5,984.0333
Total	**25.4370**	**7.4486**	**64.3709**	**0.1694**	**5.4007**	**6.5177**	**11.9184**	**1.4447**	**6.5146**	**7.9593**	**786.8212**	**7,802.8892**	**8,589.7104**	**2.6389**	**0.0589**	**8,673.2430**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	24.2295	1.8229	49.6662	0.1094		6.4551	6.4551		6.4551	6.4551	786.8212	1,524.5227	2,311.3439	2.3585	0.0534	2,386.2217
Energy	0.0263	0.2246	0.0968	1.4300e-003		0.0182	0.0182		0.0182	0.0182		286.5131	286.5131	5.4900e-003	5.2500e-003	288.2157
Mobile	1.1050	4.9722	12.7188	0.0497	4.5250	0.0373	4.5623	1.2105	0.0347	1.2451		5,069.3677	5,069.3677	0.2391		5,075.3440
Total	**25.3608**	**7.0197**	**62.4818**	**0.1605**	**4.5250**	**6.5105**	**11.0356**	**1.2105**	**6.5079**	**7.7183**	**786.8212**	**6,880.4035**	**7,667.2246**	**2.6031**	**0.0587**	**7,749.7814**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.30**	**5.76**	**2.93**	**5.31**	**16.21**	**0.11**	**7.41**	**16.21**	**0.10**	**3.03**	**0.00**	**11.82**	**10.74**	**1.36**	**0.46**	**10.65**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2022	1/31/2022	5	21	
2	Grading	Grading	2/1/2022	8/1/2022	5	130	
3	Building Construction	Building Construction	6/1/2022	3/1/2024	5	458	
4	Architectural Coating	Architectural Coating	1/1/2024	3/1/2024	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.74

Acres of Paving: 0

Residential Indoor: 170,100; Residential Outdoor: 56,700; Non-Residential Indoor: 11,250; Non-Residential Outdoor: 3,750; Striped Parking Area: 4,680 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Off-Highway Trucks	1	8.00	402	0.38
Demolition	Other Construction Equipment	3	8.00	172	0.42

Demolition	Rough Terrain Forklifts	1	8.00	100	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Signal Boards	2	8.00	6	0.82
Building Construction	Forklifts	0	6.00	89	0.20
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Off-Highway Trucks	2	8.00	402	0.38
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Other Construction Equipment	5	8.00	172	0.42
Grading	Rough Terrain Forklifts	1	8.00	100	0.40
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Signal Boards	2	8.00	6	0.82
Building Construction	Cranes	1	4.00	231	0.29
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Building Construction	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Other Construction Equipment	5	8.00	172	0.42
Building Construction	Paving Equipment	1	7.00	132	0.36
Building Construction	Rollers	1	7.00	80	0.38
Building Construction	Rough Terrain Forklifts	1	6.00	100	0.40
Building Construction	Rubber Tired Loaders	1	8.00	203	0.36
Building Construction	Signal Boards	2	8.00	6	0.82
Building Construction	Surfacing Equipment	2	8.00	263	0.30
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	11	28.00	0.00	12.00	14.70	6.90	13.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	5,688.00	14.70	6.90	13.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	96.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1274	0.0000	0.1274	0.0193	0.0000	0.0193			0.0000			0.0000
Off-Road	2.8580	26.5180	28.4394	0.0566		1.2279	1.2279		1.1439	1.1439		5,430.6342	5,430.6342	1.5754		5,470.0184
Total	**2.8580**	**26.5180**	**28.4394**	**0.0566**	**0.1274**	**1.2279**	**1.3552**	**0.0193**	**1.1439**	**1.1632**		**5,430.6342**	**5,430.6342**	**1.5754**		**5,470.0184**

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.0800e-003	0.1074	0.0252	2.9000e-004	6.4900e-003	2.7000e-004	6.7600e-003	1.7800e-003	2.6000e-004	2.0400e-003		31.9788	31.9788	2.5800e-003		32.0434
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1215	0.0758	0.8785	2.8100e-003	0.3130	2.2500e-003	0.3152	0.0830	2.0700e-003	0.0851		280.2741	280.2741	7.0600e-003		280.4506
Total	**0.1245**	**0.1832**	**0.9037**	**3.1000e-003**	**0.3195**	**2.5200e-003**	**0.3220**	**0.0848**	**2.3300e-003**	**0.0871**		**312.2529**	**312.2529**	**9.6400e-003**		**312.4940**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0422	0.0000	0.0422	6.3900e-003	0.0000	6.3900e-003			0.0000			0.0000
Off-Road	0.8718	17.7889	22.4996	0.0566		0.8960	0.8960		0.8960	0.8960	0.0000	3,537.0132	3,537.0132	0.9846		3,561.6280
Total	**0.8718**	**17.7889**	**22.4996**	**0.0566**	**0.0422**	**0.8960**	**0.9382**	**6.3900e-003**	**0.8960**	**0.9023**	**0.0000**	**3,537.0132**	**3,537.0132**	**0.9846**		**3,561.6280**

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.0800e-003	0.1074	0.0252	2.9000e-004	6.4900e-003	2.7000e-004	6.7600e-003	1.7800e-003	2.6000e-004	2.0400e-003		31.9788	31.9788	2.5800e-003		32.0434
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1215	0.0758	0.8785	2.8100e-003	0.3130	2.2500e-003	0.3152	0.0830	2.0700e-003	0.0851		280.2741	280.2741	7.0600e-003		280.4506
Total	**0.1245**	**0.1832**	**0.9037**	**3.1000e-003**	**0.3195**	**2.5200e-003**	**0.3220**	**0.0848**	**2.3300e-003**	**0.0871**		**312.2529**	**312.2529**	**9.6400e-003**		**312.4940**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0456	0.0000	0.0456	6.6500e-003	0.0000	6.6500e-003			0.0000			0.0000
Off-Road	4.5649	42.2054	45.1350	0.0968		1.9306	1.9306		1.7904	1.7904		9,319.8581	9,319.8581	2.8332		9,390.6887
Total	**4.5649**	**42.2054**	**45.1350**	**0.0968**	**0.0456**	**1.9306**	**1.9762**	**6.6500e-003**	**1.7904**	**1.7970**		**9,319.8581**	**9,319.8581**	**2.8332**		**9,390.6887**

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2358	8.2240	1.9318	0.0225	0.4971	0.0208	0.5178	0.1362	0.0199	0.1561		2,448.5947	2,448.5947	0.1978		2,453.5400
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1735	0.1083	1.2550	4.0200e-003	0.4471	3.2100e-003	0.4503	0.1186	2.9600e-003	0.1215		400.3915	400.3915	0.0101		400.6437
Total	**0.4093**	**8.3323**	**3.1868**	**0.0265**	**0.9442**	**0.0240**	**0.9682**	**0.2548**	**0.0228**	**0.2776**		**2,848.9862**	**2,848.9862**	**0.2079**		**2,854.1837**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0151	0.0000	0.0151	2.2000e-003	0.0000	2.2000e-003			0.0000			0.0000
Off-Road	1.5561	31.0176	38.4897	0.0968		1.4231	1.4231		1.4231	1.4231	0.0000	6,229.5746	6,229.5746	1.8554		6,275.9601
Total	**1.5561**	**31.0176**	**38.4897**	**0.0968**	**0.0151**	**1.4231**	**1.4383**	**2.2000e-003**	**1.4231**	**1.4253**	**0.0000**	**6,229.5746**	**6,229.5746**	**1.8554**		**6,275.9601**

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2358	8.2240	1.9318	0.0225	0.4971	0.0208	0.5178	0.1362	0.0199	0.1561		2,448.5947	2,448.5947	0.1978		2,453.5400
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1735	0.1083	1.2550	4.0200e-003	0.4471	3.2100e-003	0.4503	0.1186	2.9600e-003	0.1215		400.3915	400.3915	0.0101		400.6437
Total	**0.4093**	**8.3323**	**3.1868**	**0.0265**	**0.9442**	**0.0240**	**0.9682**	**0.2548**	**0.0228**	**0.2776**		**2,848.9862**	**2,848.9862**	**0.2079**		**2,854.1837**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7484	37.8633	37.8849	0.0728		1.8117	1.8117		1.6810	1.6810		6,996.6081	6,996.6081	2.0818		7,048.6540
Total	**3.7484**	**37.8633**	**37.8849**	**0.0728**		**1.8117**	**1.8117**		**1.6810**	**1.6810**		**6,996.6081**	**6,996.6081**	**2.0818**		**7,048.6540**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0638	2.0857	0.5631	5.6100e-003	0.1472	4.0400e-003	0.1512	0.0424	3.8600e-003	0.0462		600.3509	600.3509	0.0397		601.3436
Worker	0.4164	0.2599	3.0119	9.6400e-003	1.0731	7.7100e-003	1.0808	0.2846	7.1000e-003	0.2917		960.9397	960.9397	0.0242		961.5450
Total	**0.4802**	**2.3457**	**3.5750**	**0.0153**	**1.2202**	**0.0118**	**1.2320**	**0.3270**	**0.0110**	**0.3379**		**1,561.2905**	**1,561.2905**	**0.0639**		**1,562.8885**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8975	18.4756	23.1949	0.0728		0.9539	0.9539		0.9539	0.9539	0.0000	3,626.9094	3,626.9094	1.0137		3,652.2511
Total	**0.8975**	**18.4756**	**23.1949**	**0.0728**		**0.9539**	**0.9539**		**0.9539**	**0.9539**	**0.0000**	**3,626.9094**	**3,626.9094**	**1.0137**		**3,652.2511**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0638	2.0857	0.5631	5.6100e-003	0.1472	4.0400e-003	0.1512	0.0424	3.8600e-003	0.0462		600.3509	600.3509	0.0397		601.3436
Worker	0.4164	0.2599	3.0119	9.6400e-003	1.0731	7.7100e-003	1.0808	0.2846	7.1000e-003	0.2917		960.9397	960.9397	0.0242		961.5450
Total	**0.4802**	**2.3457**	**3.5750**	**0.0153**	**1.2202**	**0.0118**	**1.2320**	**0.3270**	**0.0110**	**0.3379**		**1,561.2905**	**1,561.2905**	**0.0639**		**1,562.8885**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5173	34.5577	37.7416	0.0728		1.6296	1.6296		1.5118	1.5118		6,996.1107	6,996.1107	2.0786		7,048.0743
Total	**3.5173**	**34.5577**	**37.7416**	**0.0728**		**1.6296**	**1.6296**		**1.5118**	**1.5118**		**6,996.1107**	**6,996.1107**	**2.0786**		**7,048.0743**

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0474	1.5687	0.4994	5.4300e-003	0.1472	1.9000e-003	0.1491	0.0424	1.8100e-003	0.0442		581.9693	581.9693	0.0349		582.8409
Worker	0.3927	0.2351	2.7761	9.2800e-003	1.0731	7.5100e-003	1.0806	0.2846	6.9200e-003	0.2915		925.1449	925.1449	0.0218		925.6903
Total	**0.4401**	**1.8038**	**3.2754**	**0.0147**	**1.2202**	**9.4100e-003**	**1.2296**	**0.3270**	**8.7300e-003**	**0.3357**		**1,507.1141**	**1,507.1141**	**0.0567**		**1,508.5312**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8975	18.4756	23.1949	0.0728		0.9539	0.9539		0.9539	0.9539	0.0000	3,626.7656	3,626.7656	1.0105		3,652.0279
Total	**0.8975**	**18.4756**	**23.1949**	**0.0728**		**0.9539**	**0.9539**		**0.9539**	**0.9539**	**0.0000**	**3,626.7656**	**3,626.7656**	**1.0105**		**3,652.0279**

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0474	1.5687	0.4994	5.4300e-003	0.1472	1.9000e-003	0.1491	0.0424	1.8100e-003	0.0442		581.9693	581.9693	0.0349		582.8409
Worker	0.3927	0.2351	2.7761	9.2800e-003	1.0731	7.5100e-003	1.0806	0.2846	6.9200e-003	0.2915		925.1449	925.1449	0.0218		925.6903
Total	**0.4401**	**1.8038**	**3.2754**	**0.0147**	**1.2202**	**9.4100e-003**	**1.2296**	**0.3270**	**8.7300e-003**	**0.3357**		**1,507.1141**	**1,507.1141**	**0.0567**		**1,508.5312**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3717	32.4842	37.7690	0.0728		1.5043	1.5043		1.3951	1.3951		6,995.8022	6,995.8022	2.0774		7,047.7373
Total	**3.3717**	**32.4842**	**37.7690**	**0.0728**		**1.5043**	**1.5043**		**1.3951**	**1.3951**		**6,995.8022**	**6,995.8022**	**2.0774**		**7,047.7373**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0463	1.5651	0.4852	5.4100e-003	0.1472	1.8700e-003	0.1490	0.0424	1.7900e-003	0.0442		579.9498	579.9498	0.0343		580.8079
Worker	0.3728	0.2142	2.5876	8.9700e-003	1.0731	7.4100e-003	1.0805	0.2846	6.8200e-003	0.2914		894.5688	894.5688	0.0200		895.0680
Total	**0.4191**	**1.7792**	**3.0728**	**0.0144**	**1.2202**	**9.2800e-003**	**1.2295**	**0.3270**	**8.6100e-003**	**0.3356**		**1,474.5186**	**1,474.5186**	**0.0543**		**1,475.8760**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8975	18.4756	23.1949	0.0728		0.9539	0.9539		0.9539	0.9539	0.0000	3,626.5486	3,626.5486	1.0094		3,651.7830
Total	**0.8975**	**18.4756**	**23.1949**	**0.0728**		**0.9539**	**0.9539**		**0.9539**	**0.9539**	**0.0000**	**3,626.5486**	**3,626.5486**	**1.0094**		**3,651.7830**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0463	1.5651	0.4852	5.4100e-003	0.1472	1.8700e-003	0.1490	0.0424	1.7900e-003	0.0442		579.9498	579.9498	0.0343		580.8079
Worker	0.3728	0.2142	2.5876	8.9700e-003	1.0731	7.4100e-003	1.0805	0.2846	6.8200e-003	0.2914		894.5688	894.5688	0.0200		895.0680
Total	**0.4191**	**1.7792**	**3.0728**	**0.0144**	**1.2202**	**9.2800e-003**	**1.2295**	**0.3270**	**8.6100e-003**	**0.3356**		**1,474.5186**	**1,474.5186**	**0.0543**		**1,475.8760**

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**13.8880**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.5 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0738	0.0424	0.5121	1.7800e-003	0.2124	1.4700e-003	0.2138	0.0563	1.3500e-003	0.0577		177.0501	177.0501	3.9500e-003		177.1489
Total	**0.0738**	**0.0424**	**0.5121**	**1.7800e-003**	**0.2124**	**1.4700e-003**	**0.2138**	**0.0563**	**1.3500e-003**	**0.0577**		**177.0501**	**177.0501**	**3.9500e-003**		**177.1489**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.7072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**13.7667**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.5 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0738	0.0424	0.5121	1.7800e-003	0.2124	1.4700e-003	0.2138	0.0563	1.3500e-003	0.0577		177.0501	177.0501	3.9500e-003		177.1489
Total	**0.0738**	**0.0424**	**0.5121**	**1.7800e-003**	**0.2124**	**1.4700e-003**	**0.2138**	**0.0563**	**1.3500e-003**	**0.0577**		**177.0501**	**177.0501**	**3.9500e-003**		**177.1489**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1050	4.9722	12.7188	0.0497	4.5250	0.0373	4.5623	1.2105	0.0347	1.2451		5,069.3677	5,069.3677	0.2391		5,075.3440
Unmitigated	1.1798	5.3896	14.6029	0.0586	5.4007	0.0435	5.4443	1.4447	0.0405	1.4852		5,977.1684	5,977.1684	0.2746		5,984.0333

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	558.60	536.76	492.24	1,865,765	1,563,250
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	332.40	315.30	153.23	579,075	485,184
Total	891.00	852.06	645.47	2,444,840	2,048,434

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553363	0.042540	0.203692	0.115607	0.014606	0.005830	0.021800	0.032323	0.002120	0.001725	0.004837	0.000711	0.000846
Enclosed Parking with Elevator	0.553363	0.042540	0.203692	0.115607	0.014606	0.005830	0.021800	0.032323	0.002120	0.001725	0.004837	0.000711	0.000846
Strip Mall	0.553363	0.042540	0.203692	0.115607	0.014606	0.005830	0.021800	0.032323	0.002120	0.001725	0.004837	0.000711	0.000846

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0263	0.2246	0.0968	1.4300e-003		0.0182	0.0182		0.0182	0.0182		286.5131	286.5131	5.4900e-003	5.2500e-003	288.2157
NaturalGas Unmitigated	0.0276	0.2361	0.1019	1.5100e-003		0.0191	0.0191		0.0191	0.0191		301.1981	301.1981	5.7700e-003	5.5200e-003	302.9880

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2526.49	0.0273	0.2328	0.0991	1.4900e-003		0.0188	0.0188		0.0188	0.0188		297.2336	297.2336	5.7000e-003	5.4500e-003	298.9999
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	33.6986	3.6000e-004	3.3000e-003	2.7800e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		3.9645	3.9645	8.0000e-005	7.0000e-005	3.9881
Total		**0.0276**	**0.2361**	**0.1019**	**1.5100e-003**		**0.0191**	**0.0191**		**0.0191**	**0.0191**		**301.1981**	**301.1981**	**5.7800e-003**	**5.5200e-003**	**302.9880**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2.40433	0.0259	0.2216	0.0943	1.4100e-003		0.0179	0.0179		0.0179	0.0179		282.8627	282.8627	5.4200e-003	5.1900e-003	284.5436
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.0310284	3.3000e-004	3.0400e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6504	3.6504	7.0000e-005	7.0000e-005	3.6721
Total		**0.0263**	**0.2246**	**0.0969**	**1.4300e-003**		**0.0181**	**0.0181**		**0.0181**	**0.0181**		**286.5131**	**286.5131**	**5.4900e-003**	**5.2600e-003**	**288.2157**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	24.2295	1.8229	49.6662	0.1094		6.4551	6.4551		6.4551	6.4551	786.8212	1,524.5227	2,311.3439	2.3585	0.0534	2,386.2217
Unmitigated	24.2295	1.8229	49.6662	0.1094		6.4551	6.4551		6.4551	6.4551	786.8212	1,524.5227	2,311.3439	2.3585	0.0534	2,386.2217

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1690					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8393					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	22.0110	1.7429	42.7184	0.1090		6.4166	6.4166		6.4166	6.4166	786.8212	1,512.0000	2,298.8212	2.3465	0.0534	2,373.3968
Landscaping	0.2102	0.0800	6.9478	3.7000e-004		0.0385	0.0385		0.0385	0.0385		12.5227	12.5227	0.0121		12.8249
Total	**24.2295**	**1.8229**	**49.6662**	**0.1094**		**6.4551**	**6.4551**		**6.4551**	**6.4551**	**786.8212**	**1,524.5227**	**2,311.3439**	**2.3585**	**0.0534**	**2,386.2217**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1690					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8393					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	22.0110	1.7429	42.7184	0.1090		6.4166	6.4166		6.4166	6.4166	786.8212	1,512.0000	2,298.8212	2.3465	0.0534	2,373.3968
Landscaping	0.2102	0.0800	6.9478	3.7000e-004		0.0385	0.0385		0.0385	0.0385		12.5227	12.5227	0.0121		12.8249
Total	**24.2295**	**1.8229**	**49.6662**	**0.1094**		**6.4551**	**6.4551**		**6.4551**	**6.4551**	**786.8212**	**1,524.5227**	**2,311.3439**	**2.3585**	**0.0534**	**2,386.2217**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Landscaping

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX C

Biological Resources

Updated Tree Condition Letter

Carlberg ASSOCIATES

Horticulturists and
Registered Consulting
ARBORISTS

March 12, 2019

Linda Silverstein, Project Administrator
Goldrich Kest
5150 Overland Avenue
Culver City, California 90230

Re: 86 South Fair Oaks Avenue, Pasadena, California 91105

Dear Ms. Silverstein,

In June 2018, Carlberg Associates conducted a tree inventory on the property located at 86 South Fair Oaks Avenue in Pasadena. The existing parking lot is proposed to be demolished to accommodate a new mixed-use development. Carlberg prepared a tree inventory, tree location map, and Protected Tree Removal applications that were submitted to the City of Pasadena by the project architect, Architectural Resources Group (ARG), in September 2018.

It has come to our attention that Tree #24, a protected Indian laurel fig (*Ficus microcarpa*), failed from the root plate during one of the rain storms in January 2018. Photographs provided by ARG at the end of this letter illustrate the failure. I did not see the tree in its failed condition. In 2018, we noted fungal fruiting bodies on several of the structural roots. Based on the prior presence of fungal fruiting bodies and the nature of the failure, this tree failure appears to have occurred due to storm-related pressure on a significantly compromised root structure. These are natural causes and not related to any project-related activity.

It is my opinion that mitigation should not be required for the loss of this tree. Please feel welcome to contact me at our Sierra Madre office with questions. Thank you.

Sincerely,

Christine Cuba

Christy Cuba
ASCA Registered Consulting Arborist, #502
ISA Certified Arborist, WE-1982A
christy@cycarlberg.com

CHRISTINE M. CUBA
ASCA
AMERICAN SOCIETY of CONSULTING ARBORISTS
Registered Consulting Arborist #502

CC. Liz MacLean/ARG

Santa Monica Office
828 Fifth Street, Suite 3
Santa Monica, California 90403
Office: 310.451.4804

Sierra Madre Office
80 West Sierra Madre Boulevard, #241
Sierra Madre, California 91024
Office: 626.428.5072

www.cycarlberg.com

Central Park Protected Tree Location Exhibit

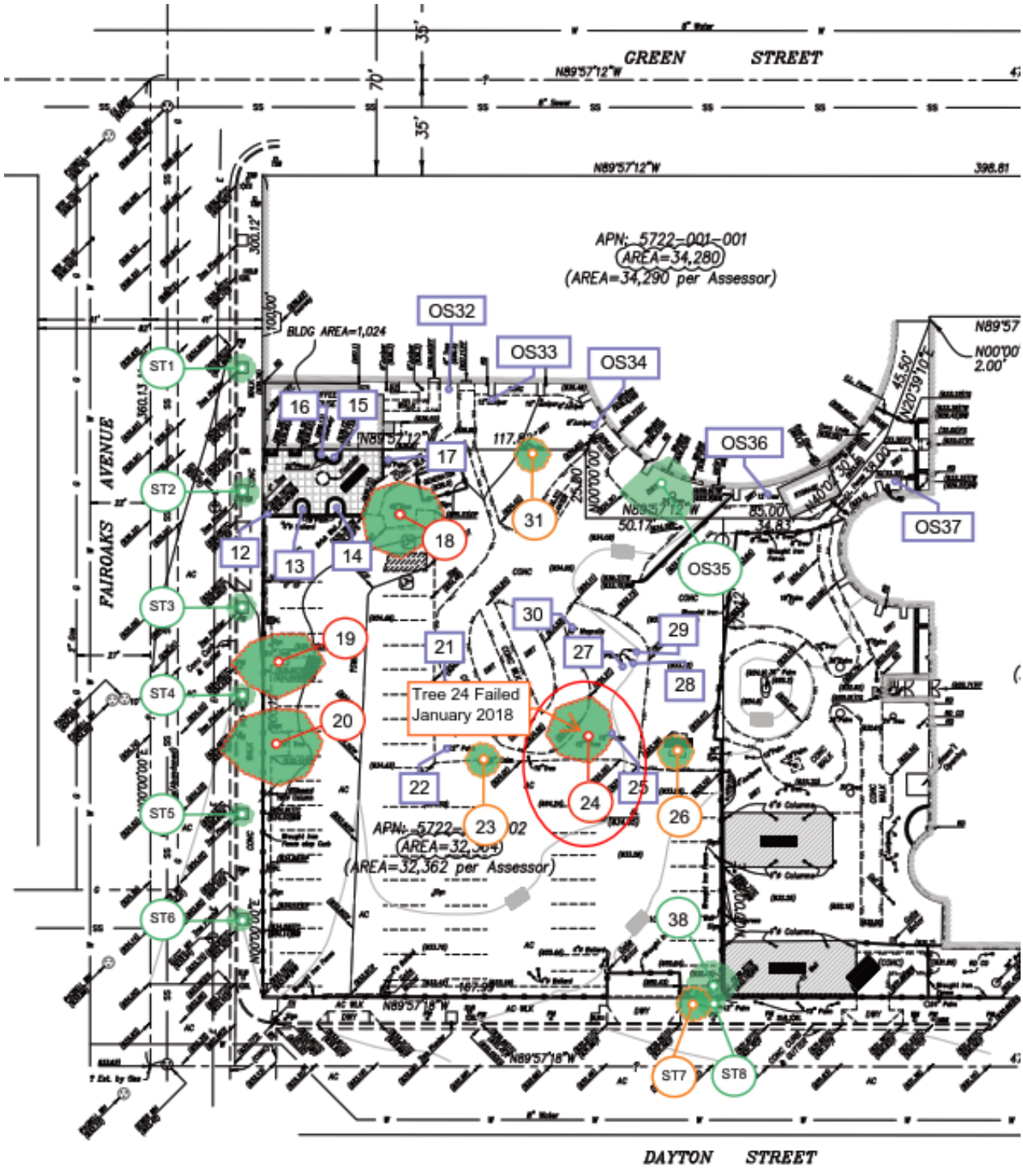


Exhibit A – Illustrating the location of Tree 24 on the Tree Location Map
Not to Scale



Above – Facing north - Illustrating Tree 24 in July 2017
Below – Illustrating some of the fungal fruiting bodies on the roots



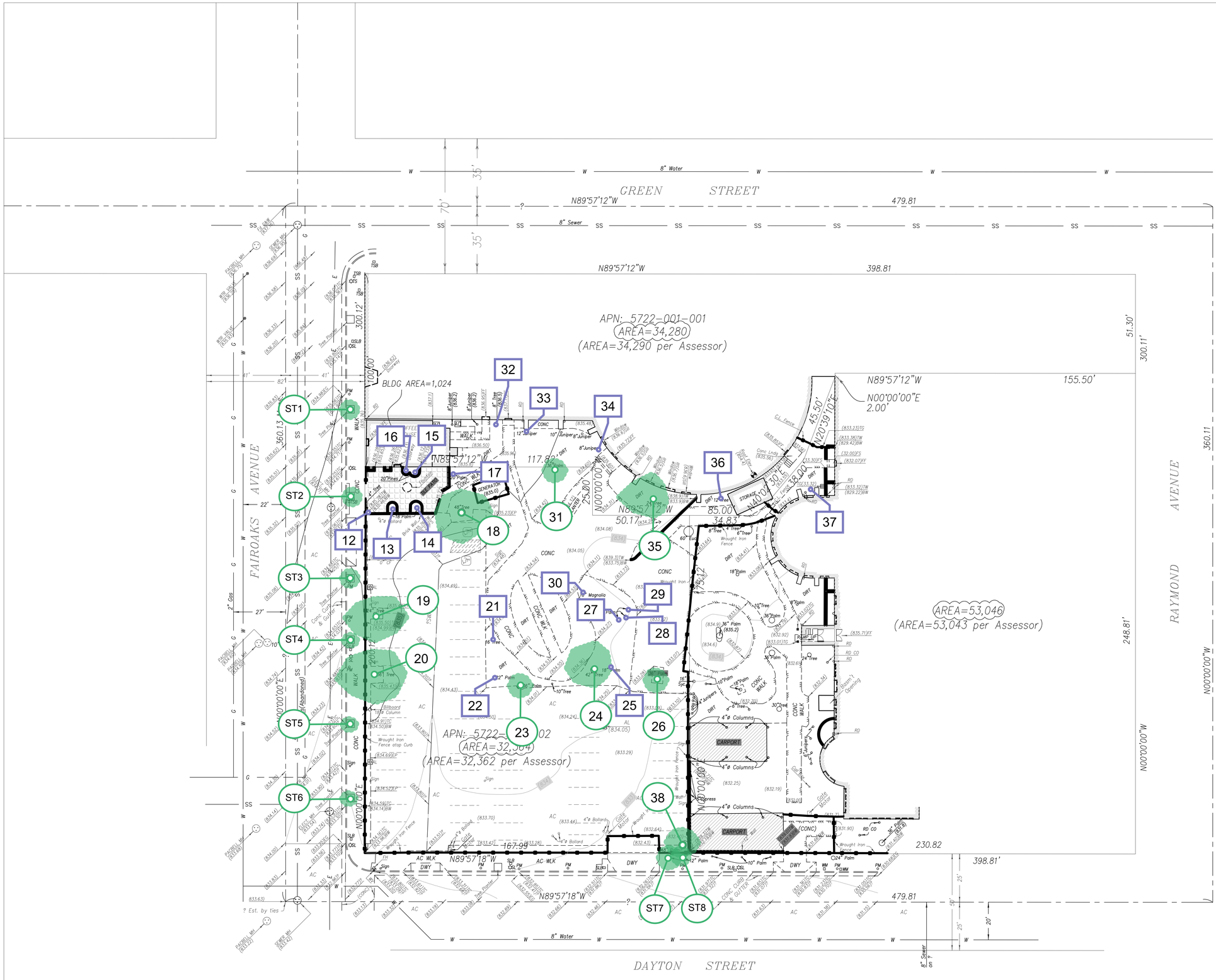


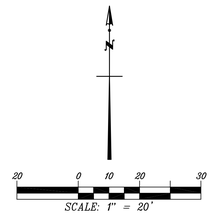
Above and Below - Illustrating Tree 24 after the failure in January 2018





Illustrating Tree 24 after the failure in January 2018





TREE INVENTORY LEGEND

- # — City of Pasadena Protected Tree
- Protected Tree Canopy
- # — Inventoried Non-Protected Tree

Note: Inventoried trees plotted outside property line boundaries are designated "OS" for off-site and "ST" for city street trees

Carlberg ASSOCIATES
Horticulturists and Registered Consulting ARBORISTS

PROTECTED TREE LOCATION EXHIBIT

86 SOUTH FAIR OAKS AVENUE, PASADENA, CALIFORNIA
PREPARED FOR: GOLDRICH KEST

www.cycarlberg.com — Date: 7.10.17 — By: J. Sanchez

LEGEND

AL	Area Light
BW	Back Walk/Bottom Wall
CO	Clean-Out
FH	Fire Hydrant
℄	Flowline
PM	Parking Meter
RD	Roof Drain
SL	Street Light
SLB	Street Lighting Box
TC	Top Curb
TS	Traffic Signal
TSB	Traffic Signal Box
WM	Water Meter
WV	Water Valve

LEGAL DESCRIPTION:

A portion of Lot 2 of Hotel Green Replat, in the City of Pasadena, County of Los Angeles, State of California as per map recorded in Book 1 pages 77-78 of maps, in the Office of the County Recorder of said county.

Assessor's Parcel No. 5722-001-001
Owner: Green Hotel Apartments
Site Address: 71 S. Raymond Ave., Pasadena, CA 91105
Zoning: LA PSC-

BENCHMARK:

Spk E. Curb Fairoaks opposite South Line Dayton Street to the West.
Elevation: 833.81'

12-04-09 UPDATED PROPERTY LINES AND LOT AREAS PER LEGAL DESCRIPTION PROVIDED BY CLIENT

These plans are instruments of service and the property of S.E.C. Civil Engineers, Inc. All information contained on these drawings is for use on this specified project. If plans are provided in an electronic format (computer disk, compact disk, or via e-mail or modem transmission, etc) as a courtesy to our client, the delivery of electonic files does not constitute the delivery of our professional work product. Only paper prints signed by a registered engineer employed by S.E.C. Civil Engineers, Inc. constitute our professional work product. S.E.C. Civil Engineers, Inc. shall not be responsible for any modifications made to the electronic files, or for any products derived from electronic files which are not reviewed and signed by a registered engineer employed by S.E.C Civil Engineers, Inc.

Copyright: S.E.C. Civil Engineers, Inc.
All rights Reserved.

JOB NO. 7532.00
SCALE: 1"=20'
DATE: 2-21-07
REVISION: 12-04-09
REVISION:

S.E.C. CIVIL ENGINEERS, INC.
16823 SATICOY STREET VAN NUYS, CA. 91406
(818) 782-2788 (323) 873-1788 FAX:(818) 782-0111
RONALD W. SPINDLER R.C.E. 13194

SHEET OF

CLIENT: Prestige Homes, Inc.

PROJECT: Architectural Topography-Green Hotel

F:\History\7532.00 Prestige Homes Green Hotel\3 Engineering\3-01-01 Calcs\Master.dwg 7/19/2010 12:19:48 PM PDT

Tree ID	Common Name / Botanical Name	DBH / BT Ht.	Height	Spread (N/E/S/W)	Health Grade	Structure Grade	Comments	Disposition	Protected Y/N
ST1	Crape myrtle/ *Lagerstroemia indica*	3	20	4/4/5/4	B	B	tree well, sparse interior	Retain	City right-of-way
ST2	Crape myrtle/ *Lagerstroemia indica*	3	15	6/6/5/3	A	A	tree well, minor basal damage	Retain	City right-of-way
ST3	Crape myrtle/ *Lagerstroemia indica*	2	13	4/4/5/5	A-	B	planted low, dry	Retain	City right-of-way
ST4	Crape myrtle/ *Lagerstroemia indica*	1	10	2/2/2/2	F	F	dead	Retain	City right-of-way
ST5	Crape myrtle/ *Lagerstroemia indica*	1	10	1/1/1/1	B	B	codominant stems at 6 feet	Retain	City right-of-way
ST6	Crape myrtle/ *Lagerstroemia indica*	stump sprouts	4	2/2/2/2	A-	C	powdery mildew	Retain	City right-of-way
ST7	Queen palm/ *Syagrus romanzoffiana*	20' BT*	30	10/10/10/10	A	A		Remove	City right-of-way
ST8	Queen palm/ *Syagrus romanzoffiana*	15' BT	20	7/7/7/7	A	B	shaded by phoenix canariensis to north	Remove	City right-of-way
12	Tree of Heaven/ *Ailanthus altissima*	8.5	30	10/12/14/20	A	B	codominant stems, concrete all around	Remove	No
13	Mexican fan palm/ *Washingtonia robusta*	50' BT	58	10/10/10/10	A	A	old tags 71, 38	Remove	No
14	Mexican fan palm/ *Washingtonia robusta*	65' BT	73	8/8/8/8	A	A		Remove	No
15	Canary Island pine/ *Pinus canariensis*	21	80	8/8/12/12	B	B	topped (laterals), shaded on west by other, epicormic growth	Remove	No
16	Canary Island pine/ *Pinus canariensis*	18.5	75	12/12/12/13	A	B-	topped (laterals), shaded on east by other, epicormic growth	Remove	No
17	Mexican fan palm/ *Washingtonia robusta*	42' BT	50	8/8/8/8	A	A		Remove	No
18	Camphor/ *Cinnamomum camphora*	19, 21, 31	45	15/21/25/15	B	C	multiple pruning events, topped, epicormic, history of breakage, mechanical damage, good	Remove	**Yes**
19	Camphor/ *Cinnamomum camphora*	16, 16.5	45	12/18/15/20	B	B	multiple pruning events, codominant stems, epicormic, twig dieback, old mechanical damage	Remove	**Yes**
20	Camphor/ *Cinnamomum camphora*	18.5, 23.5	45	15/21/21/30	B	B	multiple pruning events, epicormic, twig dieback, old mechanical damage, history of breakage	Remove	**Yes**
21	Chinese elm/ *Ulmus parvifolia*	15	25	9/12/20/12	B	C	old tag 10, 2 trunks, anthracnose at base, mechanical damage, lost a codominant stem at	Remove	No
22	Mexican fan palm/ *Washingtonia robusta*	50' BT	57	7/7/7/7	A	A-	woodpeckers, old tags 235 and 77	Remove	No
23	California fan palm/ *Washingtonia filifera*	45' BT	55	10/10/10/10	A	A-	woodpeckers, spiked, old tag 11	Relocate	**Yes**
24	Indian laurel fig/ *Ficus microcarpa*	40.5 at 4 ft	45	30/15/18/27	B	C	white fungi on roots at all sides (only on bark), old tags 12 and 55	Remove	**Yes**
25	Mexican fan palm/ *Washingtonia robusta*	50' BT	58	8/8/8/8	A	A	old tags 27 and 78, curved trunk	Remove	No

Tree ID	Common Name / Botanical Name	DBH / BT Ht.	Height	Spread (N/E/S/W)	Health Grade	Structure Grade	Comments	Disposition	Protected Y/N
26	Canary Island date palm/ *Phoenix canariensis*	50' BT	58	10/10/10/10	A	A	old tags 13 and 65	Remove	**Yes**
27	Mexican fan palm/ *Washingtonia robusta*	55' BT	62	8/8/8/8	A	A	spiked, old tag 29, woodpeckers	Remove	No
28	Mexican fan palm/ *Washingtonia robusta*	55' BT	62	8/8/8/8	A	A	curved trunk, old tag 30, woodpeckers	Remove	No
29	Mexican fan palm/ *Washingtonia robusta*	60' BT	68	8/8/8/8	A	A	old tag 31, woodpeckers in skinned part	Remove	No
30	Southern Magnolia/ *Magnolia grandiflora*	15	30	10/10/8/12	B	B	old tag 82, multiple pruning events, root pruned on westside 2ft	Remove	No
31	California fan palm/ *Washingtonia filifera*	50' BT	60	8/8/8/8	A	B	old tag 6 and 53, eroded trunk on south and west, spiked, mechanical damage on trunk	Relocate	**Yes**
32	Hollywood juniper/ *Juniperus chinensis 'Torulosa'*	5, 8, 10	30	4/12/9/6	A-	A-	codominant stems, minor dieback, old tags 34 and 74	Remain	No
33	Hollywood juniper/ *Juniperus chinensis 'Torulosa'*	13	30	3/10/10/12	A-	A	minor dieback, old tag 75	Remain	No
34	Hollywood juniper/ *Juniperus chinensis 'Torulosa'*	10	25	3/5/9/12	A	B-	old tag 32, leans southwest, cable imbedded (trunk and branch)	Remain	No
35	Camphor/ *Cinnamomum camphora*	24	45	21/12/12/24	B	B-	topped laterals and top, multiple pruning events, old pruning callus is good, old tags 7 and 68	Remain	**Yes**
36	Victorian box/ *Pittosporum undulatum*	10	28	1/6/10/10	C	C-	old tags 8 and 83, canker on southwest, topped, epicormic shoots	Remain	No
37	Weeping fig/ *Ficus benjamina*	2, 4, 6	30	14/15/14/10	A	B	potted plant escapee, shaded out	Remain	No
38	Canary Island date palm/ *Phoenix canariensis*	20' BT	30	15/15/15/15	A	A	old tag 67	Retain	**Yes**

ARCHITECTURAL RESOURCES GROUP, INC.
Architects, Planners & Conservators

MEMORANDUM

To:	Kristopher Forsythe Goldrich and Kest Industries, LLC 5150 Overland Ave. Culver City, CA 90230	8 Mills Place, Suite 300 Pasadena California 91105 626.583.1401
Project:	86 South Fair Oaks, Hotel Green Apartments	*fax* 626.583.1414
Project No:	*09190*	www.arg-la.com
Date:	June 7, 2013	
Phone:	(310) 204-2050 x 217	
Fax:	(310) 280-5770	
Via:	e-mail: KForsythe@GKInd.com	

Remarks:

ARG has reviewed the findings of the draft Tree Aging study by Jan C. Scow Consulting Arborists, LLC dated June 3, 2013. The study was commissioned by Goldrich & Kest Industries in order to provide an assessment of the ages of the trees on the Hotel Green Apartments project site, which lies within the historic property of the Hotel Green. As a part of this review, ARG examined historic photos in our research collection about the site with special attention to the project site. We reviewed the findings of the study and compared it to what we know about the historic character of the project site. We also estimated a period of significance for the historic Hotel Green property based on our prior research in order to put the estimated ages of the trees in the context of the project site's historical period.

No period of significance has yet been determined for the property. The National Register nomination was written before this became an obligatory part of a nomination. Our historic context report didn't make a call either. However, based on our research the period would begin in 1899 with the opening of the "West Annex," now the Castle Green. We believe that most qualified interpreters would place the end of the period of significance at end of the resort hotel era. We would argue for 1924, the year that the Castle Green became individually-owned apartment units and was no longer a hotel; this was presumably the year that the property was subdivided, though the date on the subdivision map we have is not legible. Trees that are more than 85 years old would then fall within the period of significance.

This age category would include six trees from the study's list:

5	Camphor	90-110 years old
13	Canary Island Date Palm	100-110 years old
11	California Fan Palm	75-85 years old
6	California Fan Palm	75-85 years old
35	Mexican Fan Palm	75-95 years old
37	Mexican Fan Palm	80-90 years old

In addition, four are close in age to this category at approximately 75 (range: 70 to 80) years old. These trees, it should be noted, are highly unlikely to be a part of any historic designed landscape from the prime resort era, and therefore from the period of significance, because they appear to the arborist to date to the 1930s. We have included them due to what the arborist has noted is the inexact nature of tree-dating (these specimens were noted to have an age class reliability of plus or minus 5%, or 3 to 4 years).

28	Mexican Fan Palm	70 to 80 years old
29	Mexican Fan Palm	70 to 80 years old
30	Mexican Fan Palm	70 to 80 years old
31	Mexican Fan Palm	70 to 80 years old

The study, then, identifies one broad-canopy, non-deciduous tree (the Camphor), six Mexican Fan Palms, two California Fan Palms, and one Canary Island Date Palm as being of or near an age that ARG determines could fall within the period of significance for the site.

The open area to the south of the Hotel Green (now the project site) was a historic planned landscape and can be seen in many historic images with paths, low plantings, trees, and other such features laid out according to the conventions of the day. This design worked in concert with that of Central Park, just across the street to the south. Although we have not done a thorough analysis, a review of the appearance of the garden in the historic images that we have seems to indicate that there are many features that there is no longer a trace within the project site. The trees that remain from the period do appear to be remnants of this design, but they are not significant enough on their own to give information about the overall design of the garden and they alone are not enough evidence of the design and (plant) material of the garden.

The remaining trees do not seem to be representative or typical of the range of trees that characterized the garden, given that all but one are palm trees, and palm trees do not dominate the historic photographs. One reason for this may be that the palms were very small and less visible when they were first planted, but many images show mature trees throughout the garden and relatively little sign of palm trees (which were present in early photos of Central Park, however).

The ages of the trees is certainly one issue, for it does appear that a number of them (some on the project site, and presumably some on the adjacent portion of the Castle Green property to the east) date to the property's period of significance. These trees would be considered historic features of the property. However, many of the trees that survive may not be from the period of significance but still do contribute to the historic character of the property.

The difference between these two categories of trees is that the former are presumed to be remnants of a historic designed landscape that is mostly gone from the site, as it has been altered over time and subject to different uses over time, including (particularly on the south half of the project site) a tennis court, a parking lot, and the site of a house; the latter category consists of trees that were not planted during the period of significance. They do, however, contribute to the setting of the historic buildings. One cannot expect a site whose period of significance is 110 to 85 years ago to have the same plants or even same replacement plants

(i.e., same species) that it had during that time in order to be considered significant. In this case, however, the hardscape, layout, and other more durable features of the garden that existed on the project site are also gone. Castle Green residents have noted that some of these remnants existed in the recent past, but that alterations and improvements to the landscaping on the project site in recent years resulted in their disappearance.

Our opinion, however, is summed up thus:

1) The historic trees and the trees of similar species are all contributing to the historic setting of the building, whether they were planted during the resort era or not. Historic setting is one of the seven aspects of historic integrity defined by the National Park Service in *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* (pp. 44-45).

2) Although the trees that are older than 80-85 years old (noted in red and pink on the diagram) do appear to be remnants of the original garden design of this portion of the hotel property, the original garden design does not appear to be intact enough to merit an argument that the trees cannot be moved to other parts of the property for fear of destroying an intact historic designed landscape, or that constructing a building on the site will destroy a historic designed landscape (we do not believe that the garden or its design has high enough historic integrity (is intact enough) to merit that level of consideration).

In ARG's opinion, the removal of the trees and the construction of the building may be an issue for its potential impact to the historic setting of the Hotel Green and Castle Green. The EIR consultant will determine whether those impacts are significant per the CEQA guidelines. In ARG's opinion, the historic setting of the Castle Green is well served in its preservation by the buffer of its own property, on the east and west sides, and the vegetation thereon. The Hotel Green has long been served by a garden on its south-facing side, and this relationship will be effectively eliminated once the new building is constructed (even if Hotel Green residents have access to the small amount of public space that will be provided for the new apartments). However, we do not believe that the impact of this change is so great as to threaten or compromise the National Register eligibility of the property. ARG's design for the new building has been predicated on meeting the Standards in order to avoid such an impact.

Please see following page for an illustration of the older trees that Jan Scow identified in his study.



For reference, the above diagram shows trees over 70 years old on the project site, per the arborist's study. The color categories correspond to the same in the study:

Pink: oldest trees, at approximately 100-105 years of age
Red: next-oldest trees, at approximately 75 to 85 years of age
Yellow: Most likely not historic; appear to post-date the resort hotel era at approximately 70-75 years of age.

By: Jennifer Trotoux, Associate; Christopher Smith, Senior Associate
Architectural Historian and Historic Preservation Planner

E-mail: jennifert@arg-la.com; christopher@arg-la.com

CC: F. Hickman, C. Chase, C. Ahbe, J. Scow

Jan C. Scow Consulting Arborists, LLC

Disease and Pest Diagnosis, Hazard Evaluation, Restorative Pruning Advice, Value Assessment

3887 Woodcliff Rd.
Sherman Oaks, CA 91403
(818) 789-9127

Date: 6/3/13 rev 6/7/13
To: Kristopher Forsythe
From: Jan Scow
Subject: Tree aging: 86 S. Fair Oaks

DRAFT

Tree #	Species	Status[1]	Cohort	Est. Age	~ Year	Range (years)	Reliability
1	Camphor	Protected specimen	C	70	1943	65-75 (10)	2b
2	Camphor	Protected specimen	C	70	1943	65-75 (10)	2b
3	Canary Island pine	Protected mature	E	50	1963	47-53 (6)	2a
4	Canary Island pine	Protected mature	E	50	1963	47-53 (6)	2a
5	Camphor	Protected specimen	A	100	1913	90-110 (20)	2b
6	California fan palm	Protected specimen	C	80	1933	75-85 (10)	1
7	Camphor	Protected specimen	E	45	1968	40-50 (10)	2b
9	Magnolia	Non-protected	E	40	1963	35-45 (10)	2b
10	Elm	Non-protected	E	40	1963	35-45 (10)	2b
11	California fan palm	Protected specimen	C	80	1933	75-85 (10)	1
12	Indian laurel fig	Protected specimen	D	65	1948	58-72 (14)	2b
13	Canary Isl date palm	Protected specimen	A	105	1908	100-110 (10)	1
14	Canary Isl date palm	Protected mature	F	20	1993	17-23 (6)	3
22	Queen palm	Protected street tree	F	11	2002	9-13 (4)	3
Tree #	Species	Status[2]	Cohort	age	~ Year	Range (years)	Reliability
23	Queen palm	Protected street tree	F	11	2002	9-13 (4)	3
28	Mexican fan palm	Non-protected	C	75	1938	70-80 (10)	1

[1] As per sheet A1.16 “Protected Tree & Non-Protected Tree Mitigation Analysis
[2] As per sheet A1.16 “Protected Tree & Non-Protected Tree Mitigation Analysis

29	Mexican fan palm	Non-protected	C	75	1938	70-80 (10)	1
30	Mexican fan palm	Non-protected	C	75	1938	70-80 (10)	1
31	Mexican fan palm	Non-protected	C	75	1938	70-80 (10)	1
35	X Mexican fan palm	Protected mature	B	85	1928	75-95 (10)	4
36	X Mexican fan palm	Protected mature	E	45	1968	40-50 (10)	4
37	Mexican fan palm	Non-protected	B	85	1928	80-90 (10)	1
38	Mexican fan palm	Non-protected	D	65	1948	61-68 (7)	1

Age classes (years)
A = 100+
B = 80-89
C = 70-79
D = 60-69
E = 40-59
F = < 20

Reliability	
1	plus or minus 5%
2a	plus or minus 5%
2b	plus or minus 10%
3	plus or minus 3 years
4	plus or minus 10%

Reliability

1 Believed to be very reliable, based on palm growth rates. Within plus or minus 5%.

2a Believed to be very reliable, based on ring count vs. trunk diameter of same species from previous locations. Within plus or minus 5%.

2b Believed to be reliable, based on known approximate growth rates of woody trees. Within plus or minus 10%.

3 Believed to be reliable, based on palm growth rates, but some variables make dating less certain, including uncertain growth rates and very rapid growth rates of young palms. Within plus or minus 2-3 years.

4 Believed to be fairly reliable, based on palm growth rates, but some variables make dating less certain, including uncertainty about growth rates for hybridized Washingtonia palms. Within plus or minus 10%.

APPENDIX D

Greenhouse Gases

8. GREENHOUSE GAS EMISSIONS. Would the project:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

☐ ☐ ☒ ☐

WHY? The project will generate Carbon Dioxide, which is the primary component of Greenhouse gases (GHG). Thus, the project will contribute to global warming as described by the Intergovernmental Panel on Climate Change. In total, the project will generate 1,667.47 metric tons of CO_2 during construction[1] and 1,641.60 metric tons per year for operations, see Air Quality Technical Memorandum.

The City of Pasadena developed the Climate Action Plan (CAP) as a qualified greenhouse gas (GHG) emissions reduction plan in accordance with CEQA Guidelines Section 15183.5. The project applicant has submitted a *Climate Action Plan Consistency Checklist Application Form* in order to demonstrate that the proposed project is consistent with the Pasadena CAP by incorporating applicable actions intended to ensure that the project contributes its fair share to the City's cumulative GHG reduction goals. Proposed sustainable development actions from the submitted CAP Consistency Checklist are listed and explained below in Tables 1 & 2. Review of the Checklist demonstrates that the proposed project would have a less than significant GHG impact.

b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

☐ ☐ ☐ ☒

WHY? The project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. The project is consistent with the General Plan and Zoning Code and is not a use that is a significant source of GHG emissions because it is consistent with the City's CAP, as set forth below. The project would not conflict with AB 32, SB32, or the Final 2017 Scoping Plan; therefore, there would be no impacts related to conflict with applicable plans.

City of Pasadena's Climate Action Plan
The City's CAP requires projects to meet at least 11 GHG Reduction Strategies, including six mandatory measures, one action in Energy Efficiency and Conservation, one action in the Sustainable Mobility and Land Use category, and three additional measures. The proposed project will implement 13 actions from the City's CAP, see **Table 1, CAP Action Measures**.

Table 1
CAP Action Measures

GHG Reduction Strategy	Sustainable Development Actions	Yes	N/A

[1] Construction emissions amortized over thirty years is approximately 55.57 MT CO2e/year.

Mandatory Measures			
T-1.2: Continue to improve bicycle and pedestrian safety	**Bicycle Storage:** Does the project provide bicycle storage lockers, racks, or other bicycle storage facilities for residents/employees? Check "N/A" only if the project does not include residents or employees.	X	
T-3.1: Decrease annual commuter miles traveled by single occupancy vehicles	**Transportation Demand Management (TDM):** Does the project include a TDM plan? A TDM plan is required for the following projects: multifamily residential development that are 100 or more units; mixed-use developments with 50 or more residential units or 50,000 square feet or more of non-residential development; or non-residential projects which exceed 75,000 square feet. If applicable, please submit the TDM plan for review.	X	
T-4.1: Expand the availability and use of alternative fuel vehicles and fueling infrastructure	**Alternative Vehicle Fueling Wiring:** For projects with more than three parking spaces, does the project provide wiring for at least one 240V Type II electric car charger? Please include specifications on the project plans. Check "N/A' only if the project does not include more than three parking spaces.	X	
E-1.2: Encourage the use of energy conservation devices and passive design concepts that make use of the natural climate to increase energy efficiency	**Passive Design Features**: Does the project utilize passive design techniques such as awnings or overhands on the east, west, and south facing windows which block the high summer sun but allow in low winter sun? Please include specifications on the project plans.	X	
WC-1.1: Reduce potable water usage throughout Pasadena	**Irrigation Efficiency:** Will the project utilize drought tolerant landscaping and/or drip irrigation and/or weather controllers to reduce outdoor water use? Please include specifications on the project plans. Check "N/A" only if the project does not include any landscaping.	X	
WR-1.1: Continue to reduce solid waste and landfill GHG emissions	**Facilitate Recycling:** Does the project include a space for separate trash and recycling bins as well as provide information signage/handouts for residents/employees outlining materials to be recycled? Please include specifications on the project plans.	X	
Energy Efficiency and Conservation (select a minimum of one action)			
E-1.1: Increase energy efficiency requirements of new buildings to perform better than 2016 Title 24 Standards	**Zero-Net Energy (ZNE):** Does the project generate 100% of electricity required on site? ZNE calculations must be provided.		X
E-1.1: Increase energy efficiency requirements of new buildings to perform better than 2016 Title 24 Standards	**Energy Efficiency (Exceed 2016 Title 24):** Does the project exceed the 2016 Title 24 Efficiency Standards by at least 5%? Please include Title 24 energy model.	X	
E-4.1: Increase city-wide use of carbon-neutral energy by encouraging and/or supporting carbon-neutral technologies	**Renewable Energy:** Does the project generate at least 60% of the building's projected electricity needs through renewable energy? Please include specifications on the project plans.		X
Sustainable Mobility and Land Use (select a minimum of one action)			
T-1.1: Continue to expand Pasadena's bicycle and pedestrian network	**End-of-Trip Bicycle Facilities (Commercial Development):** Does the project provide at least one shower for every 50 employees? Please include these specifications on the project plans.	X	
T-1.1: Continue to expand Pasadena's bicycle and pedestrian network	**Bike Share:** Does the project include a bike share station? Please include these specifications on the project plans.		X
T-3.1: Decrease annual commuter miles traveled by single occupancy vehicles	**Car Sharing:** Does the project provide/facilitate car sharing by providing a designated car share space on or within the immediate vicinity of the project site? Examples of car share options include ZipCar, PitCarz, and Getaround. Please include these specifications on the project plans.		X
T-3.1: Decrease annual commuter miles traveled by single occupancy vehicles	**Park De-Coupling:** Does the project separate the cost of parking from the cost of commercial space and/or residential housing by charging for each individually? Please include these specifications on the project plans.	X	

T-4.1: Expand the availability and use of alternative fuel vehicles and fueling infrastructure	**Alternative Vehicle Fueling Infrastructure:** Does the proposed project include functioning 240V Type II electric car chargers at 3% of parking spaces (at least one charger) AND conduit to allow for future charger installation to 25% of spaces?	**X**	
T-5.1: Facilitate high density, mixed-use, transit-oriented, and infill development	**Transit Oriented Development:** Is the project located within 0.25 mile of a major transit stop as defined in the Zoning Code. Please include a map outlining the nearest transit stop.	**X**	
T-6.1: Reduce GHG emissions from heavy-duty construction equipment and vehicles	**Reduce GHG emissions from heavy-construction equipment:** Will the project utilize at least 30% alternative fueled construction equipment (by pieces of equipment) and implement an equipment idling limit of 3 minutes? Please provide idling limit plan including implementation strategies aligning with the total pieces of equipment and those utilizing alternative fuels.		**X**
Water Conservation			
WC-1.1: Reduce potable water usage throughout Pasadena	**Indoor Water Efficiency:** Will the project achieve at least a 35% reduction in indoor water use per the LEED V4 Indoor Water Use Reduction Calculator? Please attach the calculator output.		**X**
WC-2.1: Increase access to and use of non-potable water	**Rainwater Capture and Reuse:** Does the project utilize a rainwater capture and reuse system to reduce the amount of potable water consumed on site? Please include these specifications on the project plans.		**X**
WC-2.1: Increase access to and use of non-potable water	**Indoor & Outdoor Recycled Water:** Will the project be plumbed to utilize recycled water for either indoor or outdoor water use? Please include these specifications on the project plans.		**X**
WC-2.1: Increase access to and use of non-potable water	**Greywater:** Will the project be plumbed to take advantage of greywater produced on site such as a laundry to landscape system or another on-site water reuse system? Please include these specifications on project plans.		**X**
WC-3.1: Improve storm water to slow, sink, and treat water run-off, recharge groundwater, and improve water quality	**Permeable Surfaces:** Is at least 30% of the hardscape (e.g., surface parking lots, walkways, patios, etc.) permeable to allow infiltration? Please include these specifications on the project plans.		**X**
WC-3.1: Improve storm water to slow, sink, and treat water run-off, recharge groundwater, and improve water quality	**Stormwater Capture:** Is the project designed to retain stormwater resulting from the 95th percentile, 24-hour rain event as defined by the Los Angeles County 95th percentile precipitation isohyetal map? Please provide the engineered stormwater retention plan with the project plans.	**X**	
Waste Conservation			
WR-1.1: Continue to reduce solid waste and landfill GHG emissions	**Recycled Materials:** Does the project utilize building materials and furnishings with at least 50% ([re- or post-consumer) recycled content or products which are designed for reuse? At a minimum, project must show at least 10% of the material by cost meets the recycled content requirements? Please submit the plan for review.		**X**
WR-3.1: Implement a city-wide composting program to limit the amount of organic material entering landfills	**On-Site Composting:** Does the project include an area specifically designated for on-site composting? Please include these specifications on the project plans.		**X**
Urban Greening			
UG-1.1: Continue to preserve, enhance, and acquire additional green space throughout Pasadena to improve carbon sequestration, reduce the urban heat-island effect, and increase opportunities for active recreation	**Greenspace:** Does the project include at least 500 sq. ft. of public use greenspace (landscaped yards, parklets, rooftop garden, etc.)? At a minimum, 50% of the required greenspace must include softscape landscaping (e.g., trees, plants, grass, etc.).		**X**
UG-2.1: Continue to protect existing trees and plant new ones to improve and ensure viability of Pasadena's urban forest	**Trees:** Does the project result in a net gain of trees? Please include these specifications on the project plans.	**X**	

Source: *Architectural Resources Group, Central Park Apartments 86 S. Fair Oaks, Pasadena, CA. Climate Action Plan Consistency Submittal.*

The City's CAP requires the proposed project to provide supporting information describing how each selected Sustainable Development Action would be implemented in the proposed project. **Table 2, Project Implementation of the CAP Actions** details project consistency with the thirteen actions identified within Table 1. The *CAP Consistency Submittal* prepared by the Architectural Resources Group provides additional information regarding project consistency with these measures.

Table 2
Project Implementation of the CAP Actions

Sustainable Development Action	Description of Project Implementation
Mandatory Measures	
T-1.2: Bicycle Storage	The project provides bicycle storage facilities for residents and employees. A Class 1 Bicycle Facility is located within the building and is accessible to residents. A Class 2 Bicycle Facility is provided for non-residents and employees.
T-3.1: Transportation Demand Management	Since the project is a mixed-use development with 84 residential units, a Transportation Demand Management (TDM) plan is required to be prepared and implemented pursuant to Section 10.64.020 of the Pasadena Municipal Code. A TDM plan has been drafted and submitted to the City for review.
T-4.1: Alternative Vehicle Fueling Wiring	Three percent of on-site parking spaces (approximately six spaces) will accommodate 240V Type II electric car chargers for alternative vehicle fueling (AVF). Up to 25 percent of spaces (Approximately 49 spaces) will be capable of supporting such charging in the future.
E-1.2: Passive Design Features	The project utilizes a number of passive design techniques to increase energy efficiency. Residential units will have operable, dual-pane windows that provide both daylighting and ventilation. Every unit will also have its own occupiable exterior balcony; these balconies will typically be stacked to shade apartment glazing from excessive solar exposure. Additional fixed canopies and facade overhangs will further mitigate solar heat gain on the east, west, and south facades. Retail spaces will be provided with extensive storefront glazing, also shaded by canopies. Building surface materials are generally to be light-colored to reduce heat absorption. Paved site surfaces will be offset with significant planted areas; new and relocated existing site trees will provide extensive shading.
WC-1.1: Irrigation Efficiency	More than 75 percent of planting material utilized in this project is identified by Water Use Classification of Landscape Species (WUCOLS) as needing "Low" or "Very Low" amounts of irrigation water, indicating that an overwhelming majority of plants will be drought tolerant. The project will use a drip irrigation system with a weather-based irrigation controller.
WR-1.1: Facilitate Recycling	The project includes separate trash and recycling bins. The first parking level (P1) features two rooms that include space for separate trash and recycling bins. Informational signage will be displayed to clearly indicate which materials can be recycled to educate residents, employees, and visitors to the building about proper refuse disposal procedures.
Selective Actions	
E-1.1: Energy Efficiency (Exceed 2016 Title 24)	The project is projected to exceed the 2016 Title 24 Efficiency Standards by 11.3 percent. A Title 24 energy model has been prepared to demonstrate the project's energy efficiency features.
E-1.1: End-of-Trip Bicycle Facilities	Shower facilities for bicyclists will be located inside of the building, in proximity to the Class 1 Bicycle Facility that is described in the response for Sustainable Development Action T-1.2 (Bicycle Storage). Approximately 30 employees are projected based upon the commercial program. Two showers will be available for employees of the ground floor restaurant and retail tenants. The project also includes four live-work units with bathroom facilities. The project thus exceeds the one shower per 50 employees standards.
T-3.1: Parking De-Coupling	On-site parking for residential tenants at the Central Park Apartments will be de-coupled from the lease agreements to remove an incentive for single-occupancy vehicle usage. Parking spaces will be licensed or leased via separate agreements with building management, and a fee charged per parking space. Approximately 53 parking spaces will be available to tenants of the Hotel Green located next door as "joint parking". Those parking spaces will likely not be de-coupled due to existing lease agreements.
T-3.1: Transportation Demand Management	A Transportation Demand Management (TDM) plan is required by the City of Pasadena as the mixed-use project exceeds 50 dwelling units. This feature is not being added to the total number of selective actions that are associated with this project. A TDM plan has been drafted and submitted to the City for review.
T-4.1: Alternative Vehicle Fueling Infrastructure	The project includes six parking spaces with functioning 240V Type II wiring for alternative vehicle fueling (AVF), which is equivalent to 3 percent of on-site parking spaces. The project also includes an estimated 49 parking spaces with conduit to support future alternative vehicle parking (F-AVF) spaces, which is equivalent to 25 percent of on-site parking spaces.
T-5.1: Transit Oriented Development	The project site is located within a 0.25-mile radius of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station, which are both identified in the Zoning Code as major transit stops.

WC-3.1 Stormwater Capture	The project is designed to retain stormwater resulting from the 95th percentile, 24-hour rain event per the Los Angeles County 95th percentile precipitation isohyetal map. Two infiltration drywells are proposed below the structure to capture and infiltrate the 95th percentile storm volume generated onsite. Roof drainage and runoff from all site areas will be collected and routed to the drywells, where it will infiltrate into the soil to promote groundwater recharge. Additional storage upstream of proposed drywells will be required for 95th percentile storm. Solids will be removed from stormwater run-off through settlement in the proposed drywell chambers.
UG-2.1: Trees	The project results in a net gain of trees. Nineteen trees are currently located on the property, and 38 trees are identified on the proposed landscape plan associated with the project, resulting in a net gain of 19 trees.

Source: *Architectural Resources Group, Central Park Apartments 86 S. Fair Oaks, Pasadena, CA. Climate Action Plan Consistency Submittal.*

Final 2017 Scoping Plan Update

CARB issued the Final 2017 Scoping Plan Update in November 2017 and establishes emissions reductions strategies necessary to meet SB 32's 2030 reduction goals. **Table 3, Project Consistency with Applicable 2017 Scoping Plan Measures** identifies the Scoping Plan policies that are applicable to the proposed project, demonstrating project consistency.

Table 3
Project Consistency with Applicable 2017 Scoping Plan Measures

Measures	Project Consistency
Implement SB 350 by 2030: • Increase the Renewables Portfolio Standard to 50 percent of retail sales by 2030 and grid reliability	**Not Applicable.** The measure is not related to development projects but intended for energy providers.
• Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.	**Not Applicable.** This measure is directed towards policymakers, not development projects.
• Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in the IRPs to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly-owned utilities meet GHG emissions planning targets through a combination of measures as described in IRPs.	**Consistent.** The project is required to meet CALGreen building standards by including measures designed to reduce energy consumption.
Implement Mobile Source Strategy (Cleaner Technology and Fuels): • Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document "Potential VMT Reduction Strategies for Discussion."	**Consistent.** The project site is located within a 0.25-mile radius of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station. Thus, this would reduce VMT traveled, promote alternatives to driving, and aim to reduce GHG emissions.
By 2019, develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road use, parking pricing, transit discounts).	**Not Applicable.** This measure is directed towards policymakers, not development projects. However, the project is within 0.25-miles of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station, which would lead to a reduction in VMT.
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	**Not Applicable.** This measure is directed towards CARB, CalRecycle, CDFA, SWRCB, and local air districts. However, the statewide policy goals of 75 percent of solid waste generated be source reduce, recycled, or composted by 2020 under AB 341. Since the project would be operational after this year, the project's waste collection service would be required to be compliant with this waste reduction.

Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	**Consistent**. The project incorporates measures that will reduce GHG emissions from project energy, indoor water, and outdoor water use. Additionally, due to project proximity to the Del Mar and Memorial Park Metro stations, the project will reduce VMT and associated transportation emissions.

Source: *CARB. California's 2017 Climate Change Scoping Plan.*

SCAG's RTP/SCS

2016-2040 RTP/SCS

At the regional level, the 2016-2040 RTP/SCS defines strategies for reducing GHGs. In order to assess the project's potential to conflict with the RTP/SCS, this section analyzes the project's land use profile for consistency with those in the Sustainable Communities Strategy. Generally, projects are considered consistent with the provisions and general policies of applicable City and regional land use plans and regulations, such as SCAG's Sustainable Communities Strategy, if they are compatible with the general intent of the plan and would not preclude the attainment of their primary goals. **Table 4, Project Consistency with SCAG 2016-2040 RTP/SCS** demonstrates the project's consistency with the Actions and Strategies set forth in the 2016-2040 RTP/SCS. Therefore, the project would be consistent with the GHG reduction related actions and strategies contained in the 2016-2040 RTP/SCS.

Table 4
Project Consistency with SCAG 2016-2040 RTP/SCS

Actions and Strategies	Responsible Party	Consistency Analysis
Land Use Strategies		
Reflect the changing population and demands, including combatting gentrification and displacement, by increasing housing supply at a variety of affordability levels.	Local jurisdictions	**Consistent.** The proposed project includes the development of a mixed-use development on a site with an existing surface parking lot. The project would increase the housing supply, and would not displace any existing residents.
Focus new growth around transit.	Local Jurisdictions	**Consistent.** The project site is located within a 0.25-mile radius of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station.
Plan for growth around livable corridors, including growth on the Livable Corridors network.	SCAG Local Jurisdictions	**Consistent.** The project site is located within a 0.25-mile radius of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station.
Support local sustainability planning, including developing sustainable planning and design policies, sustainable zoning codes, and Climate Action Plans.	Local Jurisdictions	**Not Applicable.** While this strategy calls on local governments to adopt General Plan updates, zoning codes, and Climate Action Plans to further sustainable communities, the proposed project would not interfere with such policymaking and would be consistent with those policy objectives.
Protect natural and farm lands, including developing conservation strategies.	SCAG Local Jurisdictions	**Consistent.** The project site is currently developed with a surface parking lot; therefore, the proposed project would not be constructed on any natural or farm lands.
Transportation Strategies		
Preserve our existing transportation system.	SCAG County Transportation Commissions Local Jurisdictions	**Not Applicable.** While this strategy calls on investing in the maintenance of our existing transportation system, the proposed project would not interfere with such policymaking.
Manage congestion through programs like the Congestion Management Program, Transportation Demand	County Transportation Commissions Local Jurisdictions	**Consistent.** The proposed project will minimize congestion impacts on the region because of its proximity to public transit and the implementation of a transportation demand management (TDM) program.

Actions and Strategies	Responsible Party	Consistency Analysis
Management, and Transportation Systems Management strategies.		
Promote safety and security in the transportation system.	SCAG County Transportation Commissions Local Jurisdictions	**Not Applicable.** While this strategy aims to improve the safety of the transportation system and protect users from security threats, the proposed project would not interfere with such policymaking.
Complete our transit, passenger rail, active transportation, highways and arterials, regional express lanes, goods movement, and airport ground transportation systems.	SCAG County Transportation Commissions Local Jurisdictions	**Not Applicable.** This strategy calls for transportation planning partners to implement major capital and operational projects that are designed to address regional growth. The proposed project would not interfere with this larger goal of investing in the transportation system.
Technological Innovation and 21st Century Transportation		
Promote zero-emissions vehicles.	SCAG Local Jurisdictions	**Consistent.** While this action/strategy is not necessarily applicable on a project-specific basis, the project would include electric vehicle charging infrastructure.
Promote neighborhood electric vehicles.	SCAG Local Jurisdictions	**Consistent.** While this action/strategy is not necessarily applicable on a project-specific basis, the project would include electric vehicle charging infrastructure.
Implement shared mobility programs.	SCAG Local Jurisdictions	**Not Applicable.** While this strategy is designed to integrate new technologies for last-mile and alternative transportation programs, the proposed project would not interfere with these programs.

Source: *Southern California Association of Governments; 2016–2040 RTP/SCS, Chapter 5: The Road to Greater Mobility and Sustainable Growth; and Impact Sciences, 2019.*

Connect SoCal Plan

On May 7, 2020, SCAG's Regional Council adopted Connect SoCal (2020-2045 RTP/SCS) for federal transportation conformity purposes only. In light of the COVID-19 pandemic, the Regional Council will consider approval of Connect SoCal in its entirety and for all other purposes within 120 days from May 7, 2020.

Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians. **Table 5, Project Consistency with SCAG Connect SoCal** demonstrates the project's consistency with the major goals set forth in Connect SoCal Plan. Therefore, the project would be consistent with the GHG reduction related actions and strategies contained in Connect SoCal.

Table 5
Project Consistency with SCAG Connect SoCal

Measures	Consistency Analysis
Encourage regional economic prosperity and global competitiveness.	**Not Applicable.** This strategy calls on encouraging regional economic prosperity and global competitiveness. The proposed project would not interfere with such policymaking.
Improve mobility, accessibility, reliability, and travel safety for people and goods.	**Consistent.** The project site is located within 0.25-mile radius of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station.

Measures	Consistency Analysis
Enhance the preservation, security, and resilience of the transportation system.	**Not Applicable.** While this strategy calls on enhancing the preservation, security, and resilience of the transportation system, the proposed project would not interfere with such policymaking.
Increase person and goods movements and travel choices within the transportation system.	**Not Applicable.** This strategy calls on SCAG to increase person and goods movement and travel choices across the transportation system. The proposed project would not interfere with this goal.
Reduce greenhouse gas emissions and improve air quality.	**Consistent.** The Project would result in criteria air pollutant and GHG emissions during construction and operation. However, emissions would not exceed the SCAQMD significance thresholds and would be consistent with the City's CAP.
Support healthy and equitable communities.	**Not Applicable.** This strategy calls on supporting healthy and equitable communities. The proposed project would not interfere with this goal.
Adapt to a changing climate and support an integrated regional development pattern and transportation network.	**Consistent.** The proposed project will minimize congestion impacts on the region because of its proximity to public transit and the implementation of a transportation demand management (TDM) program.
Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	**Not Applicable.** This strategy calls on SCAG to use new transportation technologies and data-driven solutions to increase travel efficiency. The proposed project would not interfere with this goal.
Encourage development of diverse housing types in areas that are supported by multiple transportation options.	**Consistent.** The proposed project would construct 84 apartment units and 4 work/live units within a 0.25-mile radius of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station.
Promote conservation of natural and agricultural lands and restoration of habitats.	**Not Applicable.** This strategy calls on SCAG to promote the conservation of natural and agricultural land and the restoration of habitats. The proposed project site currently serves as a surface parking lot. Therefore, the proposed project would not interfere with this goal.

Source: *Southern California Association of Governments; Connect SoCal; and Impact Science, 2020.*

Architectural
Resources Group

Central Park Apartments
86 S. Fair Oaks, Pasadena, CA

Climate Action Plan Consistency Submittal

CLIMATE ACTION PLAN CONSISTENCY CHECKLIST

CLIMATE ACTION PLAN CONSISTENCY CHECKLIST SUPPORTING DOCUMENTS:

01 DRAWINGS 1

- Site Plan
- P1 Level Plan
- P2 Level Plan
- P3 Level Plan
- P4 Level Plan
- Passive Design Features
- Exterior Elevations
- Landscape Plan - Ground Floor Tree Locations
- Landscape Plan - Ground Floor Planting Locations
- Existing Tree Location Exhibit
- Transit Oriented Development Map

02 PRELIMINARY SPECIFICATIONS 12

- Class 1 Bicycle Facility
- Class 2 Bicycle Facility

03 STORMWATER CAPTURE DOCUMENTATION 14

- Engineered Stormwater Retention Plan - Drywell Exhibit
- Hydrologic Analysis & Drywell Calculations
- Drywell Detail

APPENDICES 18

- A. Geotechnical Engineering Investigation
- B. Title 24 Building Energy Analysis Report
- C. Draft Transportation Demand Management Plan

Architectural
Resources Group

Central Park Apartments
86 S. Fair Oaks, Pasadena, CA

Climate Action Plan Consistency Checklist

Climate Action Plan Consistency Checklist Introduction

The Climate Action Plan Consistency Checklist (Checklist) is intended to be a tool for new development projects to demonstrate consistency with Pasadena's Climate Action Plan (CAP), which is a qualified greenhouse gas (GHG) emissions reduction plan in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15183.5. This Checklist has been developed as part of the CAP implementation and monitoring process and will support the achievement of individual CAP measures as well as Pasadena's overall GHG reduction goals. In addition, this Checklist will further Pasadena's sustainability goals and policies that encourage sustainable development and aim to conserve and reduce the consumption of resources, such as energy and water, among others.

CEQA Guidelines Section 15183.5 allows lead agencies to analyze the impacts associated with GHG emissions at a programmatic level in plan-level documents such as CAPs, so that project-level environmental documents may tier from the programmatic review. Projects that meet the requirements of this Checklist will be deemed to be consistent with Pasadena's CAP and will be found to have a less than significant contribution to cumulative GHG (i.e., the project's incremental contribution to cumulative GHG effects is not cumulatively considerable), pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b). Projects that do not meet the requirements in this Checklist will be deemed to be inconsistent with Pasadena's CAP and must prepare a project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible.

Applicability

This Checklist is only required for discretionary projects[1] that are subject to and not exempt from CEQA. Projects that are exempt from CEQA are deemed to be consistent with Pasadena's CAP, and no further review is necessary, with the exception of the Class 32 "In-Fill Development Projects" categorical exemption (CEQA Guidelines Section 15332), for which Projects are required to demonstrate consistency with the CAP through this Checklist.

[1] In this context a project is any action that meets the definition of a "Project" in Section 15378 of the State CEQA Guidelines.

Climate Action Plan Consistency Checklist Application Form

When required, the Checklist must be included in the project submittal package. The requirements in the Checklist will be included in the project's conditions of approval. The applicant is required to provide supporting documentation on how the proposed project will implement the measures identified in the Checklist to the satisfaction of the Planning & Community Development Department.

Step 1: Complete a Master Land Use Application Form (separate attachment)

Step 2: Demonstrate consistency with the Land Use Element of the General Plan

The growth projections outlined in the 2015 General Plan Land Use Element were used in Pasadena's CAP to estimate community-wide GHG emissions over time. Therefore, new development projects must be consistent with the Land Use Element to be consistent with Pasadena's CAP. In order for City staff to determine a project's consistency with the Land Use Element, please answer the following question and provide explanation with supporting documentation for each response.

Is the proposed project consistent with the existing land use designation of the Land Use Element?

☑ Yes ☐ No

If "Yes," proceed and complete Step 3 of the Checklist.

If "No," the proposed project may not tier from this document and must prepare a comprehensive project-specific analysis of GHG emissions and incorporate the measures in this Checklist to the extent feasible.

Step 3: Demonstrate consistency with Pasadena's CAP

Proposed projects which complete one of the following three options will be deemed to be consistent with Pasadena's CAP and will be found to have a less than significant contribution to cumulative GHG emissions (i.e., the project's incremental contribution to cumulative GHG effects is not cumulatively considerable), pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b).

Please select one of the following options:

☑ Option A: Sustainable Development Actions – Demonstrate that the proposed project is consistent with the Pasadena CAP by incorporating applicable actions intended to ensure that the project contributes its fair share to the City's cumulative GHG reduction goals

☐ Option B: GHG Efficiency - Demonstrate that the proposed project is consistent with Pasadena's per person GHG efficiency thresholds

☐ Option C: Net Zero GHG Emissions – Demonstrate that the proposed project would not result in a net increase in GHG emissions

Option A: Sustainable Development Actions

In order to complete this option, a proposed project must incorporate applicable Sustainable Development Actions to the satisfaction of the applicable City Departments. Incorporating these actions will ensure that the project is reducing its fair share of GHG emissions and support the achievement of Pasadena's overall GHG emissions reduction goals. For each action selected, please submit the requested documentation. If a mandatory action is not applicable to the project, please provide a description as to why that action cannot be implemented.

Mandatory Actions (all of the actions below are required)

GHG Reduction Strategy (Measure in Pasadena's CAP)	Sustainable Development Actions	Yes	N/A
		Check the appropriate box and provide explanation	
T-1.2: Continue to improve bicycle and pedestrian safety	**Bicycle Storage:** Does the project provide bicycle storage lockers, racks, or other bicycle storage facilities for residents/employees? Check "N/A" only if the project does not include residents or employees.	✓	
T-3.1: Decrease annual commuter miles traveled by single occupancy vehicles	**Transportation Demand Management (TDM):** Does the project include a TDM plan? A TDM plan is required for the following projects: multifamily residential development that are 100 or more units; mixed-use developments with 50 or more residential units or 50,000 square feet or more of non-residential development; or non-residential projects which exceed 75,000 square feet. If applicable, please submit the TDM plan for review.	✓	
T-4.1: Expand the availability and use of alternative fuel vehicles and fueling infrastructure	**Alternative Vehicle Fueling Wiring:** For projects with more than three parking spaces, does the project provide wiring for at least one 240V Type II electric car charger? Please include specifications on the project plans. Check "N/A" only if the project does not include more than three parking spaces.	✓	
E-1.2: Encourage the use of energy conservation devices and passive design concepts that make use of the natural climate to increase energy efficiency	**Passive Design Features:** Does the project utilize passive design techniques such as awnings or overhangs on the east, west, and south facing windows which block the high summer sun but allow in lower winter sun? Please include specifications on the project plans.	✓	
WC-1.1: Reduce potable water usage throughout Pasadena	**Irrigation Efficiency:** Will the project utilize drought tolerant landscaping and/or drip irrigation and/or weather controllers to reduce outdoor water use? Please include specifications on the project plans. Check "N/A" only if the project does not include any landscaping.	✓	
WR-1.1: Continue to reduce solid waste and landfill GHG emissions	**Facilitate Recycling:** Does the project include a space for separate trash and recycling bins as well as provide informational signage/handouts for residents/employees outlining materials to be recycled? Please include specifications on the project plans.	✓	

Selective Actions

In addition the mandatory actions, the proposed project must implement the following:

- One additional action in the Energy Efficiency and Conservation category
- One additional action in the Sustainable Mobility and Land Use category
- Three additional actions from any category

Energy Efficiency and Conservation (select a minimum of one action)

GHG Reduction Strategy (Measure in Pasadena's CAP)	Sustainable Development Actions	Yes	No
E-1.1: Increase energy efficiency requirements of new buildings to perform better than 2016 Title 24 Standards	**Zero-Net Energy (ZNE):** Does the project generate 100% of electricity required on site? ZNE calculations must be provided.		X
E-1.1: Increase energy efficiency requirements of new buildings to perform better than 2016 Title 24 Standards	**Energy Efficiency (Exceed 2016 Title 24):** Does the project exceed the 2016 Title 24 Efficiency Standards by at least 5%? Please include Title 24 energy model.	✓	
E-4.1: Increase city-wide use of carbon-neutral energy by encouraging and/or supporting carbon-neutral technologies	**Renewable Energy:** Does the project generate at least 60% of the building's projected electricity needs through renewable energy? Please include specifications on the project plans.		X

Sustainable Mobility and Land Use (select a minimum of one action)

GHG Reduction Strategy (Measure in Pasadena's CAP)	Sustainable Development Action	Yes	No
T-1.1: Continue to expand Pasadena's bicycle and pedestrian network	**End-of-Trip Bicycle Facilities (Commercial Development):** Does the project provide at least one shower for every 50 employees? Please include these specifications on the project plans.	✓	
T-1.1: Continue to expand Pasadena's bicycle and pedestrian network	**Bike Share:** Does the project include a bike share station? Please include these specifications on the project plans.		X
T-3.1: Decrease annual commuter miles traveled by single occupancy vehicles	**Car Sharing:** Does the project provide/facilitate car sharing by providing a designated car share space on or within the immediate vicinity of the project site? Examples of car share options include ZipCar, PitCarz, and Getaround. Please include these specifications on the project plans.		X
T-3.1: Decrease annual commuter miles traveled by single occupancy vehiclesT-3.1	**Parking De-Coupling:** Does the project separate the cost of parking from the cost of commercial space and/or residential housing by charging for each individually? Please include these specifications on the project plans.	✓	
T-3.1: Decrease annual commuter miles traveled by single occupancy vehicles	**Transportation Demand Management (TDM):** Does the project include a TDM plan? Please submit the TDM plan for review (Note: this measure cannot be combined with the mandatory measure that requires a TDM plan for projects that meet certain size thresholds.)	*Req'd*	
T-4.1: Expand the availability and use of alternative fuel vehicles and fueling infrastructure	**Alternative Vehicle Fueling Infrastructure:** Does the proposed project include functioning 240V Type II electric car chargers at 3% of parking spaces (at least one charger) AND conduit to allow for future charger installation to 25% of spaces?	✓	
T-5.1: Facilitate high density, mixed-use, transit-oriented, and infill development	**Transit Oriented Development:** Is the project located within 0.25 mile of a major transit stop as defined in the Zoning Code. Please include a map outlining the nearest transit stop.	✓	
T-6.1: Reduce GHG emissions from heavy-duty construction equipment and vehicles	**Reduce GHG emissions from heavy-construction equipment:** Will the project utilize at least 30% alternative fueled construction equipment (by pieces of equipment) and implement an equipment idling limit of 3 minutes? Please provide idling limit plan including implementation strategies along with the total pieces of equipment and those utilizing alternative fuels.		X

Water Conservation

GHG Reduction Strategy (Measure in Pasadena's CAP)	Sustainable Development Action	Yes	No
WC-1.1: Reduce potable water use throughout Pasadena	**Indoor Water Efficiency:** Will the project achieve at least a 35% reduction in indoor water use per the LEED V4 Indoor Water Use Reduction Calculator? Please attach the calculator output.		X
WC-2.1: Increase access to and use of non-potable water	**Rainwater Capture and Reuse:** Does the project utilize a rainwater capture and reuse system to reduce the amount of potable water consumed on site? Please include these specifications on the project plans.		X
WC-2.1: Increase access to and use of non-potable water	**Indoor & Outdoor Recycled Water:** Will the project be plumbed to utilize recycled water for either indoor or outdoor water use? Please include these specifications on the project plans.		X
WC-2.1: Increase access to and use of non-potable water	**Greywater:** Will the project be plumbed to take advantage of greywater produced on site such as a laundry to landscape system or another on-site water reuse system? Please include these specifications on the project plans.		X
WC-3.1: Improve storm water to slow, sink, and treat water run-off, recharge groundwater, and improve water quality	**Permeable Surfaces:** Is at least 30% of the hardscape (e.g., surface parking lots, walkways, patios, etc.) permeable to allow infiltration? Please include these specifications on the project plans.		X
WC-3.1: Improve storm water to slow, sink, and treat water run-off, recharge groundwater, and improve water quality	**Stormwater Capture:** Is the project designed to retain stormwater resulting from the 95th percentile, 24 hour rain event as defined by the Los Angeles County 95th percentile precipitation isohyetal map? Please provide the engineered stormwater retention plan with the project plans (http://dpw.lacounty.gov/wrd/hydrologygis/)	✓	

Waste Reduction

GHG Reduction Strategy (Measure in Pasadena's CAP)	Sustainable Development Action	Yes	No
WR-1.1: Continue to reduce solid waste and landfill GHG emissions	**Recycled Materials**: Does the project utilize building materials and furnishings with at least 50% (pre- or post-consumer) recycled content or products which are designed for reuse? At a minimum, projects must show at least 10% of the material by cost meets the recycled content requirement? Please submit the plan for review.		X
WR-3.1: Implement a city-wide composting program to limit the amount of organic material entering landfills	**On-Site Composting:** Does the project include an area specifically designated for on-site composting? Please include these specifications on the project plans.		X

Urban Greening

GHG Reduction Strategy (Measure in Pasadena's CAP)	Sustainable Development Action	Yes	No
UG-1.1: Continue to preserve, enhance, and acquire additional green space throughout Pasadena to improve carbon sequestration, reduce the urban heat-island effect, and increase opportunities for active recreation	**Greenspace:** Does the project include at least 500 sq. ft. of public use greenspace (landscaped yards, parklets, rooftop garden, etc.)? At a minimum, 50% of the required greenspace must include softscape landscaping (e.g., trees, plants, grass, etc.).		X
UG-2.1: Continue to protect existing trees and plant new ones to improve and ensure viability of Pasadena's urban forest	**Trees:** Does the project result in a net gain of trees? Please include these specifications on the project plans.	✓	

Total Actions Taken

Sector	Actions Selected (#)		Actions Required
Mandatory Actions	T-1.2, T-3.1, T-4.1, E-1.2, WC-1.1, WR-1.1	6	6
Energy Efficiency and Conservation	E-1.1	1	1
Sustainable Mobility and Land Use	T-1.1, T-3.1, T-4.1. T-5.1	4	1
Water Conservation	WC-3.1	1	0
Waste Reduction			0
Urban Greening		1	0
Total # of Actions Selected		13	
Total Required		*11*	

Supporting Documentation

Use the section below to provide supporting information describing how each selected Sustainable Development Action will be implemented in the proposed project. Additional information such as model outputs, invoices, and project plans should be noted below and attached to this submittal as needed.

Sustainable Development Action	Description of Project Implementation
MANDATORY ACTIONS	
STEP 2 : Demonstrate consistency with Land Use Element of the General Plan	According to the Land Use Element of the General Plan and the corresponding Land Use Diagram, the project area is designated as *High Mixed Use, 0.0-3.0 FAR, 0-87 dwelling units per acre.* The project is consistent with this designation. By incorporating ground floor retail, work-live units, and apartment units of varying types and sizes, it complies with the overarching goal of the High Mixed Use designation, which is "to support the development of multi-story mixed use buildings with a variety of compatible commercial (retail and office) and residential uses." Its FAR (2.89) and residential density (84 dwelling units proposed; 87 dwelling units allowed via density bonus: 64 units by right + 23 additional units) are both within the parameters of this land use designation.
T-1.2 Bicycle Storage	The project provides bicycle storage facilities for residents and employees. A Class 1 Bicycle Facility is located within the building and is accessible to residents. A Class 2 Bicycle Facility is provided for non-residents and employees. Refer to the CAP Consistency Checklist Supporting Docs, p. 1 (Site Plan) and p. 12-13 (Class 1 Bicycle Facility, Class 2 Bicycle Facility) for additional information and preliminary specifications for bicycle storage.
T-3.1 Transportation Demand Management	Since the project is a mixed-use development with 84 residential units a Transportation Demand Management (TDM) plan is required. A TDM plan has been drafted and is enclosed as Appendix C of CAP Consistency Checklist Supporting Docs.
T-4.1 Alternative Vehicle Fueling Wiring	Three percent of on-site parking spaces (approximately six spaces) will accommodate 240V Type II electric car chargers for alternative vehicle fueling (AVF). Up to 25 percent of spaces (approximately 49 spaces) will be capable of supporting such charging in the future. Refer to the CAP Consistency Checklist Supporting Docs, p. 2-5 (P1, P2, P3, and P4 Level Plans) for additional information about alternative vehicle fueling infrastructure and on-site parking.

Sustainable Development Action	Description of Project Implementation
E-1.2 Passive Design Features	The project utilizes a number of passive design techniques to increase energy efficiency. Residential units will have operable, dual-pane windows that provide both daylighting and ventilation. Every unit will also have its own occupiable exterior balcony; these balconies will typically be stacked to shade apartment glazing from excessive solar exposure. Additional fixed canopies and façade overhangs will further mitigate solar heat gain on the east west and south facades. Retail spaces will be provided with extensive storefront glazing, also shaded by canopies. Building surface materials are generally to be light-colored to reduce heat absorption. Paved site surfaces will be offset with significant planted areas; new and relocated existing site trees will provide extensive shading. Refer to the CAP Consistency Checklist Supporting Docs, p. 6-7 (Passive Design Features and Exterior Elevations) for additional information about passive design features of the project.
WC-1.1 Irrigation Efficiency	More than 75 percent of planting material utilized in this project is identified by WUCOLS (Water Use Classification of Landscape Species) as needing “Low” or “Very Low” amounts of irrigation water, indicating that an overwhelming majority of plants will be drought tolerant. The project will use a drip irrigation system with a weather-based irrigation controller. Refer to the CAP Consistency Checklist Supporting Docs, p. 8-9 (Landscape Plan - Ground Floor Tree Locations, Landscape Plan - Ground Floor Planting Locations) for additional information about landscape and irrigation systems.
WR-1.1 Facilitate Recycling	The project includes separate trash and recycling bins. The first parking level (P1) features two rooms that include space for separate trash and recycling bins. Informational signage will be displayed to clearly indicate which materials can be recycled to educate residents, employees, and visitors to the building about proper refuse disposal procedures. Refer to the CAP Consistency Checklist Supporting Docs, p. 2 (P1 Level Plan) for additional information about refuse disposal and storage.
SELECTIVE ACTIONS	
E-1.1 Energy Efficiency (Exceed 2016 Title 24)	The project is projected to exceed the 2016 Title 24 Efficiency Standards by 11.3 percent. A Title 24 energy model has been prepared to demonstrate the project's energy efficiency features. Refer to the CAP Consistency Checklist Supporting Docs, Appendix B, Title 24 Building Energy Analysis Report, p. 1 for Compliance Total, Column 5, 11.3 Percent Better than Standard.
T-1.1 End-of-Trip Bicycle Facilities	Shower facilities for bicyclists will be located inside of the building, in proximity to the Class 1 Bicycle Facility that is described in the response for Sustainable Development Action T-1.2 (Bicycle Storage). Approximately 30 employees are projected based upon the commercial program. Two showers will be available for employees of the ground floor restaurant and retail tenants. The project also includes four live-work units with bathroom facilities. The project thus exceeds the one shower per 50 employees standard. Refer to the CAP Consistency Checklist Supporting Docs, p. 1 (Site Plan) for supporting calculations, locations and features of the planned end-of-trip bicycle facilities.
T-3.1 Parking De-Coupling	On-site parking for residential tenants at the Central Park Apartments will be de-coupled from the lease agreements to remove an incentive for single-occupancy vehicle usage. Parking spaces will be licensed or leased via separate agreements with building management, and a fee charged per parking space. Approximately 53 parking spaces will be available to tenants of the Hotel Green located next door as “joint parking”. Those parking spaces will likely not be de-coupled due to existing lease agreements. Refer to the CAP Consistency Checklist Supporting Docs, p. 2-5 (P1, P2, P3, and P4 Level Plans) for additional information about on-site parking.

Sustainable Development Action	Description of Project Implementation
T-3.1 Transportation Demand Management (TDM)	A Transportation Demand Management (TDM) plan is required by the City of Pasadena as the mixed-use project exceeds 50 dwelling units. This feature is not being added to the total number of selective actions that are associated with this project. A draft TDM plan is included as Appendix C of the CAP Consistency Checklist Supporting Docs.
T-4.1 Alternative Vehicle Fueling Infrastructure	The project includes an estimated six parking spaces with functioning 240V Type II wiring for alternative vehicle fueling (AVF), or 3 percent of on-site parking spaces. The project also includes an estimated 49 parking spaces with conduit to support future alternative vehicle parking (F-AVF) spaces, or 25 percent of on-site parking spaces. Refer to the CAP Consistency Checklist Supporting Docs, p. 2-5 (P1, P2, P3 and P4 Level Plans) for additional information about alternative vehicle fueling infrastructure and on-site parking.
T-5.1 Transit Oriented Development	The project site is located within a 0.25-mile radius of the Del Mar Metro Station and 0.4 miles of the Memorial Park Station, which are both identified in the Zoning Code as major transit stops. Refer to the CAP Consistency Checklist Supporting Docs, p. 11 (Transit Oriented Development Map) for a map that illustrates the distance between the project site, the Del Mar Metro Station and the Memorial Park Station.
WC-3.1 Stormwater Capture	The project is designed to retain stormwater resulting from the 95th percentile, 24 hour rain event per the Los Angeles County 95th percentile precipitation isohyetal map. Two infiltration drywells are proposed below the structure to capture and infiltrate the 95th percentile storm volume generated onsite. Roof drainage and runoff from all site areas will be collected and routed to the drywells, where it will infiltrate into the soil to promote groundwater recharge. Additional storage upstream of proposed drywells will be required for 95th percentile storm. Solids will be removed from stormwater run-off through settlement in the proposed drywell chambers. Refer to the CAP Consistency Checklist Supporting Docs, p. 14 for Stormwater Capture Documentaion (Engineered Stormwater Retention Plan, Hydrologic Analysis, Drywell Calculations, Drywell Detail) and Appendix A (Geotechnical Engineering Investigation).
UG-2.1 Trees	The project results in a net gain of trees. Nineteen trees are currently located on the property, and 38 trees are identified on the proposed landscape plan associated with the project, resulting in a net gain of 19 trees. Refer to the CAP Consistency Checklist Supporting Docs, p. 8-10 (Landscape Plan - Ground Floor Tree Locations, Landscape Plan - Ground Floor Planting Locations, Existing Tree Location Exhibit) for additional information about existing and proposed trees.

Option B: GHG Efficiency

The efficiency threshold assesses the GHG efficiency of a proposed project on a service person (residents + full time employees) basis. This method recognizes that highly efficient projects (e.g., compact and mixed-use development) with relatively high mass emissions may nevertheless meet the local and State GHG reduction goals/targets. Using the demographic projections developed for the CAP, Pasadena has developed service person efficiency thresholds for the years of 2020, 2025, 2030 and 2035 which are consistent with Pasadena's GHG emission goals included in the CAP and the State targets it is designed to achieve (AB 32, SB 32, and substantial progress towards EO S-3-05). Applicants may decide to assess their proposed project's GHG emissions relative to Pasadena's GHG efficiency thresholds in lieu of completing the Sustainable Development Actions. Applicants should utilize standard GHG modeling techniques (such as CalEEMod[2]) to estimate total GHG emissions associated with the proposed project. Models should include all construction emissions (amortized over 30 years) and operational emissions. Total annual emissions should be divided by the proposed project's service population (residents + full time employees) to determine the efficiency of the proposed project using the following equation:

Proposed Project's GHG Efficiency = Annual GHG Emissions / Service Population (Residents + Full Time Employees)

The proposed project must be able to demonstrate a GHG efficiency which is less than or equal to the threshold listed below for the projects first operational year to be considered consistent with the Pasadena CAP and State targets it is designed to achieve. Refer to Appendix B for a complete description of the methodology used to calculate the efficiency thresholds.

Project First Operational Year	Threshold
2017 – 2020	5.63 MT CO_2e/Service Person
2021 – 2025	4.56 MT CO_2e/Service Person
2026 – 2030	3.57 MT CO_2e/Service Person
2031 – 2035	2.73 MT CO_2e/Service Person

[2] The California Emissions Estimator Model® (***CalEEMod***) is a statewide land use emissions computer model designed to provide a uniform platform for assessing air quality and GHG impacts associated with construction projects. Available at: http://www.caleemod.com/

Option C: Net Zero GHG Emissions

In lieu of Option A or B, applicants can demonstrate consistency with this CAP by demonstrating their proposed project would result in no net increase of GHG emissions. A proposed project can reduce its GHG emissions through the purchasing of carbon offsets issued by Climate Action Reserve[3] or other validated carbon offset registry to a level which results in zero net GHG emissions. The following methodology must be followed to prove zero net GHG emissions.

1. The applicant must model the proposed project's annual emissions using the most recent version of CalEEMod or equivalent model accepted by SCAQMD and/or CARB for CEQA purposes. Each model must include all emissions associated with the project including land clearing, demolition, earth moving, construction activities and operational related emissions such as energy use, water use, waste generation, transportation, area sources, and vegetation change, if applicable. The total annual operational emissions over 30 years as projected by the model should then be summed and added to the construction emissions to estimate the total lifetime GHG emissions associated with the project. CalEEMod is able to estimate operation related emissions over time taking into account changes to grid mix and vehicle fleet mandated by state legislation such as Renewable Portfolio Standard (RPS) and Pavley. Applicants should use CalEEMod forecasting to show overall GHG emissions and existing conditions (if applicable) should be modeled separately using CalEEMod for operations only and then subtracted from the project total to show the net change in GHG emissions.

   Example:
   Construction Emissions (1,000 MT of CO_2e) + Sum of Annual Emissions over 30 years (90,000 MT of CO_2e) – Existing Conditions (500 MT CO_2e) = 90,500 MT of CO_2e

2. The total emissions for the project must then be offset by Climate Reserve Tonnes or CRT's through the Climate Action Reserve marketplace. In the above example, the proposed project would be required to purchase 90,500 CRT's through the carbon marketplace. Offsets cost between $12-$15 as of September 2017 but prices are subject to changes in the carbon market. The marketplace can be found here: http://www.climateactionreserve.org/how/crt-marketplace/

The full CalEEMod output and verification of the CRT's purchased must be provided to the City of Pasadena as part of the review process.

[3] The Climate Action Reserve can be considered a bank which holds credits that amount to 1 metric ton of CO_2e per Climate Reserve Tonne (CRT). These credits get their reduction value through projects which reduce GHG emissions such as renewable energy development or through carbon sequestration. Those projects can sell CRT's equal to the amount of GHG emissions reduced. Other projects, can then purchase those CRT's to offset their own emissions. For more information see the Technical Appendix B of the Climate Action Plan

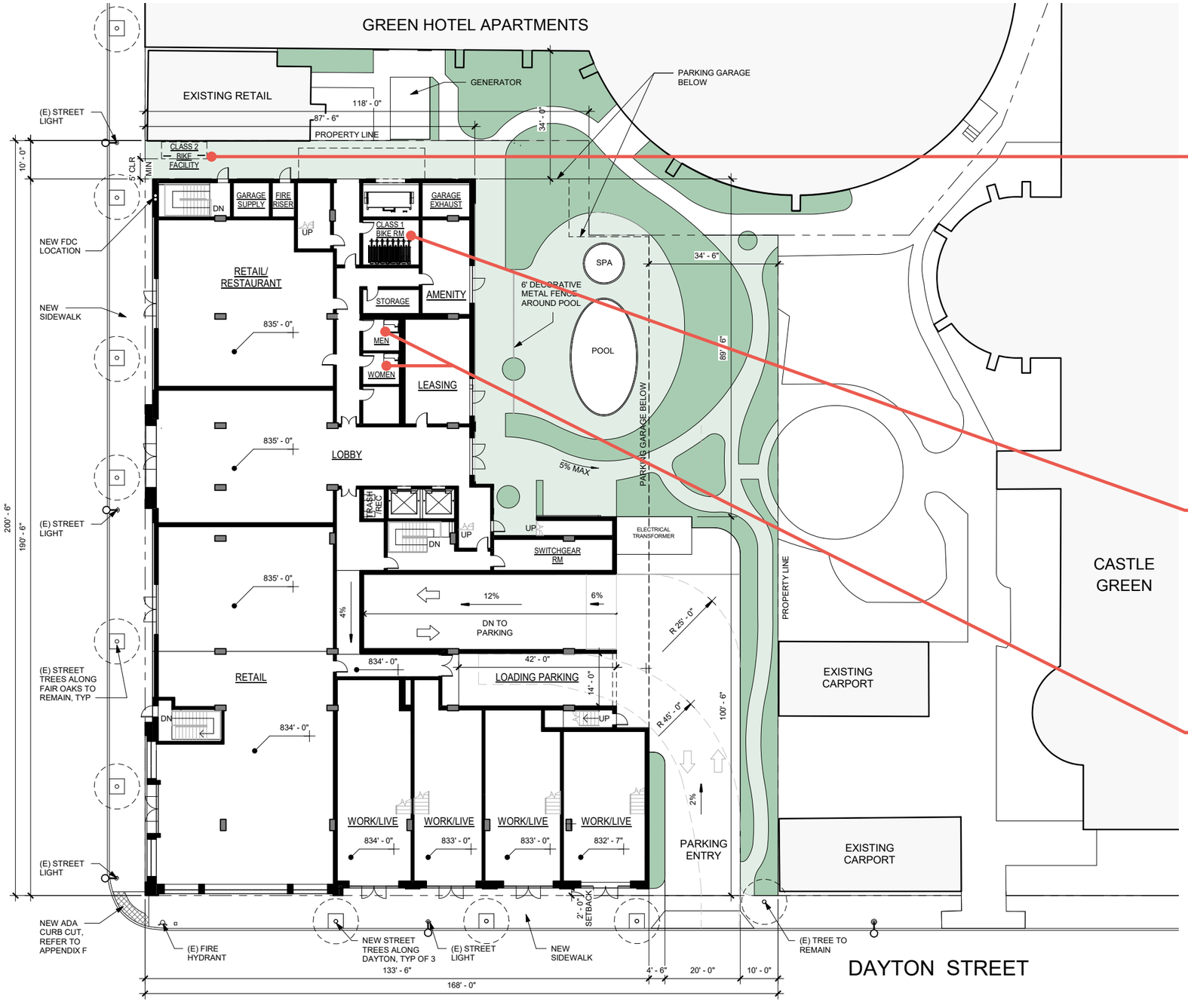
Architectural
Resources Group

Central Park Apartments
86 S. Fair Oaks, Pasadena, CA

Climate Action Plan Consistency Checklist

Supporting Documents

SITE PLAN



T - 1.2 BICYCLE STORAGE
T - 1.1 END-OF-TRIP BICYCLE FACILITIES

NON-RESIDENTIAL & EMPLOYEE BIKE PARKING

*Per Pasadena Municipal Code 17.46.320 Bicycle Parking Standards, the bicycle requirement for the non-residential portion (less than 15,000 SF) of a mixed-use project is a minimum of (4) Class 2 Bicycle Spaces.

RETAIL	4,218 SF
RESTAURANT	1,974 SF
COMMERCIAL PORTION OF WORK/LIVE	3,702 SF
TOTAL	**9,894 SF**

9,894 SF < 15,000 SF =
Minimum of (4) Class 2 Bicycle Spaces required
(4) Class 2 Bicycle Spaces provided

See p. 13 for preliminary specification.

RESIDENTIAL BIKE PARKING

*Per Pasadena Municipal Code 17.46.320 Bicycle Parking Standards, the bicycle requirement for the residential portion of a mixed-use project is a minimum of 1 space for every six dwelling units.

1 SPACE x 84 UNITS/6 UNITS = 14 =
Minimum of (14) Class 1 Bicycle Spaces required
(16) Class 1 Bicycle Spaces provided

See p. 12 for preliminary specification.

END-OF-TRIP BICYCLE FACILITIES

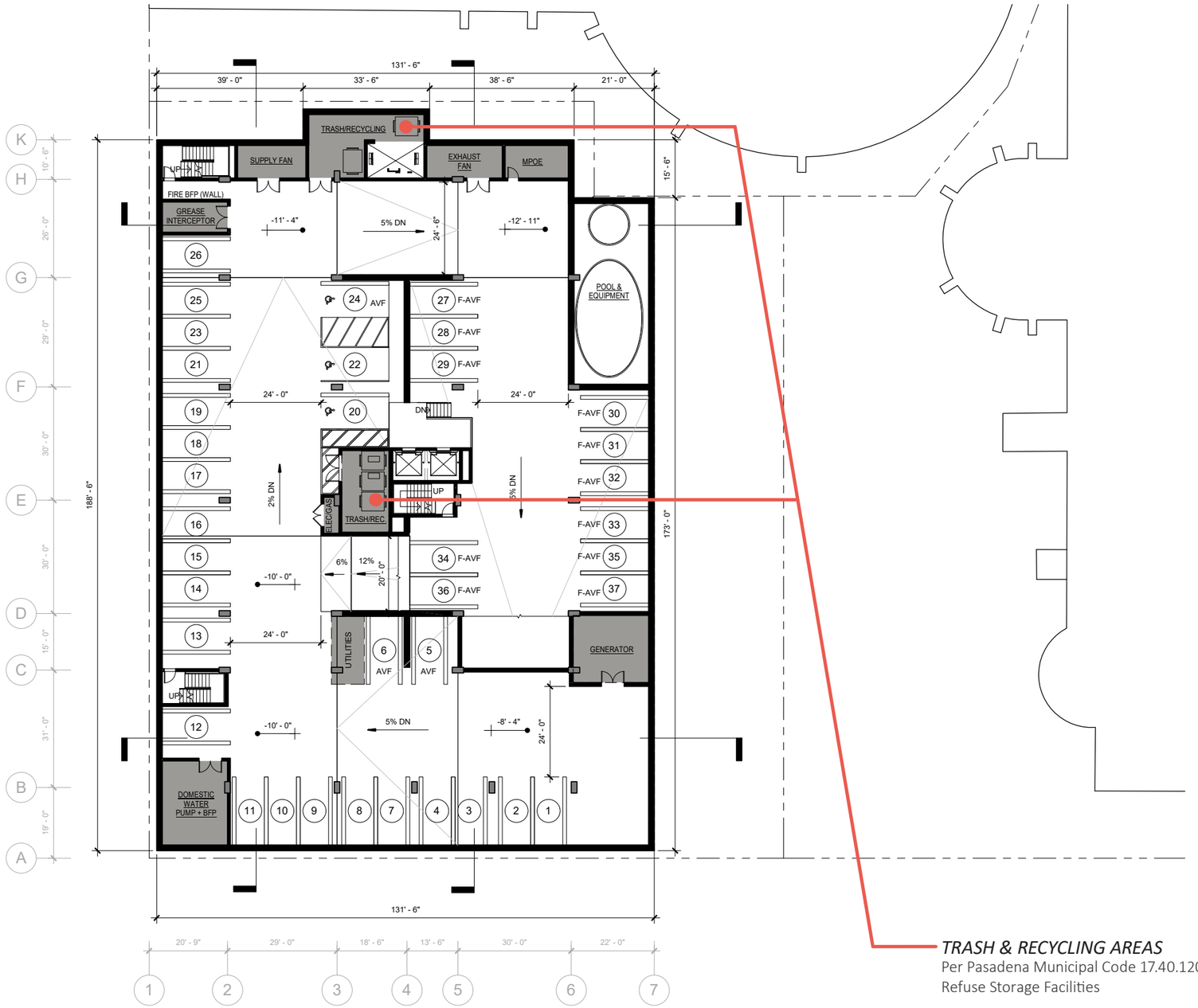
RETAIL (4,218 SF @ 1 employee/500 SF = 8.4)	9
RESTAURANT (1,974 SF @ 1 employee/350 SF = 5.6)	6
COMMERCIAL PORTION OF WORK/LIVE (3,702 SF @ 1 employee/250 SF = 14.8)	15
TOTAL EMPLOYEES	**30**

Minimum of (1) shower per 50 employees required
(2) Showers provided within End-of-Trip Bicycle Facilities

16 0 16 32 N

P1 LEVEL PLAN

T - 3.1 PARKING DE-COUPLING
T - 4.1 ALTERNATIVE VEHICLE FUELING WIRING
W - R 1.1 FACILITATE RECYCLING



TRASH & RECYCLING AREAS
Per Pasadena Municipal Code 17.40.120
Refuse Storage Facilities

OVERALL PARKING SUMMARY

Refer to page 4 of the Concept Design for complete parking tabulations.

RESIDENTIAL*	96 SPACES
GUEST	9 SPACES
WORK/LIVE*	12 SPACES
RETAIL/RESTAURANT*	25 SPACES
JOINT (GREEN HOTEL APTS)	53 SPACES
TOTAL PARKING	**195 SPACES**
STANDARD	189 SPACES
ACCESSIBLE	6 SPACES

* On-site parking for residential tenants at the Central Park Apartments will be licensed or leased via separate agreements with building management, and a fee charged per parking space.

TOTAL AVF: ALTERNATIVE VEHICLE FUELING SPACES (3% of 195 SPACES = 5.85)	6 SPACES
TOTAL F-AVF: INFRASTRUCTURE FOR FUTURE CHARGER INSTALLATION (F-AVF) (25% of 195 SPACES = 48.75)	49 SPACES

P1 PARKING SUMMARY

TOTAL PARKING	**37 SPACES**
STANDARD	34 SPACES
ACCESSIBLE	3 SPACES
AVF: ALTERNATIVE VEHICLE FUELING SPACES	3 SPACES
F-AVF: INFRASTRUCTURE FOR FUTURE CHARGER INSTALLATION (F-AVF)	11 SPACES

(Locations of AVF & F-AVF spaces shown on plans are preliminary and for illustrative purposes only.)

16 0 16 32

N

P2 LEVEL PLAN

T - 4.1 ALTERNATIVE VEHICLE FUELING WIRING

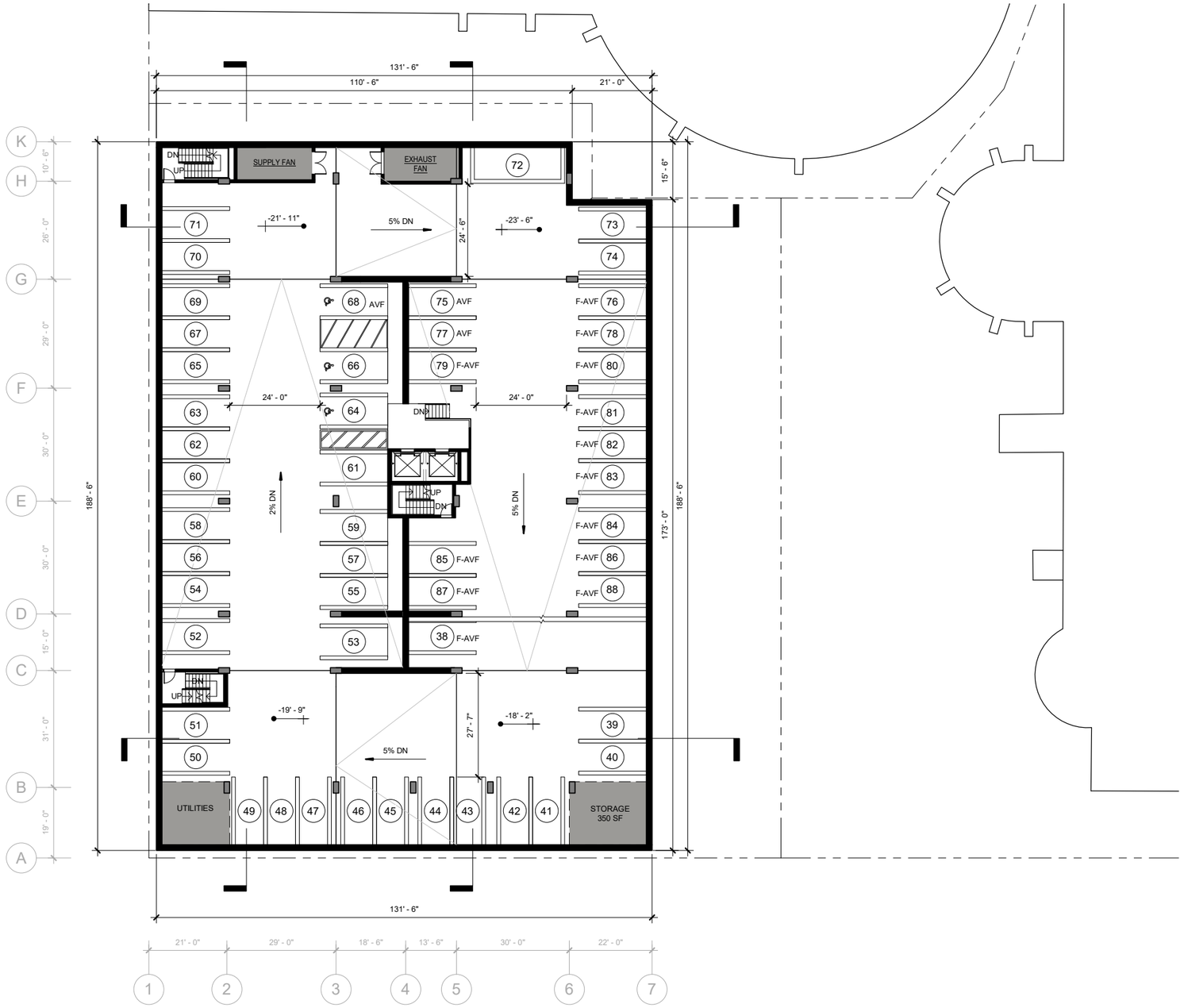
P2 PARKING SUMMARY

Refer to page 4 of the Concept Design for complete parking tabulations.

TOTAL PARKING	**51 SPACES**
STANDARD	48 SPACES
ACCESSIBLE	3 SPACES

AVF: ALTERNATIVE VEHICLE FUELING SPACES	3 SPACES
F-AVF: INFRASTRUCTURE FOR FUTURE CHARGER INSTALLATION	13 SPACES

(Locations of AVF & F-AVF spaces shown on plans are preliminary and for illustrative purposes only.)



16 0 16 32

N

P3 LEVEL PLAN

T - 4.1 ALTERNATIVE VEHICLE FUELING WIRING

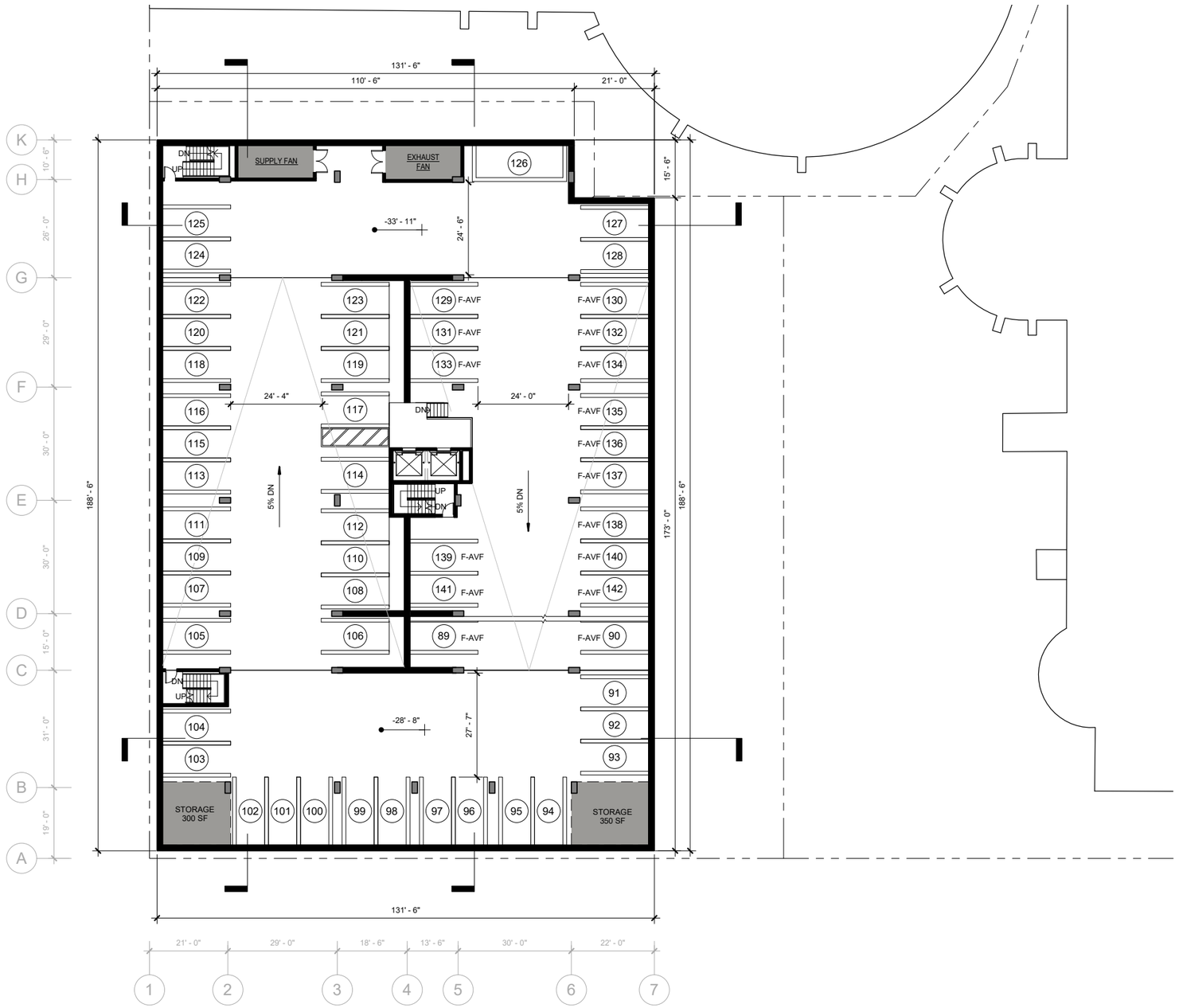
P3 PARKING SUMMARY

Refer to page 4 of Concept Design for complete parking tabulations.

TOTAL PARKING	**54 SPACES**
STANDARD	54 SPACES
ACCESSIBLE	0 SPACES

- **AVF:** ALTERNATIVE VEHICLE FUELING SPACES — 0 SPACES
- **F-AVF:** INFRASTRUCTURE FOR FUTURE CHARGER INSTALLATION — 16 SPACES

(Locations of AVF & F-AVF spaces shown on plans are preliminary and for illustrative purposes only.)



16 0 16 32

N

P4 LEVEL PLAN

T - 4.1 ALTERNATIVE VEHICLE FUELING WIRING

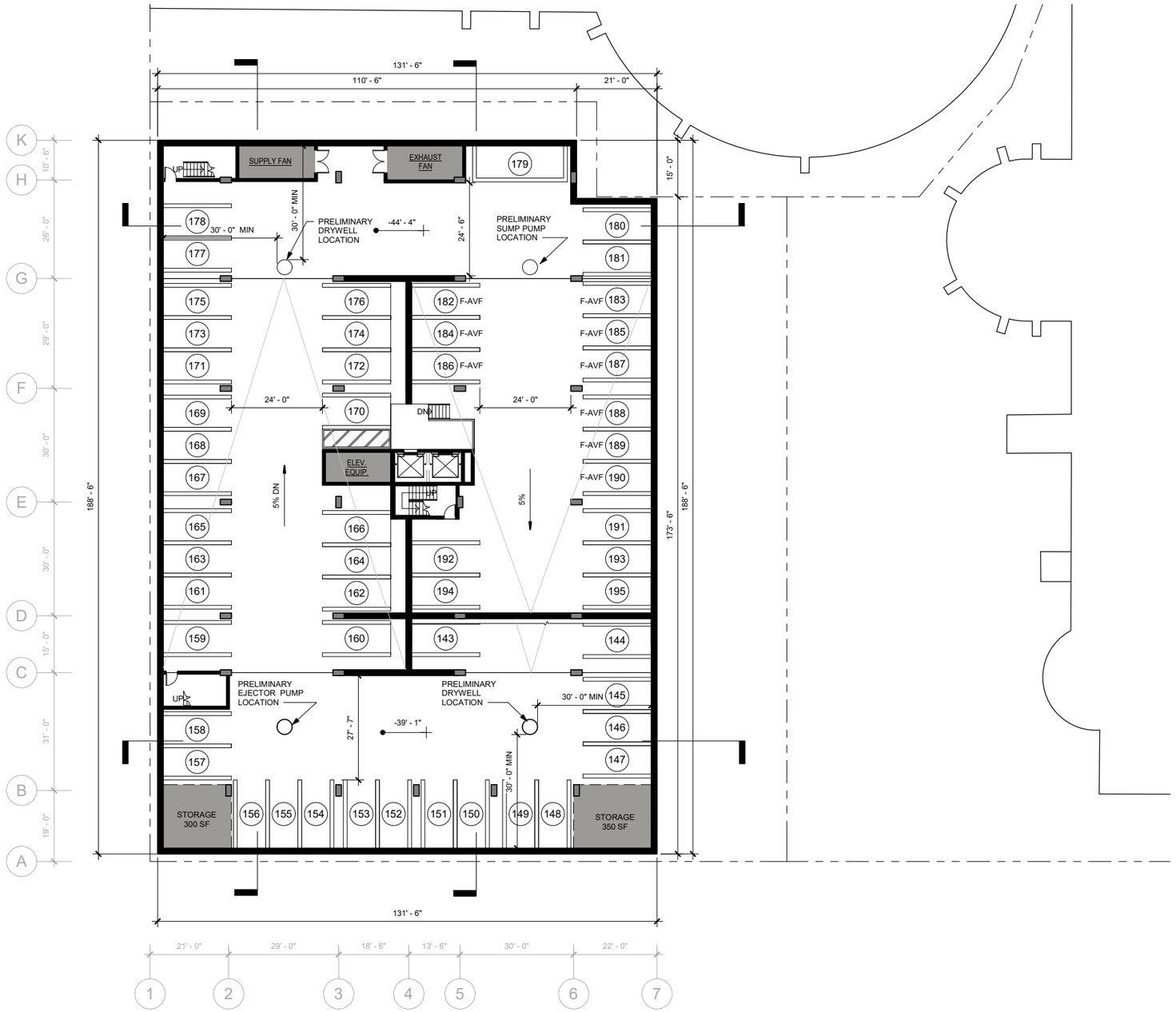
P4 PARKING SUMMARY

Refer to page 4 of Concept design for complete parking tabulations.

TOTAL PARKING	**53 SPACES**
STANDARD	53 SPACES
ACCESSIBLE	0 SPACES

● **JOINT PARKING**	53 SPACES
● **AVF:** ALTERNATIVE VEHICLE FUELING SPACES	0 SPACES
● **F-AVF:** INFRASTRUCTURE FOR FUTURE CHARGER INSTALLATION	9 SPACES

(Locations of AVF & F-AVF spaces shown on plans are preliminary and for illustrative purposes only.)



16 0 16 32

N

PASSIVE DESIGN FEATURES

E - 1.2 PASSIVE DESIGN FEATURES



Passive design features and active systems incorporated into the project design include:

- Building configuration:
  - Building is oriented to provide all occupied rooms with daylight and a view
  - Usable exterior balconies at all apartment units
- Materials:
  - Exterior materials selected for durability and local availability
  - Interior materials selected for wear-resistance and low VOC emissions
  - Cool roofing material
- Windows:
  - Operable apartment windows
  - Dual pane glazing
  - Overhangs and fixed canopies provide solar shading at east, south and west windows
- Energy efficient building systems:
  - High-efficiency gas boilers
  - Commissioning to align system performance with design targets and energy efficiency standards
  - Water submetering and individual electric meters
- System control:
  - Each apartment and commercial unit will have its own controllable thermostat
  - Daylighting, occupancy sensors and dimmer switches will be used to optimize lighting
- Landscape:
  - Drought tolerant planting
  - Landscaped roof terraces at mezzanine, second, third, and penthouse floors
  - Low backlight/uplight/glare-rated exterior light fixtures
- Storage and collection of recyclables

EXTERIOR ELEVATIONS

E - 1.2 PASSIVE DESIGN FEATURES BY ELEVATION



SOUTH ELEVATION



NORTH ELEVATION



WEST ELEVATION



EAST ELEVATION

16 0 16 32

LANDSCAPE PLAN - GROUND FLOOR TREE LOCATIONS

WC - 1.1 IRRIGATION EFFICIENCY
UG - 2.1 TREES

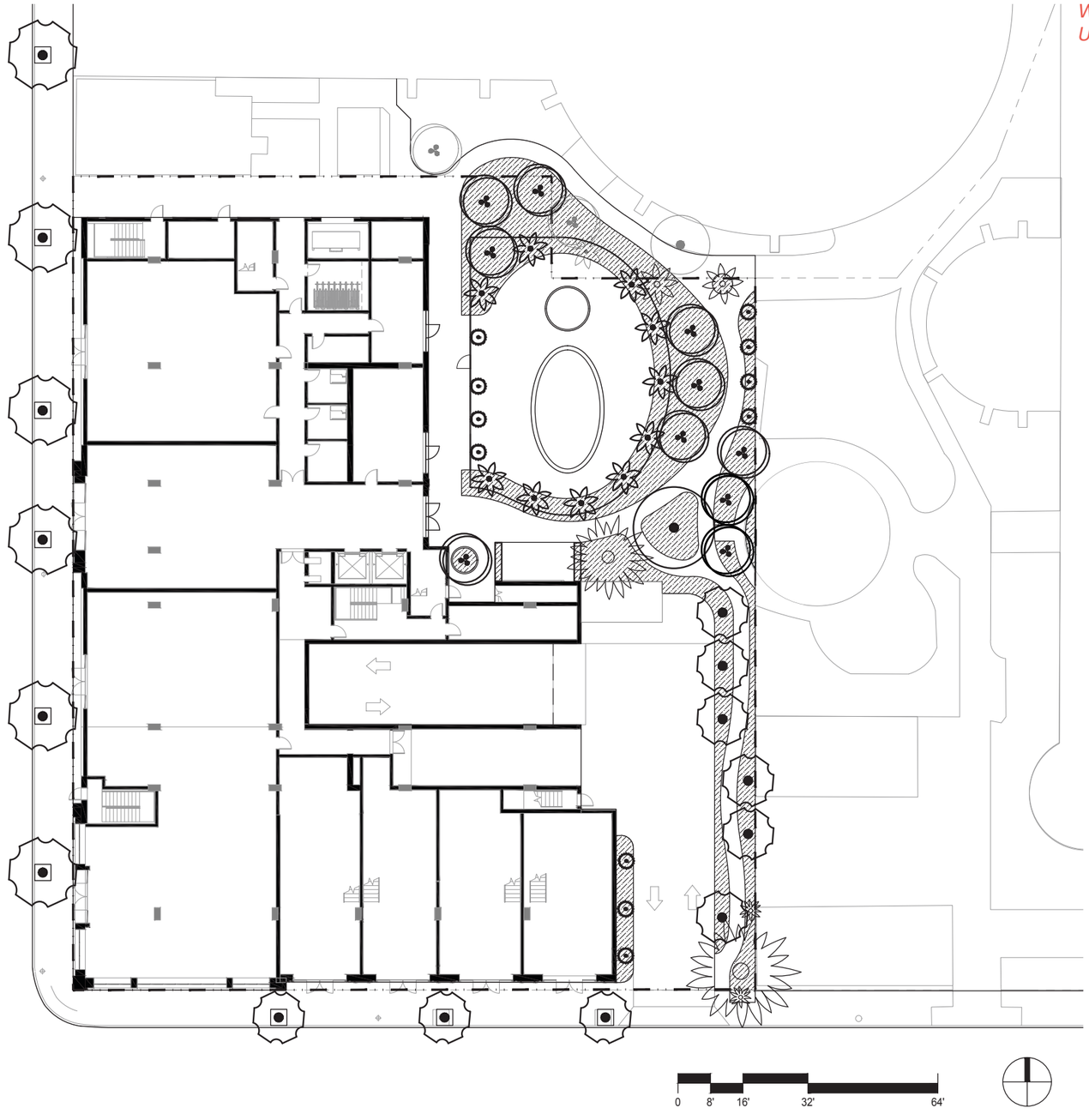
TREE LEGEND:

SYMBOL	BOTANICAL NAME "COMMON NAME"	SIZE	WUCOLS	COMMENTS
	OLEA EUROPAEA 'MAJESTIC BEAUTY' FRUITLESS OLIVE	60" BOX	LOW	MULTI–TRUNK
	ARCHONTOPHOENIX CUNNINGHAMIANA "KING PALM"	24" BOX	MODERATE	STANDARD
	UMBELLULARIA CALIFORNICA "BAY LAUREL"	24" BOX	LOW	STANDARD
	QUERCUS ENGELMANNII "ENGLEMANN OAK"	96" BOX	LOW	STANDARD
	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	36" BOX	LOW	STANDARD, MATCH EXISTING STREET TREES
	PHOENIX CANARIENSIS "CANARY ISLAND DATE PALM"	–		SEE TREE REPLACEMENT CALCULATIONS
	SYAGRUS ROMANZOFFIANA "QUEEN PALM"	–		SEE TREE REPLACEMENT CALCULATIONS
	WASHINGTONIA FILIFERA "CALIFORNIA FAN PALM"	–		SEE TREE REPLACEMENT CALCULATIONS

TREE REPLACEMENT CALCULATIONS:

TREE ID	STATUS	BOTANICAL NAME "COMMON NAME"	DBH / BT HT.	REPLACEMENT TREES REQUIRED (ORD. NO. 2237, § 2, 2012.)
#38	TO BE RETAINED	PHOENIX CANARIENSIS "CANARY ISLAND DATE PALM"	20' BT	NONE
ST1	TO BE RETAINED	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	3	NONE
ST2	TO BE RETAINED	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	3	NONE
ST3	TO BE RETAINED	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	2	NONE
ST4	TO BE RETAINED	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	1	NONE
ST5	TO BE RETAINED	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	1	NONE
ST6	TO BE RETAINED	LAGERSTROEMIA INDICA "CRAPE MYRTLE"	STUMP SPROUTS	NONE
ST8	TO BE RETAINED	SYAGRUS ROMANZOFFIANA "QUEEN PALM"	15' BT	NONE
ST7	TO BE TRANSPLANTED	SYAGRUS ROMANZOFFIANA "QUEEN PALM"	20' BT	NONE
#23	TO BE TRANSPLANTED	WASHINGTONIA FILIFERA "CALIFORNIA FAN PALM"	50' BT	NONE
#31	TO BE TRANSPLANTED	WASHINGTONIA FILIFERA "CALIFORNIA FAN PALM"	45' BT	NONE
#26	TO BE TRANSPLANTED	PHOENIX CANARIENSIS "CANARY ISLAND DATE PALM"	50' BT	NONE
#24	NO LONGER EXISTS*	FICUS MICROCARPA "INDIAN LAUREL FIG"	40.5"	NONE
#18	TO BE REMOVED	CINNAMOMUM CAMPHORA "CAMPHOR TREE"	31"	(4) 36" BOX TREES OR (8) 24" BOX TREES
#19	TO BE REMOVED	CINNAMOMUM CAMPHORA "CAMPHOR TREE"	16.5"	(2) 36" BOX TREES OR (4) 24" BOX TREES
#20	TO BE REMOVED	CINNAMOMUM CAMPHORA "CAMPHOR TREE"	23.5"	(4) 36" BOX TREES OR (8) 24" BOX TREES

NOTE:
*TREE #24 NO LONGER EXISTS. SEE PRIVATE TREE REMOVAL REQUEST APPLICATIONS FOR DETAILS REGARDING UPDATED TREE CONDITION.



GROUND FLOOR PROPOSED LANDSCAPE:

TREES 36" BOX OR LARGER	17
TREES 24" BOX	21
TOTAL LANDSCAPE	11,600 SF
SOFTSCAPE	3,257 SF
HARDSCAPE	8,343 SF

REPLACEMENT TREES REQUIRED:

TREES 36" BOX OR LARGER OR TREES 24" BOX	10 20

EXISTING TREES	19
PROPOSED TREES	38
NET GAIN OF TREES	**19**

LANDSCAPE PLAN - GROUND FLOOR PLANTING LOCATIONS

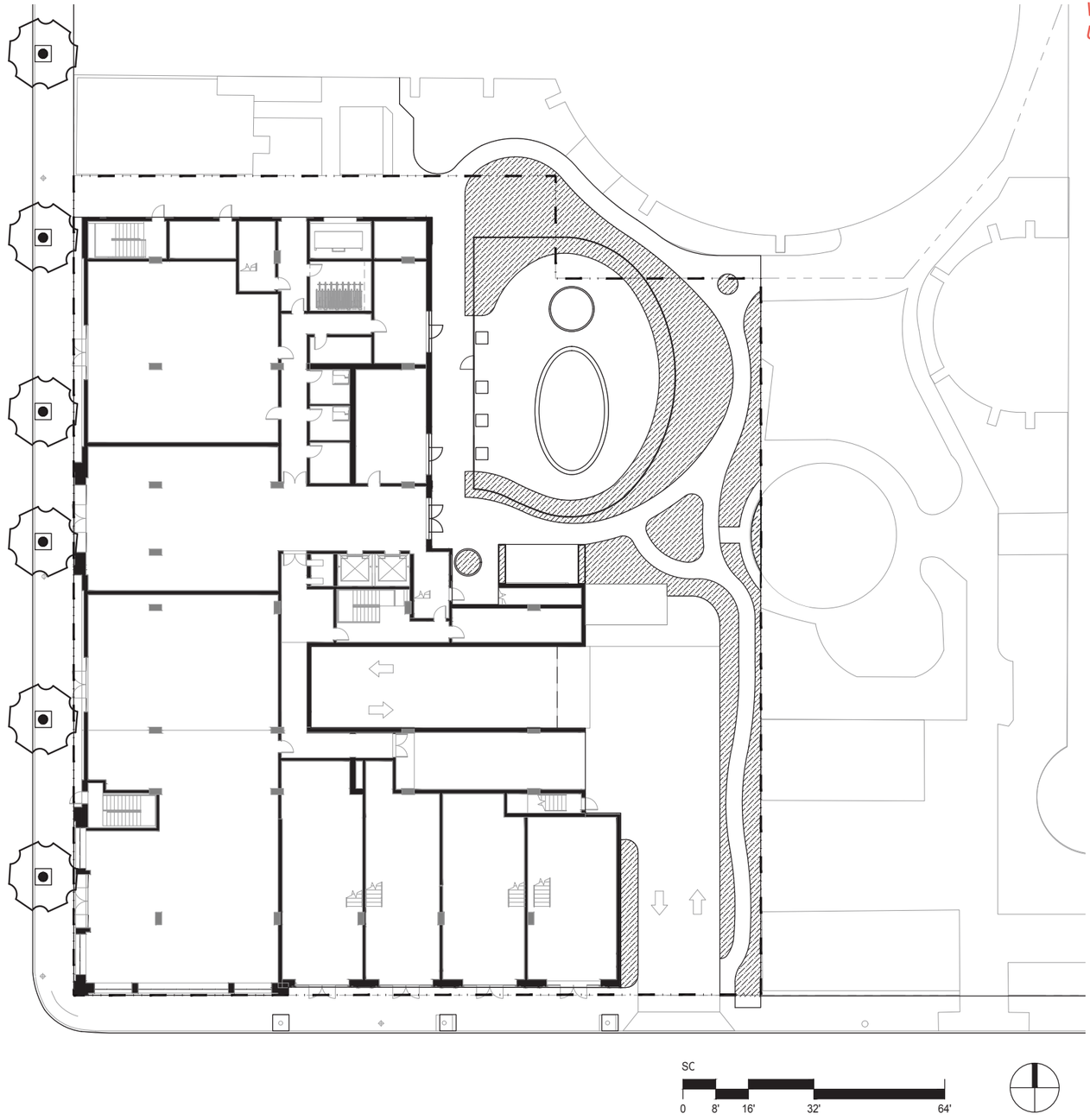
WC - 1.1 IRRIGATION EFFICIENCY
UG - 2.1 TREES

SHRUB, VINE & GROUNDCOVER LEGEND:

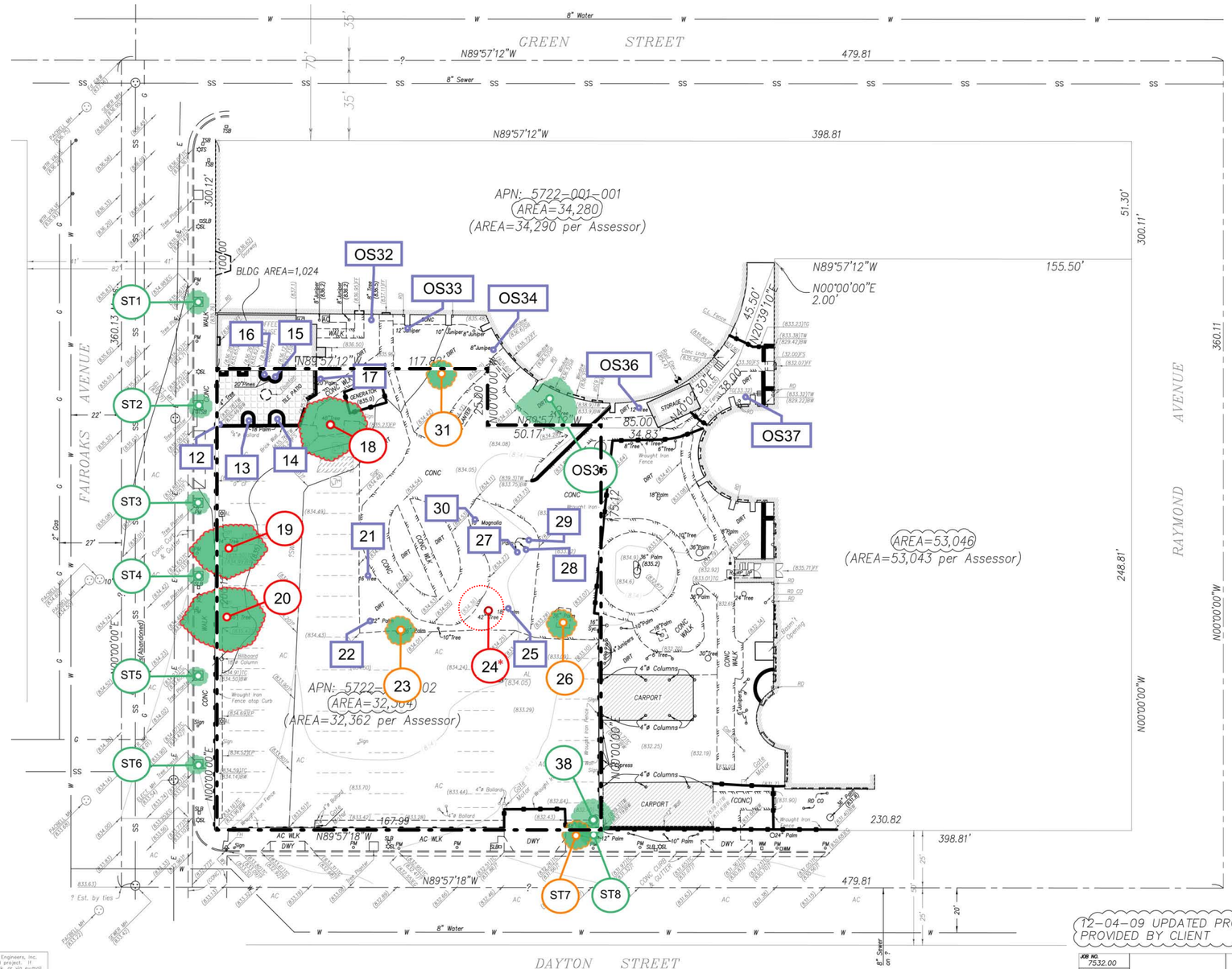
SYMBOL	BOTANICAL NAME "COMMON NAME"	SIZE	WUCOLS
	AGAVE ATTENUATA "FOXTAIL AGAVE"	15 GAL.	LOW
	ARCTOSTAPHYLOS 'SUNSET' "SUNSET MANZANITA"	5 GAL.	LOW
	ARTEMISIA 'POWIS CASTLE' "WORMWOOD"	5 GAL.	MODERATE
	CARPENTERIA CALIFORNICA "BUSH ANEMONE"	5 GAL.	LOW
	DASYLIRION LONGISSIMUM "MEXICAN GRASS TREE"	15 GAL.	VERY LOW
	DISTICTUS 'RIVERS' "ROYAL TRUMPET VINE"	5 GAL	MODERATE
	DRACENA DRACO "DRAGON TREE"	24" BOX	VERY LOW
	ARMERIA MARITIMA 'ALBA' "WHITE FLOWERED THRIFT"	1 GAL.	MODERATE
	LAVANDULA ANGUSTIFOLIA 'HIDCOTE PINK' "HIDCOTE PINK LAVENDER"	1 GAL.	LOW
	PRUNUS ILICIFOLIA SSP. 'LYONII' "CATALINA CHERRY"	15 GAL.	LOW
	ROSA X 'NOASCHNEE' "FLOWER CARPET WHITE GROUNDCOVER ROSE"	2 GAL.	MODERATE
	STRELITZIA REGINAE "BIRD OF PARADISE"	15 GAL.	MODERATE
	SALVIA CLEVELANDII 'WINNIFRED GILMAN' "BLUE SAGE"	5 GAL.	VERY LOW
	VERBENA LILACINA "DE LA MINA"	5 GAL.	LOW

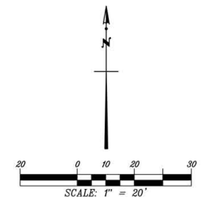
NOTE:

ALL IRRIGATION TO BE DRIP IRRIGATION WITH WEATHER BASED IRRIGATION CONTROLLER.



EXISTING TREE LOCATION EXHIBIT





TREE INVENTORY LEGEND

- # — City of Pasadena Protected Tree
- Protected Tree Canopy
- # — Inventoried Non-Protected Tree
- # — Protected Tree To Be Removed
- # — Protected/ROW Tree To Be Relocated

NOTE: INVENTORIED TREES PLOTTED OUTSIDE PROPERTY LINE BOUNDARIES ARE DESIGNATED "OS" FOR OFF-SITE AND "ST" FOR STREET TREES

* TREE # 24 NO LONGER EXISTS. SEE PRIVATE TREE REMOVAL REQUEST APPLICATION FOR DETAILS REGARDING UPDATED TREE CONDITION.

EXISTING TREES ON SITE = 19

Carlberg ASSOCIATES Horticulturists and Registered Consulting ARBORISTS

PROTECTED TREE LOCATION EXHIBIT

86 SOUTH FAIR OAKS AVENUE, PASADENA, CALIFORNIA
PREPARED FOR: GOLDRICH KEST

www.cycarlberg.com Revised Date: 6.07.18 By: J. Sanchez

These plans are instruments of service and the property of S.E.C. Civil Engineers, Inc. All information contained on these drawings is for use on this specified project. If plans are provided in an electronic format (computer disk, compact disk, or via e-mail or modem transmission, etc) as a courtesy to our client, the delivery of electonic files does not constitute the delivery of our professional work product. Only paper prints signed by a registered engineer employed by S.E.C. Civil Engineers, Inc. constitute our professional work product. S.E.C. Civil Engineers, Inc. shall not be responsible for any modifications made to the electronic files, or for any products derived from electronic files which are not reviewed and signed by a registered engineer employed by S.E.C Civil Engineers, Inc.

Copyright: S.E.C. Civil Engineers, Inc.
All rights Reserved.

LEGEND

AL	Area Light
BW	Back Walk/Bottom Wall
CO	Clean-Out
FH	Fire Hydrant
℄	Flowline
PM	Parking Meter
RD	Roof Drain
SL	Street Light
SLB	Street Lighting Box
TC	Top Curb
TS	Traffic Signal
TSB	Traffic Signal Box
WM	Water Meter
WV	Water Valve

LEGAL DESCRIPTION:

A portion of Lot 2 of Hotel Green Replat, in the City of Pasadena, County of Los Angeles, State of California as per map recorded in Book 1 pages 77-78 of maps, in the Office of the County Recorder of said county.

Assessor's Parcel No. 5722-001-001
Owner: Green Hotel Apartments
Site Address: 71 S. Raymond Ave., Pasadena, CA 91105
Zoning: LA PSC-

BENCHMARK:

Spk E. Curb Fairoaks opposite South Line Dayton Street to the West.
Elevation: 833.81'

12-04-09 UPDATED PROPERTY LINES AND LOT AREAS PER LEGAL DESCRIPTION PROVIDED BY CLIENT

JOB NO. 7532.00
SCALE: 1"=20'
DATE: 2-21-07
REVISION: 12-04-09
REVISION:

S.E.C. CIVIL ENGINEERS, INC.
16823 SATICOY STREET VAN NUYS, CA. 91406
(818) 782-2788 (323) 873-1788 FAX:(818) 782-0111
RONALD W. SPINDLER R.C.E. 13194

CLIENT: Prestige Homes, Inc.
PROJECT: Architectural Topography-Green Hotel

SHEET OF

F:\History\7532.00 Prestige Homes Green Hotel\3 Engineering\3-01-01 Cadd\Master.dwg 7/19/2010 12:12:48 PM PDT

TRANSIT ORIENTED DEVELOPMENT MAP

T - 5.1 TRANSIT ORIENTED DEVELOPMENT



CLASS 1 BICYCLE FACILITY

T - 1.2 BICYCLE STORAGE

DERO DECKER



- Sturdy red handle grips
- Lift-assist trays
- Dampers for safe lowering of trays
- Spring loaded levers hold bikes firmly in place
- U-lock compatible
- Smallest footprint
- Smooth and silent operation
- Simple installation
- Low maintenance
- Specially designed fat bike trays available
- Adjustable downward resting position to accommodate different floor clearances.





FINISH OPTIONS

Galvanized



Powder Coat

White	Black	Light Gray RAL 7042	Deep Red RAL 3003	Yellow RAL 1023
CNH Bright Yellow	Orange RAL 2004	Blue RAL 5005	Sky Blue RAL 5015	Hunter Green RAL 6005
Light Green RAL 6018	Green RAL 6016	Sepia Brown RAL 8014	Bronze	Silver 9007
Dark Purple	Flat Black	Wine Red RAL 3005	Beige RAL 1001	Iron Gray 7011

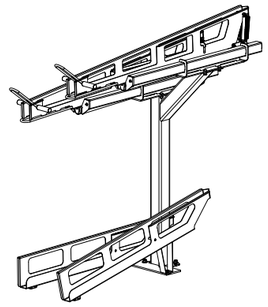
www.dero.com | 1-888-337-6729

DERO A PLAYCORE Company

© 2017 Dero

DERO DECKER
Submittal Sheet

*This is a preliminary specification and is for illutrative purposes only. Exact specification to be confirmed.



CAPACITY 4 bikes per unit. x 4 = 16 Bike Spaces

MATERIALS
Uprights: 4" 11g square tube
Upright base: 1/4" plate
Cantilevers: 11g plate
Cantilever base: 1/4" plate
Trays: 11g plate

FINISHES

☑ **Galvanized**
An after fabrication hot dipped galvanized finish is our standard option.

☐ **Powder Coat**
Our powder coat finish assures a high level of adhesion and durability by following these steps:
1. Sandblast
2. Epoxy primer electrostatically applied
3. Final thick TGIC polyester powder coat

MOUNT OPTIONS

☑ **Surface**
Each upright has one ¼" plate feet that accept 1/2" wedge anchors

SETBACKS See following page

RESIDENTIAL BIKE PARKING

*Per Pasadena Municipal Code 17.46.320 Bicycle Parking Standards, the bicycle requirement for the residential portion of a mixed-use project is a minimum of 1 space for every six dwelling units.

1 SPACE x 84 UNITS/6 UNITS = 14=
Minimum of (14) Class 1 Bicycle Spaces required
(16) Class 1 Bicycle Spaces provided

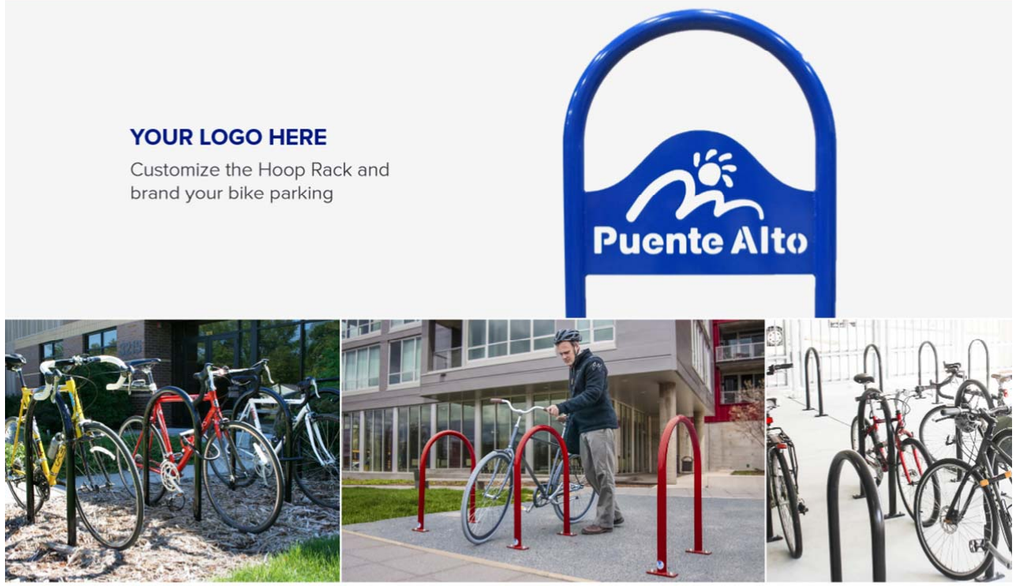
CLASS 2 BICYCLE FACILITY

T - 1.2 BICYCLE STORAGE

HOOP RACK

YOUR LOGO HERE

Customize the Hoop Rack and brand your bike parking



FINISH OPTIONS

Galvanized



Stainless

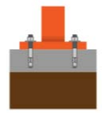


PVC Dip

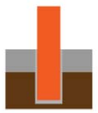


MOUNT OPTIONS

Surface



In-Ground



Rail



Powder Coat

White	Black	Light Gray RAL 7042	Deep Red RAL 3003	Yellow RAL 1023
CNH Bright Yellow	Orange RAL 2004	Blue RAL 5005	Sky Blue RAL 5015	Hunter Green RAL 6005
Light Green RAL 6018	Green RAL 6016	Sepia Brown RAL 8014	Bronze	Silver 9007
Dark Purple	Flat Black	Wine Red RAL 3005	Beige RAL 1001	Iron Gray 7011

Thermoplastic

Black	Green	Red	Blue	Gray	Brown



Optional Lean Bar

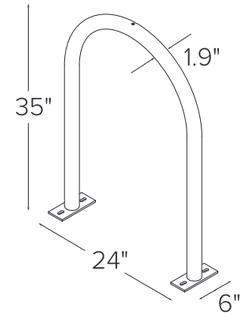
www.dero.com | 1-888-337-6729

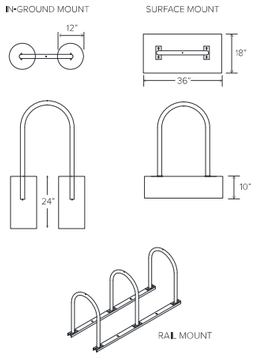
DERO A PLAYCORE Company

© 2018 Dero

HOOP RACK
Submittal Sheet

*This is a preliminary specification and is for illutrative purposes only. Exact specification to be confirmed.





CAPACITY 2 Bikes x 2 = 4 Bike Spaces

MATERIALS

- [x] **Standard** 1.5" schedule 40 pipe (1.9" OD)
- [ ] **Lightweight** 1.5" schedule 10 pipe (1.9" OD)

FINISHES

- [ ] **Galvanized** An after fabrication hot dipped galvanized finish is our standard option.
- [x] **Powder Coat** Our powder coat finish assures a high level of adhesion and durability by following these steps:
  1. Sandblast
  2. Epoxy primer electrostatically applied
  3. Final thick TGIC polyester powder coat
- [ ] **Thermoplastic** In addition to an increased thickness (8-10mils), the thermoplastic finish covers a galvanized layer and offers superior impact resistance over powder coating.
- [ ] **PVC Dip** (plastisol) Other colors available by special order (minimum orders apply)
- [ ] **Stainless** Stainless Steel: 304 grade stainless steel material finished in either a high polished shine or a satin finish.

MOUNT OPTIONS

- [x] **In-ground** In ground mount is embedded into concrete base. Specify in ground mount for this option.
- [ ] **Surface** Foot Mount has two 2.5"x6"x.25" feet with two anchors per foot. Specify foot mount for this option.
- [ ] **Rail** Rail Mounted Racks are bolted to two parallel rails which can be left freestanding or anchored to the ground. Rails are heavy duty 3"x1.4"x3/16" thick galvanized mounting rails. Specify rail mount for this option.

NON-RESIDENTIAL & EMPLOYEE BIKE PARKING

*Per Pasadena Municipal Code 17.46.320 Bicycle Parking Standards, the bicycle requirement for the non-residential portion (less than 15,000 SF) of a mixed-use project is a minimum of (4) Class 2 Bicycle Spaces.

RETAIL	4,218 SF
RESTAURANT	1,974 SF
COMMERCIAL PORTION OF WORK/LIVE	3,702 SF
TOTAL	**9,894 SF**

9,894 SF < 15,000 SF =
Minimum of (4) Class 2 Bicycle Spaces required
(4) Class 2 Bicycle Spaces provided

STORMWATER CAPTURE DOCUMENTATION

WC - 3.1 STORMWATER CAPTURE

ENGINEERED STORMWATER RETENTION PLAN - DRYWELL EXHIBIT 15

HYDROLOGIC ANALYSIS & DRYWELL CALCULATIONS 16

DRYWELL DETAIL 17

ENGINEERED STORMWATER RETENTION PLAN - DRYWELL EXHIBIT



CENTRAL PARK APARTMENTS

Site Area: 0.74 Acres
Percent Impervious: 90.0%
95th Percentile, 24-Hour Storm: 2.0 in
95th Percentile Volume: 4,416 CF

Drywell Capacity

Torrent Resources calculated the drywell capacity as shown on the following page. Per those calculations, the drywells have a capacity to infiltrate 1,473 CF as quickly as it enters the drywell, due to the soil percolation rate and the drywell depth and diameter. The remaining 2,943 CF can be stored in the drywell rock shaft and chamber, which has a capacity of 621 CF, and a storage tank located in or under the parking level. The storage tank will require a minimum capacity of 2,322 cf (~17,500 gallon). This water will be drawn down within 96 hours as required by LA County. Because the drywell is designed to treat the 95th percentile storm, City of Pasadena Low Impact Development (LID) requirements are met and exceeded by the proposed drywell system.

Drywell A proposed approximate location below structure. All drainage on structure will be collected and routed to the drywells per Plumbing Engineer's drawings. All site drainage on grade will be collected and routed to proposed building and handoff to drywell system. Drywell A is proposed to treat half of the total site design volume.

Drywell B proposed approximate location below structure. All drainage on structure will be collected and routed to the drywells per Plumbing Engineer's drawings. All site drainage on grade will be collected and routed to proposed building and handoff to drywell system. Drywell B is proposed to treat half of the total site design volume.

kpff
700 S. Flower, Suite 2100
Los Angeles, CA 90017
O:213.418.0201
www.kpff.com

HYDROLOGIC ANALYSIS & DRYWELL CALCULATIONS

Peak Flow Hydrologic Analysis

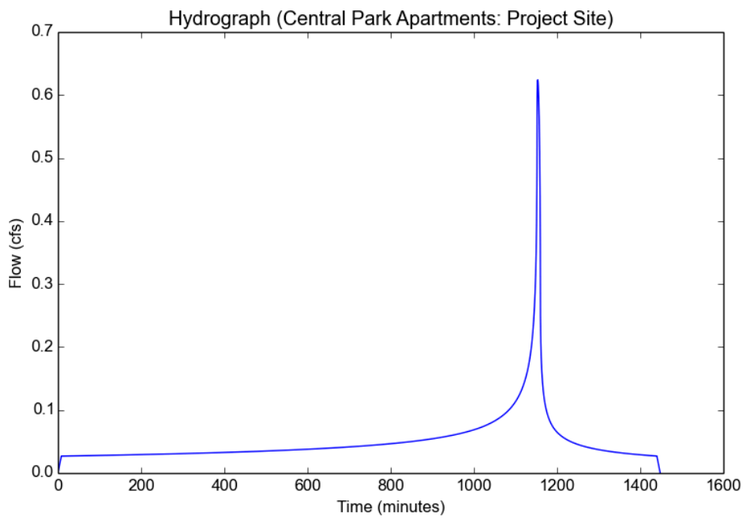
File location: P:/2017/1700925 Central Park Apartments/ENGR/STORM/LID/2018-03-18 Drywell Calcs/95th percentile Central Park Ap Site.pdf
Version: HydroCalc 1.0.2

Input Parameters

Project Name	Central Park Apartments
Subarea ID	Project Site
Area (ac)	0.74
Flow Path Length (ft)	240.0
Flow Path Slope (vft/hft)	0.02
85th Percentile Rainfall Depth (in)	2.0
Percent Impervious	0.9
Soil Type	2
Design Storm Frequency	95th percentile storm
Fire Factor	0
LID	True

Output Results

Modeled (85th percentile storm) Rainfall Depth (in)	2.0
Peak Intensity (in/hr)	0.9567
Undeveloped Runoff Coefficient (Cu)	0.7155
Developed Runoff Coefficient (Cd)	0.8816
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	0.6241
Burned Peak Flow Rate (cfs)	0.6241
24-Hr Clear Runoff Volume (ac-ft)	0.1014
24-Hr Clear Runoff Volume (cu-ft)	4416.0298



April 2, 2019
KPFF - Los Angeles
Attn: Kevin Ellis

Re: Maxwell® Drainage System Calculations for **Central Park - Pasadena, CA**

Given:

Design Infiltration Rate	3.00	in/hr
Mitigated Volume	4,416	ft^3
Required Drawdown Time	96	hours
Min. Depth to Infiltration	20	ft
Groundwater Depth for Design	35	ft
Rock Porosity	40	%

85'-50'=35'

Design:

Actual Depth to Infiltration	20 ft
Actual Drywell Bottom Depth	25 ft

Convert Design Rate from in/hr to ft/sec.

$3.00 \frac{in}{hr} \times \frac{1\ ft}{12\ in} \times \frac{1\ hr}{3600\ sec} = 0.000069 \frac{ft}{sec}$

A 6 foot diameter drywell provides 18.85 SF of infiltration area per foot of depth, plus 28.27 SF at the bottom.

For a 25 foot deep drywell, infiltration occurs between 20 feet and 25 feet below grade. This provides 5 feet of infiltration depth in addition to the bottom area. Infiltration area per drywell is calculated below.

$5\ ft \times 18.85 \frac{ft^2}{ft} + 28.27\ ft^2 = 123\ ft^2$

Combine design rate with infiltration area to get flow (disposal) rate for each drywell.

$0.000069 \frac{ft}{sec} \times 123\ ft^2 = 0.00851 \frac{ft^3}{sec}$

Volume of disposal for each drywell based on various time frames are included below.

96 hrs: 0.0085 CFS x 96 hours x $\frac{3600\ sec}{1\ hr}$ = 2,941 cubic feet of retained water disposed of.

Chamber diameter = 4 feet. Drywell rock shaft diameter = 6 feet.
Volume provided in each drywell with chamber depth of 22 feet.

$22\ ft \times 12.57\ ft^2 + 3\ ft \times 28.27\ ft^2 \times 40\ \% = 310\ ft^3$

The MaxWell System is composed of 2 drywell(s) .
Total volume provided = 621 CF.
Total 96 hour infiltration volume = 5,881 CF.
Total infiltration flowrate = 0.01702 CFS.

Based on the total mitigated volume of 4416 CF, after subtracting the volume infiltrated as quickly as it enters the drywell of 1473 CF, the remaining volume is 2943 CF. The storage provided in the drywell system is 621 CF. Therefore 2322 CF can be stored in a separate detention system.

Bill De Jong, PE
Technical Engineer
Torrent Resources (CA), Inc.
909-915-9490

Torrent Resources (CA) Incorporated
9950 Alder Avenue
Bloomington, CA 92316
Phone 909-829-0740
CA Lic. 886759 A, C-42
An Evolution of McGuckin Drilling

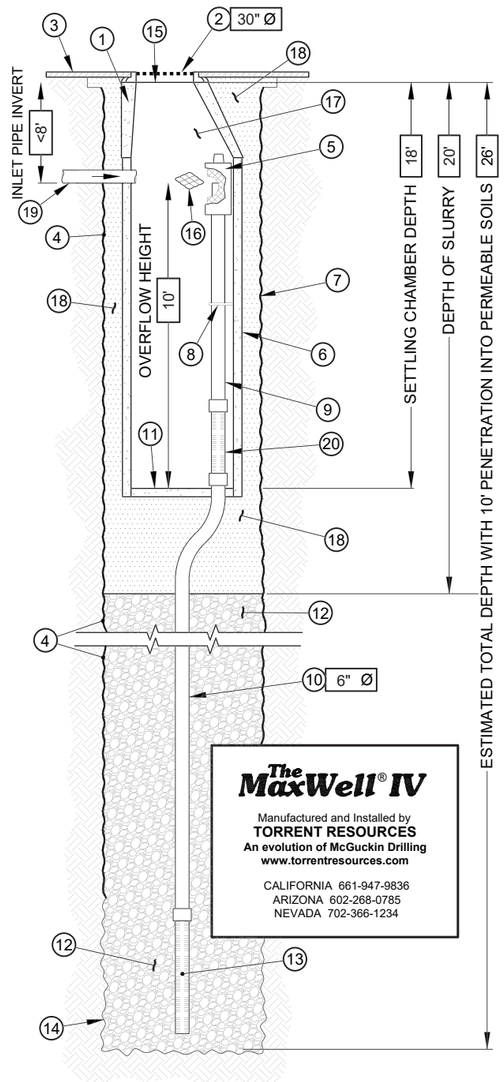
DRYWELL DETAIL

Central Park- Pasadena - 01Nov18

The MaxWell® IV Drainage System Detail And Specifications

ITEM NUMBERS

1. **MANHOLE CONE** - MODIFIED FLAT BOTTOM.
2. **CLEAN CAST IRON PRESSURIZED COVER** WITH GASKET (NEENAH R-6462-HH). BOLTED. RIM ELEVATION ±0.02' OF PLANS.
3. **GRADED BASIN OR PAVING** (BY OTHERS).
4. NON-WOVEN GEOTEXTILE SLEEVE, MIRAFITM/ 140 NL. HELD APPROX. 10 FEET OFF THE BOTTOM OF EXCAVATION.
5. **PUREFLO® DEBRIS SHIELD** - ROLLED 16 GA. STEEL X 24" LENGTH WITH VENTED ANTI-SIPHON AND INTERNAL .265" MAX. SWO FLATTENED EXPANDED STEEL SCREEN X 12" LENGTH. **FUSION BONDED EPOXY COATED**.
6. **PRE-CAST LINER** - 4000 PSI CONCRETE 48" ID. X 54" OD. **CENTER IN HOLE** AND ALIGN SECTIONS **TO MAXIMIZE BEARING SURFACE**.
7. **MIN. 6' Ø DRILLED SHAFT**.
8. **SUPPORT BRACKET** - FORMED 12 GA. STEEL. **FUSION BONDED EPOXY COATED**.
9. **OVERFLOW PIPE** - SCH. 40 PVC MATED TO DRAINAGE PIPE AT BASE SEAL.
10. **DRAINAGE PIPE** - ADS HIGHWAY GRADE WITH TRI-A COUPLER. **SUSPEND PIPE** DURING BACKFILL OPERATIONS TO PREVENT BUCKLING OR BREAKAGE. DIAMETER AS NOTED.
11. **BASE SEAL** - GEOTEXTILE OR CONCRETE SLURRY.
12. **ROCK** - WASHED, SIZED BETWEEN 3/8" AND 1-1/2" TO **BEST COMPLEMENT SOIL CONDITIONS**.
13. **FLOFAST® DRAINAGE SCREEN** - SCH. 40 PVC 0.120" SLOTTED WELL SCREEN WITH 32 SLOTS PER ROW/FT. 120" OVERALL LENGTH WITH TRI-B COUPLER.
14. **MIN. 6' Ø SHAFT** - DRILLED TO **MAINTAIN PERMEABILITY** OF DRAINAGE SOILS.
15. **FABRIC SEAL** - U.V. RESISTANT GEOTEXTILE - **TO BE REMOVED BY CUSTOMER** AT PROJECT COMPLETION.
16. **ABSORBENT** - HYDROPHOBIC PETROCHEMICAL SPONGE. MIN. 128 OZ. CAPACITY. TYPICAL, TWO PER CHAMBER.
17. **FREEBOARD DEPTH VARIES** WITH INLET PIPE ELEVATION. INCREASE SETTLING CHAMBER DEPTH AS NEEDED TO MAINTAIN ALL INLET PIPE ELEVATIONS ABOVE OVERFLOW PIPE INLET.
18. STABILIZED BACKFILL - SIX-SACK SLURRY MIX.
19. **INLET PIPE** (BY OTHERS).
20. **INTAKE SCREEN** - 6" Ø SCH. 40 PVC 0.120" MODIFIED SLOTTED WELL SCREEN WITH 32 SLOTS PER ROW/FT. 48" OVERALL LENGTH WITH TRI-C END CAP.



AZ Lic. ROC070465 A, ROC047067 B-4, ADWR 363
CA Lic. 528080, C-42, HAZ
NV Lic. 0035350 A - NM Lic. 90504 GF04

U.S. Patent No. 4,923,330 - ™ Trademark 1974, 1990, 2004

APPENDICES

GEOTECHNICAL ENGINEERING INVESTIGATION ..... A

TITLE 24 BUILDING ENERGY ANALYSIS REPORT ..... B

DRAFT TRANSPORTATION DEMAND MANAGEMENT PLAN C

Architectural
Resources Group

Central Park Apartments
86 S. Fair Oaks, Pasadena, CA

Appendix A: Geotechnical Engineering Investigation

Geotechnologies, Inc.
Consulting Geotechnical Engineers
439 Western Avenue
Glendale, California 91201-2837
818.240.9600 • Fax 818.240.9675

July, 2019
File Number 21674

Green Hotel Apartments,
a Limited Partnership
Prestige Homes, Inc.
5150 Overland Avenue
Culver City, California 90230

Attention: Tony Mouallem

Subject: Geotechnical Engineering Investigation
Proposed Mixed-Use Development
86 South Fair Oaks Avenue, Pasadena, California

Dear Mr. Mouallem:

This letter transmits the Geotechnical Engineering Investigation for the subject site prepared by Geotechnologies, Inc. This report provides geotechnical recommendations for the development of the site, including earthwork, seismic design, retaining walls, excavations, shoring and foundation design. Engineering for the proposed project should not begin until approval of the geotechnical investigation is granted by the local building official. Significant changes in the geotechnical recommendations may result due to the building department review process.

The validity of the recommendations presented herein is dependent upon review of the geotechnical aspects of the project during construction by this firm. The subsurface conditions described herein have been projected from limited subsurface exploration and laboratory testing. The exploration and testing presented in this report should in no way be construed to reflect any variations which may occur between the exploration locations or which may result from changes in subsurface conditions.

Should you have any questions please contact this office.

Respectfully submitted,
GEOTECHNOLOGIES, INC.



GREGORIO VARELA
R.C.E. 81201

GV:km

Distribution: (4) Addressee

Email to: [TMouallem@goldrichkest.com]
[L.MacLean@arg-la.com]

TABLE OF CONTENTS

SECTION **PAGE**

INTRODUCTION 1
PROPOSED DEVELOPMENT 1
SITE CONDITIONS 2
GEOTECHNICAL EXPLORATION 3
FIELD EXPLORATION 3
Geologic Materials 3
Groundwater 4
Caving 4
SEISMIC EVALUATION 4
REGIONAL GEOLOGIC SETTING 4
REGIONAL FAULTING 5
SEISMIC HAZARDS AND DESIGN CONSIDERATIONS 5
Surface Rupture 6
Liquefaction 7
Dynamic Dry Settlement 7
Tsunamis, Seiches and Flooding 8
Landsliding 8
CONCLUSIONS AND RECOMMENDATIONS 8
2016 California Building Code Seismic Parameters 9
Deaggregated Seismic Source Parameters 10
EXPANSIVE SOILS 10
WATER-SOLUBLE SULFATES 11
GRADING GUIDELINES 11
Site Preparation 11
Compaction 12
Acceptable Materials 12
Utility Trench Backfill 13
Shrinkage 13
Weather Related Grading Considerations 14
Geotechnical Observations and Testing During Grading 14
FOUNDATION DESIGN 15
Conventional 15
Miscellaneous Foundations 16
Foundation Reinforcement 16
Lateral Design 16
Foundation Settlement 17
Foundation Observations 17
RETAINING WALL DESIGN 17
Restrained Retaining Walls 18
Dynamic (Seismic) Earth Pressure 19
Miscellaneous Cantilever Retaining Walls 19
Retaining Wall Drainage 20
Sump Pump Design 20

TABLE OF CONTENTS

SECTION **PAGE**

Waterproofing 21
Retaining Wall Backfill 21
TEMPORARY EXCAVATIONS 22
Excavation Observations 22
SHORING DESIGN 23
Soldier Piles 24
Lagging 25
Lateral Pressures 25
Tied-Back Anchors 27
Anchor Installation 27
Tieback Anchor Testing 28
Internal Bracing 29
Deflection 29
Monitoring 30
Shoring Observations 30
SLABS ON GRADE 31
Concrete Slabs-on Grade 31
Design of Slabs That Receive Moisture-Sensitive Floor Coverings 31
Concrete Crack Control 32
Slab Reinforcing 33
PAVEMENTS 33
SITE DRAINAGE 34
STORMWATER DISPOSAL 35
Introduction 35
The Proposed System 35
Percolation Testing 36
Stormwater Disposal Recommendations 37
DESIGN REVIEW 38
CONSTRUCTION MONITORING 39
EXCAVATION CHARACTERISTICS 39
CLOSURE AND LIMITATIONS 40
EXCLUSIONS 41
GEOTECHNICAL TESTING 42
Classification and Sampling 42
Moisture and Density Relationships 42
Direct Shear Testing 43
Consolidation Testing 43
Expansion Index Testing 44
Laboratory Compaction Characteristics 44

ENCLOSURES
References
Vicinity Map

TABLE OF CONTENTS

SECTION **PAGE**

ENCLOSURES - continued
Plot Plan
Local Geologic Map
Historically Highest Groundwater Levels Map
Seismic Hazard Zone Map
City of Pasadena Fault Map
Plates A-1 through A-3
Plates B-1 and B-2
Plates C-1 and C-2
Plate D
Calculation Sheets (7 sheets)

GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED MIXED-USE DEVELOPMENT
86 SOUTH FAIR OAKS AVENUE
PASADENA, CALIFORNIA

INTRODUCTION

This report presents the results of the geotechnical engineering investigation performed on the subject site. The purpose of this investigation was to identify the distribution and engineering properties of the geologic materials underlying the site, and to provide geotechnical recommendations for the design of the proposed development.

This investigation included three exploratory excavations, collection of representative samples, laboratory testing, engineering analysis, review of published geologic data, review of available geotechnical engineering information and the preparation of this report. The exploratory excavation locations are shown on the enclosed Plot Plan. The results of the exploration and the laboratory testing are presented in the Appendix of this report.

PROPOSED DEVELOPMENT

Information concerning the proposed development was furnished by the client and by the office of KPFF consulting Engineers. In addition, the plans prepared by Architectural Resources Group labeled Updated Concept Design Review Submittal, were reviewed for the preparation of this report. The proposed project consists of the construction of a mixed-use structure. The proposed structure will be six stories in height, built over four subterranean parking levels. The lowest finished grade of the deepest subterranean level is expected to extend up to a depth of 54 feet below the existing grade. The enclosed Plot Plan shows the location and alignment of the proposed structure.

Column loads are estimated to be between 500 and 1,200 kips. Wall loads are estimated to be between 10 and 60 kips per lineal foot. These loads reflect the dead plus live load. Grading is anticipated to consist of excavations as deep as 58 feet for construction of the proposed subterranean levels and foundation elements.

Any changes in the design of the project or location of any structure, as outlined in this report, should be reviewed by this office. The recommendations contained in this report should not be considered valid until reviewed and modified or reaffirmed, in writing, subsequent to such review.

SITE CONDITIONS

The site is located at 86 South Fair Oaks Avenue, in the City of Pasadena, California. The site is bounded by the existing Green Hotel Apartments structure to the north, Dayton Street to the south, Fair Oaks Avenue to the west and Castle Green Apartments structure to the east. The site is shown relative to nearby topographic features in the enclosed Vicinity Map.

The project site consists of the current parking lot for the Green Hotel Apartments as well as an advertising billboard. The surface of the parking lot consists of asphalt paving, with miscellaneous concrete hardscaped areas. The existing site grade descends gently to the southeast. Based on review of the Site Survey by S.E.C. Civil Engineers, Inc., dated December 4, 2009, the topographic relief observed across the site is approximately 3 feet.

Vegetation at the site consists of mature trees and grass lawns, contained in manicured planter areas. Drainage across the site appears to be by sheetflow to Dayton Street to the south.

GEOTECHNICAL EXPLORATION

FIELD EXPLORATION

The site was explored on September 24 and 25, 2018 by drilling three exploratory excavations. The borings were drilled to depths between 50 and 80 feet below grade with the aid of a truck-mounted drilling machine using 8-inch diameter hollowstem augers. The exploration locations are shown on the Plot Plan and the geologic materials encountered are logged on Plates A-1 through A-3.

The location of exploratory excavations was determined form hardscaped features shown in the enclosed Plot Plan. Elevations of the exploratory excavations are based on elevations provided in the Site Survey by S.E.C. Civil Engineers, Inc., dated December 4, 2009. The location and elevation of the exploratory excavations should be considered accurate only to the degree implied by the method used.

Geologic Materials

Fill materials were observed in the exploratory borings to an approximate depth of three feet below the existing grade. The fill consists of silty sands, which are dark brown in color, moist, medium dense and fine grained, with occasional cobbles.

The fill is in turn underlain by native alluvial soils, consisting primarily of sands and silty sands, with occasional layers of sandy silt. The native alluvial soils are yellowish brown and dark brown in color, and are moist, medium dense to very dense, or stiff to very stiff, and fine to coarse grained, with gravel and cobbles. More detailed descriptions of the earth materials encountered may be obtained from individual logs of the subsurface excavations.

Groundwater

Groundwater was not encountered to the maximum excavated depth of 80 feet. The historically highest groundwater level was established by review of California Geological Survey Seismic Hazard Zone Report of the Pasadena Quadrangle. Review of this report indicates that the historically highest groundwater level is on the order of 85 feet below the existing site grade. A copy of this plate labeled as Historically Highest Groundwater Levels Map is attached.

Fluctuations in the level of groundwater may occur due to variations in rainfall, temperature, and other factors not evident at the time of the measurements reported herein. Fluctuations also may occur across the site. High groundwater levels can result in changed conditions.

Caving

Caving could not be directly observed during exploration due to the type of excavation equipment utilized. However, based on the experience of this firm, large diameter excavations, excavations that encounter granular, cohesionless soils will most likely experience caving.

SEISMIC EVALUATION

REGIONAL GEOLOGIC SETTING

The subject site is located in the Transverse Ranges Geomorphic Province. The Transverse Ranges are characterized by roughly east-west trending mountains and the northern and southern boundaries are formed by reverse fault scarps. The convergent deformational features of the Transverse Ranges are a result of north-south shortening due to plate tectonics. This has resulted in local folding and uplift of the mountains along with the propagation of thrust faults (including blind thrusts). The intervening valleys have been filled with sediments derived from the bordering mountains.

REGIONAL FAULTING

Based on criteria established by the California Division of Mines and Geology (CDMG) now called California Geologic Survey (CGS), faults may be categorized as active, potentially active, or inactive. Active faults are those which show evidence of surface displacement within the last 11,000 years (Holocene-age). Potentially-active faults are those that show evidence of most recent surface displacement within the last 1.6 million years (Quaternary-age). Faults showing no evidence of surface displacement within the last 1.6 million years are considered inactive for most purposes, with the exception of design of some critical structures.

Buried thrust faults are faults without a surface expression but are a significant source of seismic activity. They are typically broadly defined based on the analysis of seismic wave recordings of hundreds of small and large earthquakes in the southern California area. Due to the buried nature of these thrust faults, their existence is usually not known until they produce an earthquake. The risk for surface rupture potential of these buried thrust faults is inferred to be low (Leighton, 1990). However, the seismic risk of these buried structures in terms of recurrence and maximum potential magnitude is not well established. Therefore, the potential for surface rupture on these surface-verging splays at magnitudes higher than 6.0 cannot be precluded.

SEISMIC HAZARDS AND DESIGN CONSIDERATIONS

The primary geologic hazard at the site is moderate to strong ground motion (acceleration) caused by an earthquake on any of the local or regional faults. The potential for other earthquake-induced hazards was also evaluated including surface rupture, liquefaction, dynamic settlement, inundation and landsliding.

Surface Rupture

In 1972, the Alquist-Priolo Special Studies Zones Act (now known as the Alquist-Priolo Earthquake Fault Zoning Act) was passed into law. The Act defines "active" and "potentially active" faults utilizing the same aging criteria as that used by California Geological Survey (CGS). However, established state policy has been to zone only those faults which have direct evidence of movement within the last 11,000 years. It is this recency of fault movement that the CGS considers as a characteristic for faults that have a relatively high potential for ground rupture in the future.

CGS policy is to delineate a boundary from 200 to 500 feet wide on each side of the known fault trace based on the location precision, the complexity, or the regional significance of the fault. If a site lies within an Earthquake Fault Zone, a geologic fault rupture investigation must be performed that demonstrates that the proposed building site is not threatened by surface displacement from the fault before development permits may be issued.

Based on review of the Fault Map presented in the Technical Background Report of the 2002 City of Pasadena Safety Element of the General Plan, the subject site is not located within a "Fault Hazard Management Zone". A copy of this map is enclosed.

Ground rupture is defined as surface displacement which occurs along the surface trace of the causative fault during an earthquake. Based on research of available literature and results of site reconnaissance, no known active or potentially active faults underlie the subject site. In addition, the subject site is not located within an Alquist-Priolo Earthquake Fault Zone. Based on these considerations, the potential for surface ground rupture at the subject site is considered low.

Liquefaction

Liquefaction is a phenomenon in which saturated silty to cohesionless soils below the groundwater table are subject to a temporary loss of strength due to the buildup of excess pore pressure during cyclic loading conditions such as those induced by an earthquake. Liquefaction-related effects include loss of bearing strength, amplified ground oscillations, lateral spreading, and flow failures.

Review of the California Seismic Hazards Zones Map for the Pasadena Quadrangle (CDMG 1999), indicates that the subject site is not located within a "Liquefiable" area. This determination is based on groundwater records, soil type and distance to a fault capable of producing a substantial earthquake. A copy of this map has been enclosed to this report.

Groundwater was not encountered during exploration, conducted to a maximum depth of 80 feet below the existing site grade. The historically highest groundwater level for the site is reported to be on the order of 85 feet below grade. Based on the density of the soils underlying the site, and the mapped depth to the historically highest groundwater level, the soils underlying the site are not considered capable of liquefaction during the ground motion expected during the design-based earthquake.

Dynamic Dry Settlement

Seismically-induced settlement or compaction of dry or moist, cohesionless soils can be an effect related to earthquake ground motion. Such settlements are typically most damaging when the settlements are differential in nature across the length of structures.

Some seismically-induced settlement of the proposed structures should be expected as a result of strong ground-shaking, however, due to the uniform nature of the underlying geologic materials, excessive differential settlements are not expected to occur.

Tsunamis, Seiches and Flooding

Tsunamis are large ocean waves generated by sudden water displacement caused by a submarine earthquake, landslide, or volcanic eruption. The Project Site is high enough and far enough from the ocean to preclude being prone to hazards of a tsunami.

Review of the County of Los Angeles Flood and Inundation Hazards Map, Leighton (1990), indicates the Project Site does not lie within mapped inundation boundaries due to a breached upgradient reservoir.

Landsliding

The probability of seismically-induced landslides occurring on the site is considered to be low due to the general lack of elevation difference across or adjacent to the site.

CONCLUSIONS AND RECOMMENDATIONS

Based upon the exploration, laboratory testing, and research, it is the finding of Geotechnologies, Inc. that construction of the proposed structure is considered feasible from a geotechnical engineering standpoint provided the advice and recommendations presented herein are followed and implemented during construction.

Fill materials were encountered during exploration to a depth of 3 feet below the existing site grade. It is anticipated that the existing fill will be removed during excavation of the proposed three-level subterranean garage, which is expected to extend up to an approximate depth of 54 feet below the existing site grade. The proposed structure may be supported by conventional foundations bearing in the native alluvial soils expected at the subgrade of the proposed subterranean levels.

It is anticipated that the proposed subterranean levels will extend adjacent to the property lines and existing development. Therefore the excavation for the proposed subterranean levels will require temporary shoring in order to provide a stable excavation. Shoring recommendations are provided in the "Excavations" section of this report.

The validity of the conclusions and design recommendations presented herein is dependent upon review of the geotechnical aspects of the proposed construction by this firm. The subsurface conditions described herein have been projected from excavations on the site as indicated and should in no way be construed to reflect any variations which may occur between these excavations or which may result from changes in subsurface conditions. Any changes in the design, as outlined in this report, should be reviewed by this office. The recommendations contained herein should not be considered valid until reviewed and modified or reaffirmed subsequent to such review.

2016 California Building Code Seismic Parameters

Based on information derived from the subsurface investigation, the subject site is classified as Site Class D, which corresponds to a "Stiff Soil" Profile, according to Table 20.3-1 of ASCE 7-10. This information and the site coordinates were input into the USGS U.S. Seismic Design Maps tool (Version 3.1.0) to calculate the ground motions for the site.

2016 CALIFORNIA BUILDING CODE SEISMIC PARAMETERS	
Site Class	D
Mapped Spectral Acceleration at Short Periods (S_S)	2.872g
Site Coefficient (F_a)	1.0
Maximum Considered Earthquake Spectral Response for Short Periods (S_{MS})	2.872g
Five-Percent Damped Design Spectral Response Acceleration at Short Periods (S_{DS})	1.915g
Mapped Spectral Acceleration at One-Second Period (S_1)	0.995g
Site Coefficient (F_v)	1.5
Maximum Considered Earthquake Spectral Response for One-Second Period (S_{M1})	1.492g
Five-Percent Damped Design Spectral Response Acceleration for One-Second Period (S_{D1})	0.995g

Deaggregated Seismic Source Parameters

The peak ground acceleration (PGA) and modal magnitude were obtained from the USGS Probabilistic Seismic Hazard Deaggregation program (USGS, 2008). The results are based on a 2 percent in 50 years ground motion (2,475 year return period). A shear wave velocity of 259 meters per second was utilized for Vs30. The deaggregation program indicates a PGA of 0.97g and a modal magnitude of 6.5 for the site.

EXPANSIVE SOILS

The onsite geologic materials are in the very low expansion range. The Expansion Index was found to be between 2 and 3 for bulk samples representative of the site soils. Recommended reinforcing is noted in the "Foundations" and "Slabs on Grade" sections of this report.

WATER-SOLUBLE SULFATES

The Portland cement portion of concrete is subject to attack when exposed to water-soluble sulfates. Usually the two most common sources of exposure are from soil and marine environments.

The sources of natural sulfate minerals in soils include the sulfates of calcium, magnesium, sodium, and potassium. When these minerals interact and dissolve in subsurface water, a sulfate concentration is created, which will react with exposed concrete. Over time sulfate attack will destroy improperly proportioned concrete well before the end of its intended service life.

The water-soluble sulfate content of the onsite geologic materials was tested by California Test 417. The water-soluble sulfate content was determined to be between 0.1 and 0.2 percentage by weight for the soils tested. Based on American Concrete Institute (ACI) Standard 318-08, the sulfate exposure is considered to be moderate for geologic materials with sulfate contents between 0.1 and 0.2 percent and Type II cement with a minimum strength of 4,000 psi must be utilized for concrete foundations and slabs in contact with the site soils. In addition, a water-cement ratio of 0.5 should be maintained in the poured concrete.

GRADING GUIDELINES

The following guidelines are provided for any miscellaneous compaction that may be required, such as retaining wall or trench backfill, or subgrade preparation.

Site Preparation

- A thorough search should be made for possible underground utilities and/or structures. Any existing or abandoned utilities or structures located within the footprint of the proposed grading should be removed or relocated as appropriate.

- All vegetation, existing fill, and soft or disturbed geologic materials should be removed from the areas to receive controlled fill. All existing fill materials and any disturbed geologic materials resulting from grading operations shall be completely removed and properly recompacted prior to foundation excavation.

- Any vegetation or associated root system located within the footprint of the proposed structures should be removed during grading.

- Subsequent to the indicated removals, the exposed grade shall be scarified to a depth of six inches, moistened to optimum moisture content, and recompacted in excess of the minimum required comparative density.

- The excavated areas shall be observed by the geotechnical engineer prior to placing compacted fill.

Compaction

All fill should be mechanically compacted in layers not more than 8 inches thick. The materials placed should be moisture conditions to within 3 percent of the optimum moisture content of the particular material placed. All fill shall be compacted to at least 90 percent of the maximum laboratory density for the materials used. The maximum density shall be determined by the laboratory operated by Geotechnologies, Inc. in general accordance with the most recent revision of ASTM D 1557.

Field observation and testing shall be performed by a representative of the geotechnical engineer during grading to assist the contractor in obtaining the required degree of compaction and the proper moisture content. Where compaction is less than required, additional compactive effort shall be made with adjustment of the moisture content, as necessary, until a minimum of 90 or 95 percent compaction is obtained.

Acceptable Materials

The excavated onsite materials are considered satisfactory for reuse in the controlled fills as long as any debris and/or organic matter, as well as over-sized material, is removed. Cobbles were

observed during exploration. Where cobbles are encountered in the materials to be reused as controlled fill, the size of the cobbles shall be limited to a maximum of 6 inches in dimension.

Any imported materials shall be observed and tested by the representative of the geotechnical engineer prior to use in fill areas. Imported materials should contain sufficient fines so as to be relatively impermeable and result in a stable subgrade when compacted. Any required import materials should consist of geologic materials with an expansion index of less than 40. The water-soluble sulfate content of the import materials should be less than 0.1% percentage by weight.

Imported materials should be free from chemical or organic substances which could affect the proposed development. A competent professional should be retained in order to test imported materials and address environmental issues and organic substances which might affect the proposed development.

Utility Trench Backfill

Utility trenches should be backfilled with controlled fill. The utility should be bedded with clean sands at least one foot over the crown. The remainder of the backfill may be onsite soil compacted to 90 percent of the laboratory maximum density. Utility trench backfill should be tested by representatives of this firm in general accordance with the most recent revision of ASTM D 1557.

Shrinkage

Shrinkage results when a volume of soil removed at one density is compacted to a higher density. A shrinkage factor between 5 and 15 percent should be anticipated when excavating and recompacting the existing fill and underlying native geologic materials on the site to an average comparative compaction of 92 percent.

Weather Related Grading Considerations

When rain is forecast all fill that has been spread and awaits compaction shall be properly compacted prior to stopping work for the day or prior to stopping due to inclement weather. These fills, once compacted, shall have the surface sloped to drain to an area where water can be removed.

Temporary drainage devices should be installed to collect and transfer excess water to the street in non-erosive drainage devices. Drainage should not be allowed to pond anywhere on the site, and especially not against any foundation or retaining wall. Drainage should not be allowed to flow uncontrolled over any descending slope.

Work may start again, after a period of rainfall, once the site has been reviewed by a representative of this office. Any soils saturated by the rain shall be removed and aerated so that the moisture content will fall within three percent of the optimum moisture content.

Surface materials previously compacted before the rain shall be scarified, brought to the proper moisture content and recompacted prior to placing additional fill, if considered necessary by a representative of this firm.

Geotechnical Observations and Testing During Grading

Geotechnical observations and testing during grading are considered to be a continuation of the geotechnical investigation. It is critical that the geotechnical aspects of the project be reviewed by representatives of Geotechnologies, Inc. during the construction process. Compliance with the design concepts, specifications or recommendations during construction requires review by this firm during the course of construction. Any fill which is placed should be observed, tested, and verified if used for engineered purposes. Please advise this office at least twenty-four hours prior to any required site visit.

Proper compaction is necessary to reduce settlement of overlying improvements. Some settlement of compacted fill should be anticipated. Any utilities supported therein should be designed to accept differential settlement. Differential settlement should also be considered at the points of entry to the structure.

FOUNDATION DESIGN

Conventional

The proposed structure may be supported by conventional foundations bearing in the native alluvial soils expected at the subgrade of the proposed subterranean levels. Continuous foundations may be designed for a bearing capacity of 4,000 pounds per square foot, and should be a minimum of 12 inches in width, 18 inches in depth below the lowest adjacent grade and 18 inches into the recommended native alluvial soils.

Column foundations may be designed for a bearing capacity of 5,000 pounds per square foot, and should be a minimum of 24 inches in width, 18 inches in depth below the lowest adjacent grade and 18 inches into the recommended native alluvial soils.

The bearing capacity increase for each additional foot of width is 500 pounds per square foot. The bearing capacity increase for each additional foot of depth is 1,000 pounds per square foot. The maximum recommended bearing capacity is 8,000 pounds per square foot.

The bearing capacities indicated above are for the total of dead and frequently applied live loads, and may be increased by one third for short duration loading, which includes the effects of wind or seismic forces.

Miscellaneous Foundations

Conventional foundations for structures such as privacy walls or trash enclosures which will not be rigidly connected to the proposed structure may bear in native alluvial soils, or in properly compacted fill materials. Continuous footings may be designed for a bearing capacity of 2,000 pounds per square foot, and should be a minimum of 12 inches in width, 18 inches in depth below the lowest adjacent grade and 18 inches into the recommended bearing material. No bearing capacity increases are recommended.

Since the recommended bearing capacity is a net value, the weight of concrete in the foundations may be taken as 50 pounds per cubic foot and the weight of the soil backfill may be neglected when determining the downward load on the foundations.

Foundation Reinforcement

All continuous foundations should be reinforced with a minimum of four #4 steel bars. Two should be placed near the top of the foundation, and two should be placed near the bottom.

Lateral Design

Resistance to lateral loading may be provided by friction acting at the base of foundations and by passive earth pressure. An allowable coefficient of friction of 0.5 may be used with the dead load forces.

Passive geologic pressure for the sides of foundations poured against undisturbed or recompacted soil may be computed as an equivalent fluid having a density of 300 pounds per cubic foot with a maximum earth pressure of 1,800 pounds per square foot.

The passive and friction components may be combined for lateral resistance without reduction. A one-third increase in the passive value may be used for short duration loading such as wind or seismic forces.

Foundation Settlement

Settlement of the foundation system is expected to occur on initial application of loading. The maximum settlement is expected to be 1 inch and occur below the heaviest loaded columns. Differential settlement is not expected to exceed ½-inch.

Foundation Observations

It is critical that all foundation excavations are observed by a representative of this firm to verify penetration into the recommended bearing materials. The observation should be performed prior to the placement of reinforcement. Foundations should be deepened to extend into satisfactory geologic materials, if necessary.

Foundation excavations should be cleaned of all loose soils prior to placing steel and concrete. Any required foundation backfill should be mechanically compacted, flooding is not permitted.

RETAINING WALL DESIGN

It is anticipated that the finished floor elevation of the lowest subterranean level will extend to a depth of 54 feet below the existing grade. Retaining walls may be designed as indicated below, depending on whether the walls will be restrained or cantilevered. Retaining wall foundations may be designed in accordance with the provisions of the "Foundation Design" section of this report.

Additional pressure should be added to the retaining wall design, for a surcharge condition due to vehicular traffic or adjacent structures. Based on review of the enclosed Plot Plan, it is anticipated that the proposed retaining walls will be surcharged by existing structures located to the north and east of the site. Information regarding the depth, configuration and loading of adjacent foundations will be required in order to determine the additional surcharge loading.

Vehicular traffic is expected in the vicinity of the proposed subterranean retaining walls. For traffic surcharge, the upper 10 feet of any retaining wall adjacent to streets, driveways or parking areas should be designed to resist a uniform lateral pressure of 100 pounds per square foot, acting as a result of an assumed 300 pounds per square foot traffic surcharge. If the traffic is more than 10 feet from the retaining walls, the traffic surcharge may be neglected.

Restrained Retaining Walls

Restrained subterranean retaining walls up to 35 feet in height and supporting a level back slope may be designed to resist a triangular distribution of earth pressure. It is recommended the walls be designed to resist the greater of the at-rest pressure, or the active pressure plus the seismic pressure, as discussed in the "Dynamic (Seismic) Earth Pressure" section below.

RESTRAINED BASEMENT WALLS		
	AT-REST EARTH PRESSURE	**ACTIVE EARTH PRESSURE *(To be Combined with Dynamic Seismic Earth Pressure)**
Height of Wall (Feet)	Triangular Distribution of Pressure (Pounds per Cubic Foot)	Triangular Distribution of Pressure (Pounds per Cubic Foot)*
Up to 54 feet	52	41

The lateral earth pressure recommended above for retaining walls assumes that a permanent drainage system will be installed so that external water pressure will not be developed against the walls. Also, where necessary, the retaining walls should be designed to accommodate any surcharge pressures that may be imposed by adjacent traffic and existing structures.

Dynamic (Seismic) Earth Pressure

Retaining walls exceeding 6 feet in height shall be designed to resist the additional earth pressure caused by seismic ground shaking. A triangular pressure distribution should be utilized for the additional seismic loads, with an equivalent fluid pressure of 30 pounds per cubic foot. When using the load combination equations from the building code, the seismic earth pressure should be combined with the lateral active earth pressure for analyses of restrained basement walls under seismic loading condition. The dynamic earth pressure may be omitted where the retaining wall is 6 feet in height or less.

Miscellaneous Cantilever Retaining Walls

Miscellaneous cantilever retaining walls supporting a level back slope may be designed utilizing a triangular distribution of pressure. Cantilever retaining walls may be designed for 30 pounds per cubic foot for walls retaining up to 12 feet of earth. In addition, cantilever walls greater than 6 feet in height shall be designed to resist the seismic earth pressure indicated in the previous "Dynamic (Seismic) Earth Pressure" section.

The pressure provided assumes a subdrain system will be installed behind the wall. For this equivalent fluid pressure to be valid, walls which are to be restrained at the top should be backfilled prior to the upper connection being made. Additional active pressure should be added for a surcharge condition due to sloping ground, vehicular traffic or adjacent structures.

Retaining Wall Drainage

All retaining walls shall be provided with a subdrain system in order to minimize the potential for future hydrostatic pressure buildup behind the proposed retaining walls. Subdrains may consist of four-inch diameter perforated pipes, placed with perforations facing down. The pipe shall be encased in at least one-foot of gravel around the pipe. The gravel shall be wrapped in filter fabric. The gravel may consist of three-quarter inch to one inch crushed rocks.

As an alternative to the standard perforated subdrain pipe and gravel drainage system, the use of gravel pockets and weepholes is an acceptable drainage method. Weepholes shall be a minimum of 4 inches in diameter, placed at 8 feet on center along the base of the wall. Gravel pockets shall be a minimum of 1 cubic foot in dimension, and may consist of three-quarter inch to one inch crushed rocks, wrapped in filter fabric. A collector pipe shall be installed to direct collected waters to a sump

Certain types of subdrain pipe are not acceptable to the various municipal agencies, it is recommended that prior to purchasing subdrainage pipe, the type and brand is cleared with the proper municipal agencies. Subdrainage pipes should outlet to an acceptable location.

The lateral earth pressures recommended above for retaining walls assume that a permanent drainage system will be installed so that external water pressure will not be developed against the walls. If a drainage system is not provided, the walls should be designed to resist an external hydrostatic pressure due to water in addition to the lateral earth pressure. In any event, it is recommended that retaining walls be waterproofed.

Sump Pump Design

The purpose of the recommended retaining wall backdrainage system is to relieve hydrostatic pressure. Groundwater was not encountered during exploration, conducted to a maximum height of 80 feet below the existing grade. Based on the depth of the proposed development, the only



water which could affect the proposed retaining walls would be irrigation water and precipitation. Additionally, the proposed site grading is such that all drainage is directed to the street and the structure has been designed with adequate non-erosive drainage devices.

Based on these considerations the retaining wall backdrainage system is not expected to experience an appreciable flow of water, and in particular, no groundwater will affect it. However, for the purposes of design, a flow of 5 gallons per minute may be assumed.

Waterproofing

Moisture effecting retaining walls is one of the most common post construction complaints. Poorly applied or omitted waterproofing can lead to efflorescence or standing water inside the building. Efflorescence is a process in which a powdery substance is produced on the surface of the concrete by the evaporation of water. The white powder usually consists of soluble salts such as gypsum, calcite, or common salt. Efflorescence is common to retaining walls and does not affect their strength or integrity.

It is recommended that retaining walls be waterproofed. Waterproofing design and inspection of its installation is not the responsibility of the geotechnical engineer. A qualified waterproofing consultant should be retained in order to recommend a product or method which would provide protection to below grade walls.

Retaining Wall Backfill

Any required backfill should be mechanically compacted in layers not more than 8 inches thick, to at least 90 percent relative compaction, obtainable by the most recent revision of ASTM D 1557 method of compaction. Flooding should not be permitted. Compaction within 5 feet, measured horizontally, behind a retaining structure should be achieved by use of light weight, hand operated compaction equipment.

Proper compaction of the backfill will be necessary to reduce settlement of overlying walks and paving. Some settlement of required backfill should be anticipated, and any utilities supported therein should be designed to accept differential settlement.

TEMPORARY EXCAVATIONS

Excavations up to a depth of 58 feet may be required for construction of the proposed subterranean levels and foundation elements. The excavations are expected to expose fill and dense native soils, which are suitable for vertical excavations up to 5 feet where not surcharged by adjacent traffic or structures. Vertical excavations exceeding 5 feet, or excavations which will be surcharged by adjacent traffic or structures should be shored.

Where sufficient space is available, temporary unsurcharged embankments could be cut at a uniform 1:1 slope gradient to a maximum depth of 20 feet, at a uniform 1½:1 (H:V) slope gradient to a maximum depth of 40 feet, and at a uniform 2:1 (H:V) slope gradient to a maximum depth of 58 feet. A uniform sloped excavation is sloped from bottom to top and does not have a vertical component.

Where sloped embankments are utilized, the tops of the slopes should be barricaded to prevent vehicles and storage loads near the top of slope within a horizontal distance equal to the depth of the excavation. If the temporary construction embankments are to be maintained during the rainy season, berms are strongly recommended along the tops of the slopes to prevent runoff water from entering the excavation and eroding the slope faces. Water should not be allowed to pond on top of the excavation nor to flow towards it.

Excavation Observations

It is critical that the soils exposed in the cut slopes are observed by a representative of Geotechnologies, Inc. during excavation so that modifications of the slopes can be made if

variations in the geologic material conditions occur. Many building officials require that temporary excavations should be made during the continuous observations of the geotechnical engineer. All excavations should be stabilized within 30 days of initial excavation.

SHORING DESIGN

The following information on the design and installation of the shoring is as complete as possible at this time. It is suggested that Geotechnologies, Inc. review the final shoring plans and specifications prior to bidding or negotiating with a shoring contractor.

One method of shoring would consist of steel soldier piles, placed in drilled holes and backfilled with concrete. The soldier piles may be designed as cantilevers or laterally braced utilizing drilled tied-back anchors or raker braces.

The purpose of the proposed shoring system is to provide a temporary stable excavation, which will allow for the construction of permanent underground retaining walls. The temporary shoring walls will be built adjacent to two historic structures, Green Hotel Apartments to the north and Castle Green Apartments to the east. Based on review of the enclosed Plot Plan, it is anticipated that portions of the Green Hotel Apartments structure may be located within the influence area of the proposed subterranean excavation. The edge of the proposed subterranean excavation is expected to be located more than 80 feet away from the Castle Green Apartments, therefore the excavation is not expected to impact this structure.

The shoring system shall be designed by a qualified shoring engineer, using the geotechnical recommendations presented herein. The shoring system shall be design to accommodate the surcharge loads anticipated from the adjacent Green Hotel Apartments. In addition, a proper vertical distance shall be maintained between the proposed tiebacks and the bottom of this adjacent structure, so the installation of these tiebacks does not introduce additional stress, or pressure, on the existing structure.

Once the shoring system has been designed by a qualified shoring engineer, the geotechnical engineer of record shall review the plans to ensure that they are in conformance with the recommendations provided in the geotechnical engineering investigation. Furthermore, shoring installation must be performed during continuous inspections provided by a field technician representing the geotechnical engineer of record. This measure is intended to ensure that the recommendations provided in the geotechnical engineering investigation and shoring plans are implemented. Additionally, the inspector would notify the geotechnical engineer of record of any condition that is not consistent with the geotechnical investigation.

If the recommendations provided herein are implemented, it is the opinion of this firm that excavation of the proposed subterranean garage should not affect the existing Green Hotel Apartments structure.

Soldier Piles

Drilled cast-in-place soldier piles should be placed no closer than 2 diameters on center. The minimum diameter of the piles is 18 inches. Structural concrete should be used for the soldier piles below the excavation; lean-mix concrete may be employed above that level. As an alternative, lean-mix concrete may be used throughout the pile where the reinforcing consists of a wideflange section. The slurry must be of sufficient strength to impart the lateral bearing pressure developed by the wideflange section to the geologic materials. For design purposes, an allowable passive value for the geologic materials below the bottom plane of excavation may be assumed to be 500 pounds per square foot per foot, up to a maximum of 3,000 pounds per square foot. To develop the full lateral value, provisions should be implemented to assure firm contact between the soldier piles and the undisturbed geologic materials.

The frictional resistance between the soldier piles and retained geologic material may be used to resist the vertical component of the anchor load. The coefficient of friction may be taken as 0.5 based on uniform contact between the steel beam and lean-mix concrete and retained earth. The

portion of soldier piles below the plane of excavation may also be employed to resist the downward loads. The downward capacity may be determined using a frictional resistance of 500 pounds per square foot. The minimum depth of embedment for shoring piles is 5 feet below the bottom of the footing excavation or 7 feet below the bottom of excavated plane whichever is deeper.

Caving should be expected to occur during drilling in the native granular soils underlaying the site. Where caving occurs, it will be necessary to utilize casing or polymer drilling fluid to maintain open pile shafts. If casing is used, extreme care should be employed so that the pile is not pulled apart as the casing is withdrawn. At no time should the distance between the surface of the concrete and the bottom of the casing be less than 5 feet. Large sized materials should also be anticipated during drilling (i.e. gravel, rocks and cobbles).

Lagging

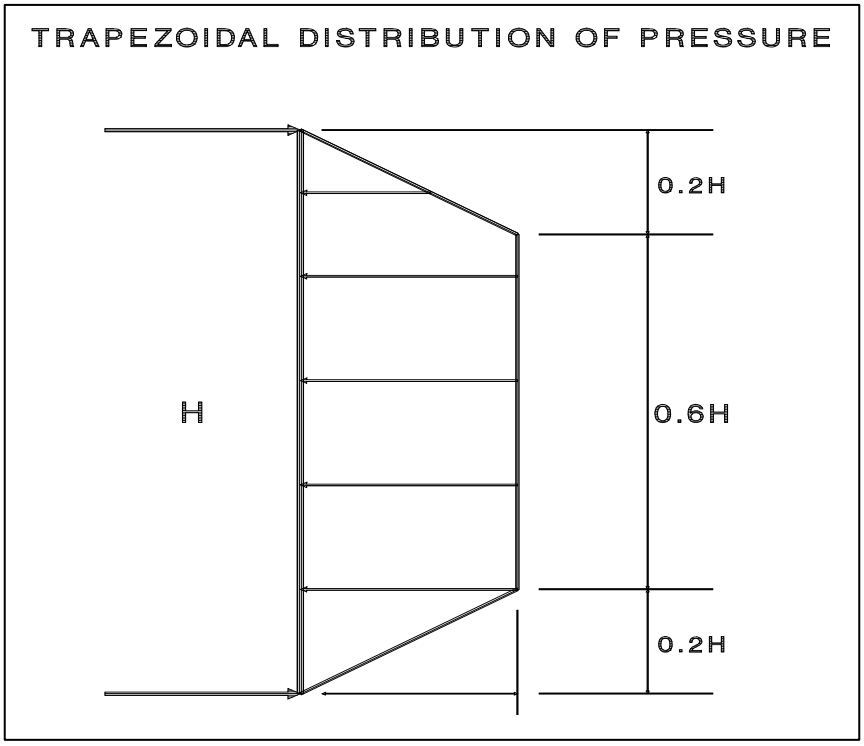
Soldier piles and anchors should be designed for the full anticipated pressures. Due to arching in the geologic materials, the pressure on the lagging will be less. It is recommended that the lagging should be designed for the full design pressure but is limited to a maximum of 400 pounds per square foot. It is recommended that a representative of this firm observe the installation of lagging to insure uniform support of the excavated embankment.

Lateral Pressures

Cantilevered shoring supporting a level backslope may be designed utilizing a triangular distribution of pressure as indicated in the following table:

HEIGHT OF SHORING "H" (feet)	EQUIVALENT FLUID PRESSURE (pounds per cubic foot)
Up to 20	28

A trapezoidal distribution of lateral earth pressure would be appropriate where shoring is to be restrained at the top by bracing or tie backs, with the trapezoidal distribution as shown in the diagram below.



Restrained shoring supporting a level backslope may be designed utilizing a trapezoidal distribution of pressure as indicated in the following table:

HEIGHT OF SHORING "H" (feet)	**DESIGN SHORING FOR (Where H is the height of the wall)**
Up to 20	18H
20 to 25	20H
25 to 40	22H
40 to 58	25H

Where a combination of sloped embankment and shoring is utilized, the pressure will be greater and must be determined for each combination. Additional active pressure should be applied where the shoring will be surcharged by adjacent traffic or structures.

Tied-Back Anchors

Tied-back anchors may be used to resist lateral loads. Friction anchors are recommended. For design purposes, it may be assumed that the active wedge adjacent to the shoring is defined by a plane drawn 35 degrees with the vertical through the bottom plane of the excavation. Friction anchors should extend a minimum of 20 feet beyond the potentially active wedge. Anchors should be placed at least 6 feet on center to be considered isolated.

Drilled friction anchors may be designed for a skin friction of 500 pounds per square foot. Only the frictional resistance developed beyond the active wedge would be effective in resisting lateral loads. Where belled anchors are utilized, the capacity of belled anchors may be designed by applying the skin friction over the surface area of the bonded anchor shaft. The diameter of the bell may be utilized as the diameter of the bonded anchor shaft when determining the surface area. This implies that in order for the belled anchor to fail, the entire parallel soil column must also fail.

Depending on the techniques utilized, and the experience of the contractor performing the installation, it is anticipated that a skin friction of 2,000 pounds per square foot could be utilized for post-grouted anchors. Only the frictional resistance developed beyond the active wedge would be effective in resisting lateral loads.

Anchor Installation

Tied-back anchors may be installed between 20 and 45 degrees below the horizontal. Caving of the anchor shafts should be anticipated and the following provisions should be implemented in

order to minimize such caving. The anchor shafts should be filled with concrete by pumping from the tip out, and the concrete should extend from the tip of the anchor to the active wedge. In order to minimize the chances of caving, it is recommended that the portion of the anchor shaft within the active wedge be backfilled with sand before testing the anchor. This portion of the shaft should be filled tightly and flush with the face of the excavation. The sand backfill should be placed by pumping; the sand may contain a small amount of cement to facilitate pumping.

Tieback Anchor Testing

At least 10 percent of the anchors should be selected for "Quick", 200 percent tests. It is recommended that at least three of these anchors be selected for 24-hour, 200 percent tests. It is recommended that the 24-hour tests be performed prior to installation of additional tiebacks. The purpose of the 200 percent tests is to verify the friction value assumed in design. The anchors should be tested to develop twice the assumed friction value. Where satisfactory tests are not achieved on these initial anchors, the anchor diameter and/or length should be increased until satisfactory test results are obtained.

The total deflection during the 24-hour 200 percent test should not exceed 12 inches. During the 24-hour tests, the anchor deflection should not exceed 0.75 inches measured after the 200 percent test load is applied.

For the "quick" 200 percent tests, the 200 percent test load should be maintained for 30 minutes. The total deflection of the anchor during the 200 percent quick tests should not exceed 12 inches; the deflection after the 200 percent load has been applied should not exceed 0.25 inch during the 30-minute period.

All of the remaining anchors should be tested to at least 150 percent of design load. The total deflection during the 150 percent test should not exceed 12 inches. The rate of creep under the 150 percent test load should not exceed 0.1 inch over a 15 minute period in order for the anchor to be approved for the design loading.

After a satisfactory test, each anchor should be locked-off at the design load. This should be verified by rechecking the load in the anchor. The load should be within 10 percent of the design load. Where satisfactory tests are not attained, the anchor diameter and/or length should be increased or additional anchors installed until satisfactory test results are obtained. Where post-grouted anchors are utilized, additional post-grouting may be required. The installation and testing of the anchors should be observed by a representative of the soils engineer.

Internal Bracing

Rakers may be utilized to brace the soldier piles in lieu of tieback anchors. The raker bracing could be supported laterally by temporary concrete footings (deadmen) or by the permanent interior footings. An allowable bearing pressure of 5,000 pounds per square foot may be used for the design a raker foundations. This bearing pressure is based on a raker foundation a minimum of 24 inches in width and length as well as 18 inches in depth into native alluvial soils. The base of the raker foundations should be horizontal. Care should be employed in the positioning of raker foundations so that they do not interfere with the foundations for the proposed structure.

Deflection

It is difficult to accurately predict the amount of deflection of a shored embankment. It should be realized that some deflection will occur. It is recommended that shoring deflection be limited to ½ inch at the top of the shored embankment where a structure is within a 1:1 plane projected up from the base of the excavation. A maximum deflection of 1-inch has been allowed, provided

there are no structures within a 1:1 plane drawn upward from the base of the excavation. If greater deflection occurs during construction, additional bracing may be necessary to minimize settlement of adjacent buildings and utilities in adjacent street and alleys. If desired to reduce the deflection, a greater active pressure could be used in the shoring design.

Monitoring

Because of the depth of the excavation, some means of monitoring the performance of the shoring system is suggested. The monitoring should consist of periodic surveying of the lateral and vertical locations of the tops of all soldier piles and the lateral movement along the entire lengths of selected soldier piles. Also, some means of periodically checking the load on selected anchors will be necessary, where applicable.

Some movement of the shored embankments should be anticipated as a result of the relatively deep excavation. It is recommended that video and photographs of the existing buildings on the adjacent properties be made during construction to record any movements for use in the event of a dispute.

Shoring Observations

It is critical that the installation of shoring is observed by a representative of Geotechnologies, Inc. Many building officials require that shoring installation should be performed during continuous observation of a representative of the geotechnical engineer. The observations insure that the recommendations of the geotechnical report are implemented and so that modifications of the recommendations can be made if variations in the geologic material or groundwater conditions warrant. The observations will allow for a report to be prepared on the installation of shoring for the use of the local building official, where necessary.

SLABS ON GRADE

Concrete Slabs-on Grade

Concrete floor slabs should be a minimum of 5 inches in thickness. Slabs-on-grade should be cast over undisturbed native alluvial soils or properly controlled fill materials. Any geologic materials loosened or over-excavated should be wasted from the site or properly compacted to 90 percent of the maximum dry density.

Outdoor concrete flatwork should be a minimum of 4 inches in thickness. Outdoor concrete flatwork should be cast over undisturbed native alluvial soils or properly controlled fill materials. Any geologic materials loosened or over-excavated should be wasted from the site or properly compacted to 90 percent of the maximum dry density.

Design of Slabs That Receive Moisture-Sensitive Floor Coverings

Geotechnologies, Inc. does not practice in the field of moisture vapor transmission evaluation and mitigation. Therefore it is recommended that a qualified consultant be engaged to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction. The qualified consultant should provide recommendations for mitigation of potential adverse impacts of moisture vapor transmission on various components of the structure.

Where dampness would be objectionable, it is recommended that the floor slabs should be waterproofed. A qualified waterproofing consultant should be retained in order to recommend a product or method which would provide protection for concrete slabs-on-grade.

All concrete slabs-on-grade should be supported on vapor retarder. The design of the slab and the installation of the vapor retarder should comply with the most recent revisions of ASTM E 1643 and ASTM E 1745. The vapor retarder should comply with ASTM E 1745 Class A requirements.

Where a vapor retarder is used, a low-slump concrete should be used to minimize possible curling of the slabs. The barrier can be covered with a layer of trimmable, compactible, granular fill, where it is thought to be beneficial. If this granular fill layer is installed, it should be a minimum of two inches in thickness. See ACI 302.2R-32, Chapter 7 for information on the placement of vapor retarders and the use of a fill layer.

Concrete Crack Control

The recommendations presented in this report are intended to reduce the potential for cracking of concrete slabs-on-grade due to settlement. However even where these recommendations have been implemented, foundations, stucco walls and concrete slabs-on-grade may display some cracking due to minor soil movement and/or concrete shrinkage. The occurrence of concrete cracking may be reduced and/or controlled by limiting the slump of the concrete used, proper concrete placement and curing, and by placement of crack control joints at reasonable intervals, in particular, where re-entrant slab corners occur.

For standard control of concrete cracking, a maximum crack control joint spacing of 15 feet should not be exceeded. Lesser spacings would provide greater crack control. Joints at curves and angle points are recommended. The crack control joints should be installed as soon as practical following concrete placement. Crack control joints should extend a minimum depth of one-fourth the slab thickness. Construction joints should be designed by a structural engineer.

Complete removal of the existing fill soils beneath outdoor flatwork such as walkways or patio areas, is not required, however, due to the rigid nature of concrete, some cracking, a shorter design life and increased maintenance costs should be anticipated. In order to provide uniform support beneath the flatwork it is recommended that a minimum of 12 inches of the exposed subgrade beneath the flatwork be scarified and recompacted to 90 percent relative compaction.

Slab Reinforcing

Concrete slabs-on-grade should be reinforced with a minimum of #3 steel bars on 18-inch centers each way. Outdoor flatwork should be reinforced with a minimum of #3 steel bars on 24-inch centers each way.

PAVEMENTS

Prior to placing paving, the existing grade should be scarified to a depth of 12 inches, moistened as required to obtain optimum moisture content, and recompacted to 90 percent of the maximum density as determined by the most recent revision of ASTM D 1557. The client should be aware that removal of all existing fill in the area of new paving is not required, however, pavement constructed in this manner will most likely have a shorter design life and increased maintenance costs. The following pavement sections are recommended:

Service	Asphalt Pavement Thickness Inches	Base Course Inches
Passenger Car Traffic	3	4
Medium Truck Traffic	4	6
Heavy Trucks	5	8

Concrete paving may also be utilized for the project. For concrete paving, the following sections are recommended:

Service	Concrete Pavement Thickness Inches	Base Course Inches
Passenger Car and Medium Truck Traffic	6	4
Heavy Trucks	7	4

Aggregate base should be compacted to a minimum of 95 percent of the most recent revision of ASTM D 1557 laboratory maximum dry density. Base materials should conform to Sections 200-2.2 or 200-2.4 of the "Standard Specifications for Public Works Construction", (Green Book), latest edition.

For standard crack control maximum expansion joint spacing of 15 feet should not be exceeded. Lesser spacings would provide greater crack control. Joints at curves and angle points are recommended. The crack control joints should be installed as soon as practical following concrete placement. Crack control joints should extend a minimum depth of one-fourth the slab thickness. Construction joints should be designed by a structural engineer. Concrete paving should be reinforced with a minimum of #3 steel bars on 24-inch centers each way.

The performance of pavement is highly dependent upon providing positive surface drainage away from the edges. Ponding of water on or adjacent to pavement can result in saturation of the subgrade materials and subsequent pavement distress. If planter islands are planned, the perimeter curb should extend a minimum of 12 inches below the bottom of the aggregate base.

SITE DRAINAGE

Proper surface drainage is critical to the future performance of the project. Saturation of a soil can cause it to lose internal shear strength and increase its compressibility, resulting in a change in the designed engineering properties. Proper site drainage should be maintained at all times.

All site drainage, with the exception of any required to disposed of onsite by stormwater regulations, should be collected and transferred to the street in non-erosive drainage devices. The proposed structure should be provided with roof drainage. Discharge from downspouts, roof drains and scuppers should not be permitted on unprotected soils within five feet of the building perimeter. Drainage should not be allowed to pond anywhere on the site, and especially not against any foundation or retaining wall. Drainage should not be allowed to flow uncontrolled

over any descending slope. Planters which are located within a distance equal to the depth of a retaining wall should be sealed to prevent moisture adversely affecting the wall. Planters which are located within five feet of a foundation should be sealed to prevent moisture affecting the earth materials supporting the foundation.

STORMWATER DISPOSAL

Introduction

Recently regulatory agencies have been requiring the disposal of a certain amount of stormwater generated on a site by infiltration into the site soils. Increasing the moisture content of a soil can cause it to lose internal shear strength and increase its compressibility, resulting in a change in the designed engineering properties. This means that any overlying structure, including buildings, pavements and concrete flatwork, could sustain damage due to saturation of the subgrade soils. Structures serviced by subterranean levels could be adversely impacted by stormwater disposal by increasing the design fluid pressures on retaining walls and causing leaks in the walls. Proper site drainage is critical to the performance of any structure in the built environment.

The Proposed System

Due to the preliminary stage of the project, the type and location of any potential stormwater disposal system has not been specifically addressed for the proposed development. It is however anticipated that the infiltration system may consist of a drywell system. This firm recommends that the infiltration system is installed outside the proposed structure.

The final location and design of the proposed infiltration system shall be reviewed and approved by this office prior to construction to evaluate whether the intent of the recommendations provided by this firm are satisfied.

Percolation Testing

Percolation testing was conducted in Boring B1, following the procedure for boring percolation test provided in the Guidelines for Design, Investigation and Reporting Low Impact Development Stormwater Infiltration (GS200.2), dated June 30, 2017, presented in the Administrative Manual for the County of Los Angeles, Department of Public Works, Geotechnical and Material Engineering Division.

Borings B1 was drilled to a depth of 80 feet. At the completion of drilling, a 2-inch diameter casing was placed within the center of the borehole for the purpose of conducting percolation testing. The casing consisted of a slotted PVC pipe within the lower 30 feet of the borehole, and solid PVC pipe to the top of the borehole. A sand pack consisting of #3 Monterey Sand was poured into the annular space around the slotted portion of the casing. A 1-foot thick, hydrated bentonite seal was placed over the sand and drill cuttings were placed to the ground surface.

Prior to testing, the borehole was filled with water for the purpose of pre-soaking for 4 hours. After presoaking, the borehole was refilled with water, and the rate of drop in the water level was measured. The percolation test readings were recorded a minimum of 8 times or until a stabilized rate of drop was obtained, whichever occurred first.

The table below summarizes the results of the infiltration rate derived from the testing. This rate includes correction factors (RF_t, RF_v, and RF_s), as required by the County of Los Angeles procedure. Field readings and calculations for the percolation testing are included in the Appendix.

Boring No.	Depth of Boring Below Existing Ground Surface (ft.)	Percolation Testing Conducted Between Depths (ft.)	Infiltration Rate (in./hr.)
B1	80	50 to 80	3.12

At the completion of the percolation testing, the PVC casing was removed from the percolation testing well, and the resulting hole was backfilled with on-site soils to the ground surface. An asphalt patch was placed.

Stormwater Disposal Recommendations

Based on the results of the exploration, testing and research, it is the finding of this firm that the use of a drywell system for the purpose of stormwater infiltration disposal is feasible from a geotechnical standpoint. The drywell system is not expected to impact the neighboring or proposed developments, provided the advice and recommendations presented herein are implemented during design and construction.

The native site soils encountered during the geotechnical explorations conducted by this firm consist of granular sandy soils suitable for stormwater infiltration. The previous section of this report presents the anticipated infiltration rates of selected soil layers. These infiltration rates may be utilized by the civil engineer for the design of a stormwater infiltration system suitable for the project.

The potential drywell system shall be installed in the exterior of the proposed structure. It is recommended that the edge of any drywell is installed at least 30 feet away from the proposed structure, and at least 20 feet away from the existing historical structures. Stormwater infiltration should only occur in the native alluvial soils located at, or deeper, than 40 feet below the existing grade.

It is anticipated that a settling chamber will be installed in the upper 40 feet of the drywell. The seams and bottom of the settling chamber should be adequately sealed to prevent infiltration within 40 feet from the existing grade. Depending on its final location, the settling chamber of the drywell may be surcharged by adjacent foundations, in which case the chamber should be designed to withstand this additional surcharge load. The final location of the proposed drywell shall be reviewed and approved by this office prior to construction.

Stormwater infiltration must be conducted a minimum of 10 feet above the groundwater level. At the site, the historically highest groundwater level is in the order of 85 feet below grade. Therefore, it is recommended that the bottom of the drywells does not extend deeper than 75 feet below the existing grade.

Drilling for the proposed drywells will most likely encounter large sized materials (i.e. cobbles and boulders). Due to the granular nature of the site soils, caving may occur in the drilled shafts. The use of casing to maintain open shafts for installation of the drywells should be anticipated.

It is recommended that the design team, including the structural engineer, waterproofing consultant, plumbing engineer, environmental engineer and landscape architect be consulted in regards to the design and construction of filtration systems. The design and construction of stormwater infiltration systems is not the responsibility of the geotechnical engineer. However, based on the experience of this firm, it is recommended that several aspects of the use of such facilities should be considered by the design and construction team:

- All infiltration devices should be provided with overflow protection. Once the device is full of water, additional water flowing to the device should be diverted to another acceptable disposal area, or disposed offsite in an acceptable manner.

- All connections associated with stormwater infiltration systems should be sealed and water-tight. Water leaking into the subgrade soils can lead to loss of strength, piping, erosion, settlement and/or expansion of the effected earth materials.

- Excavations proposed for the installation of stormwater systems should comply with the "Temporary Excavations" sections of this geotechnical engineering investigation, as well as CalOSHA Regulations where applicable.

DESIGN REVIEW

Engineering of the proposed project should not begin until approval of the geotechnical report by the Building Official is obtained in writing. Significant changes in the geotechnical recommendations may result during the building department review process.

It is recommended that the geotechnical aspects of the project be reviewed by this firm during the design process. This review provides assistance to the design team by providing specific recommendations for particular cases, as well as review of the proposed construction to evaluate whether the intent of the recommendations presented herein are satisfied.

CONSTRUCTION MONITORING

Geotechnical observations and testing during construction are considered to be a continuation of the geotechnical investigation. It is critical that this firm review the geotechnical aspects of the project during the construction process. Compliance with the design concepts, specifications or recommendations during construction requires review by this firm during the course of construction. All foundations should be observed by a representative of this firm prior to placing concrete or steel. Any fill which is placed should be observed, tested, and verified if used for engineered purposes. Please advise Geotechnologies, Inc. at least twenty-four hours prior to any required site visit.

If conditions encountered during construction appear to differ from those disclosed herein, notify Geotechnologies, Inc. immediately so the need for modifications may be considered in a timely manner.

It is the responsibility of the contractor to ensure that all excavations and trenches are properly sloped or shored. All temporary excavations should be cut and maintained in accordance with applicable OSHA rules and regulations.

EXCAVATION CHARACTERISTICS

The exploration performed for this investigation is limited to the geotechnical excavations described. Direct exploration of the entire site would not be economically feasible. The owner, design team and contractor must understand that differing excavation and drilling conditions may be encountered based on boulders, gravel, oversize materials, groundwater and many other



conditions. Fill materials, especially when they were placed without benefit of modern grading codes, regularly contain materials which could impede efficient grading and drilling. Southern California sedimentary bedrock is known to contain variable layers which reflect differences in depositional environment. Such layers may include abundant gravel, cobbles and boulders. Similarly bedrock can contain concretions. Concretions are typically lenticular and follow the bedding. They are formed by mineral deposits. Concretions can be very hard. Excavation and drilling in these areas may require full size equipment and coring capability. The contractor should be familiar with the site and the geologic materials in the vicinity.

CLOSURE AND LIMITATIONS

The purpose of this report is to aid in the design and completion of the described project. Implementation of the advice presented in this report is intended to reduce certain risks associated with construction projects. The professional opinions and geotechnical advice contained in this report are sought because of special skill in engineering and geology and were prepared in accordance with generally accepted geotechnical engineering practice. Geotechnologies, Inc. has a duty to exercise the ordinary skill and competence of members of the engineering profession. Those who hire Geotechnologies, Inc. are not justified in expecting infallibility, but can expect reasonable professional care and competence.

The recommendations of this report pertain only to the site investigated and are based upon the assumption that the geologic conditions do not deviate from those disclosed in the investigation. If any variations are encountered during construction, or if the proposed construction will differ from that anticipated herein, Geotechnologies, Inc. should be notified so that supplemental recommendations can be prepared.

This report is issued with the understanding that it is the responsibility of the owner, or the owner's representatives, to ensure that the information and recommendations contained herein are brought to the attention of the project architect and engineer and are incorporated into the

plans. The owner is also responsible to see that the contractor and subcontractors carry out the geotechnical recommendations during construction.

The findings of this report are valid as of the date of this report. However, changes in the conditions of a property can occur with the passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside control of this firm. Therefore, this report is subject to review and should not be relied upon after a period of three years.

Geotechnical observations and testing during construction is considered to be a continuation of the geotechnical investigation. It is, therefore, most prudent to employ the consultant performing the initial investigative work to provide observation and testing services during construction. This practice enables the project to flow smoothly from the planning stages through to completion.

Should another geotechnical firm be selected to provide the testing and observation services during construction, that firm should prepare a letter indicating their assumption of the responsibilities of geotechnical engineer of record. A copy of the letter should be provided to the regulatory agency for review. The letter should acknowledge the concurrence of the new geotechnical engineer with the recommendations presented in this report.

EXCLUSIONS

Geotechnologies, Inc. does not practice in the fields of methane gas, radon gas, environmental engineering, waterproofing, dewatering organic substances or the presence of corrosive soils or wetlands which could affect the proposed development including mold and toxic mold. Nothing in this report is intended to address these issues and/or their potential effect on the proposed

development. A competent professional consultant should be retained in order to address environmental issues, waterproofing, organic substances and wetlands which might affect the proposed development.

GEOTECHNICAL TESTING

Classification and Sampling

The soil is continuously logged by a representative of this firm and classified by visual examination in accordance with the Unified Soil Classification system. The field classification is verified in the laboratory, also in accordance with the Unified Soil Classification System. Laboratory classification may include visual examination, Atterberg Limit Tests and grain size distribution. The final classification is shown on the excavation logs.

Samples of the geologic materials encountered in the exploratory excavations were collected and transported to the laboratory. Undisturbed samples of soil are obtained at frequent intervals. Unless noted on the excavation logs as an SPT sample, samples acquired while utilizing a hollow-stem auger drill rig are obtained by driving a thin-walled, California Modified Sampler with successive 30-inch drops of a 140-pound hammer. The soil is retained in brass rings of 2.50 inches outside diameter and 1.00 inch in height. The central portion of the samples are stored in close fitting, waterproof containers for transportation to the laboratory. Samples noted on the excavation logs as SPT samples are obtained in general accordance with the most recent revision of ASTM D 1586. Samples are retained for 30 days after the date of the geotechnical report.

Moisture and Density Relationships

The field moisture content and dry unit weight are determined for each of the undisturbed soil samples, and the moisture content is determined for SPT samples in general accordance with the most recent revision of ASTM D 4959 or ASTM D 4643. This information is useful in

providing a gross picture of the soil consistency between exploration locations and any local variations. The dry unit weight is determined in pounds per cubic foot and shown on the "Excavation Logs", A-Plates. The field moisture content is determined as a percentage of the dry unit weight.

Direct Shear Testing

Shear tests are performed in general accordance with the most recent revision of ASTM D 3080 with a strain controlled, direct shear machine manufactured by Soil Test, Inc. or a Direct Shear Apparatus manufactured by GeoMatic, Inc. The rate of deformation is approximately 0.025 inches per minute. Each sample is sheared under varying confining pressures in order to determine the Mohr-Coulomb shear strength parameters of the cohesion intercept and the angle of internal friction. Samples are generally tested in an artificially saturated condition. Depending upon the sample location and future site conditions, samples may be tested at field moisture content. The results are plotted on the "Shear Test Diagram," B-Plates.

The most recent revision of ASTM 3080 limits the particle size to 10 percent of the diameter of the direct shear test specimen. The sheared sample is inspected by the laboratory technician running the test. The inspection is performed by splitting the sample along the sheared plane and observing the soils exposed on both sides. Where oversize particles are observed in the shear plane, the results are discarded and the test run again with a fresh sample.

Consolidation Testing

Settlement predictions of the soil's behavior under load are made on the basis of the consolidation tests in general accordance with the most recent revision of ASTM D 2435. The consolidation apparatus is designed to receive a single one-inch high ring. Loads are applied in several increments in a geometric progression, and the resulting deformations are recorded at selected time intervals. Porous stones are placed in contact with the top and bottom of each

specimen to permit addition and release of pore fluid. Samples are generally tested at increased moisture content to determine the effects of water on the bearing soil. The normal pressure at which the water is added is noted on the drawing. Results are plotted on the "Consolidation Test," C-Plates.

Expansion Index Testing

The expansion tests performed on the remolded samples are in accordance with the Expansion Index testing procedures, as described in the most recent revision of ASTM D 4829. The soil sample is compacted into a metal ring at a saturation degree of 50 percent. The ring sample is then placed in a consolidometer, under a vertical confining pressure of 1 lbf/square inch and inundated with distilled water. The deformation of the specimen is recorded for a period of 24 hour or until the rate of deformation becomes less than 0.0002 inches/hour, whichever occurs first. The expansion index, EI, is determined by dividing the difference between final and initial height of the ring sample by the initial height, and multiplied by 1,000. Results are presented in Plate D of this report.

Laboratory Compaction Characteristics

The maximum dry unit weight and optimum moisture content of a soil are determined in general accordance with the most recent revision of ASTM D 1557. A soil at a selected moisture content is placed in five layers into a mold of given dimensions, with each layer compacted by 25 blows of a 10 pound hammer dropped from a distance of 18 inches subjecting the soil to a total compactive effort of about 56,000 pounds per cubic foot. The resulting dry unit weight is determined. The procedure is repeated for a sufficient number of moisture contents to establish a relationship between the dry unit weight and the water content of the soil. The data when plotted represent a curvilinear relationship known as the compaction curve. The values of optimum moisture content and modified maximum dry unit weight are determined from the compaction curve. Results are presented in Plate D of this report.

REFERENCES

Applied Technology Council (1978), Tentative Provisions for Development of Seismic Regulations for Buildings: ATC Publication ATC 3-06, NBS Special Publication 510, NSF Publication 78-8.

Boore, D.M., Joyner, W.B., and Fumal, T.E. (1993), Estimation of Response Spectra and Peak Accelerations from Western North American Earthquakes: An interim Report, U.S. Geological Survey Open-File Report 93-509, 15 pp.

California Division of Mines and Geology, 1998, Seismic Hazard Evaluation Report for the Pasadena 7.5-Minute Quadrangle, Los Angeles County, California, Seismic Hazard Zone Report 030.

California Division of Mines and Geology, 1999, Seismic Hazard Zone Map, map scale 1:24,000.

California Geological Survey, 2008, Guidelines for Evaluation and Mitigation of Seismic Hazards in California, Special Publication 117A.

Dibblee, T.W. Jr. 1989, Geologic Map of the Pasadena Quadrangle, DMG Map #DF-23, map scale 1: 24,000.

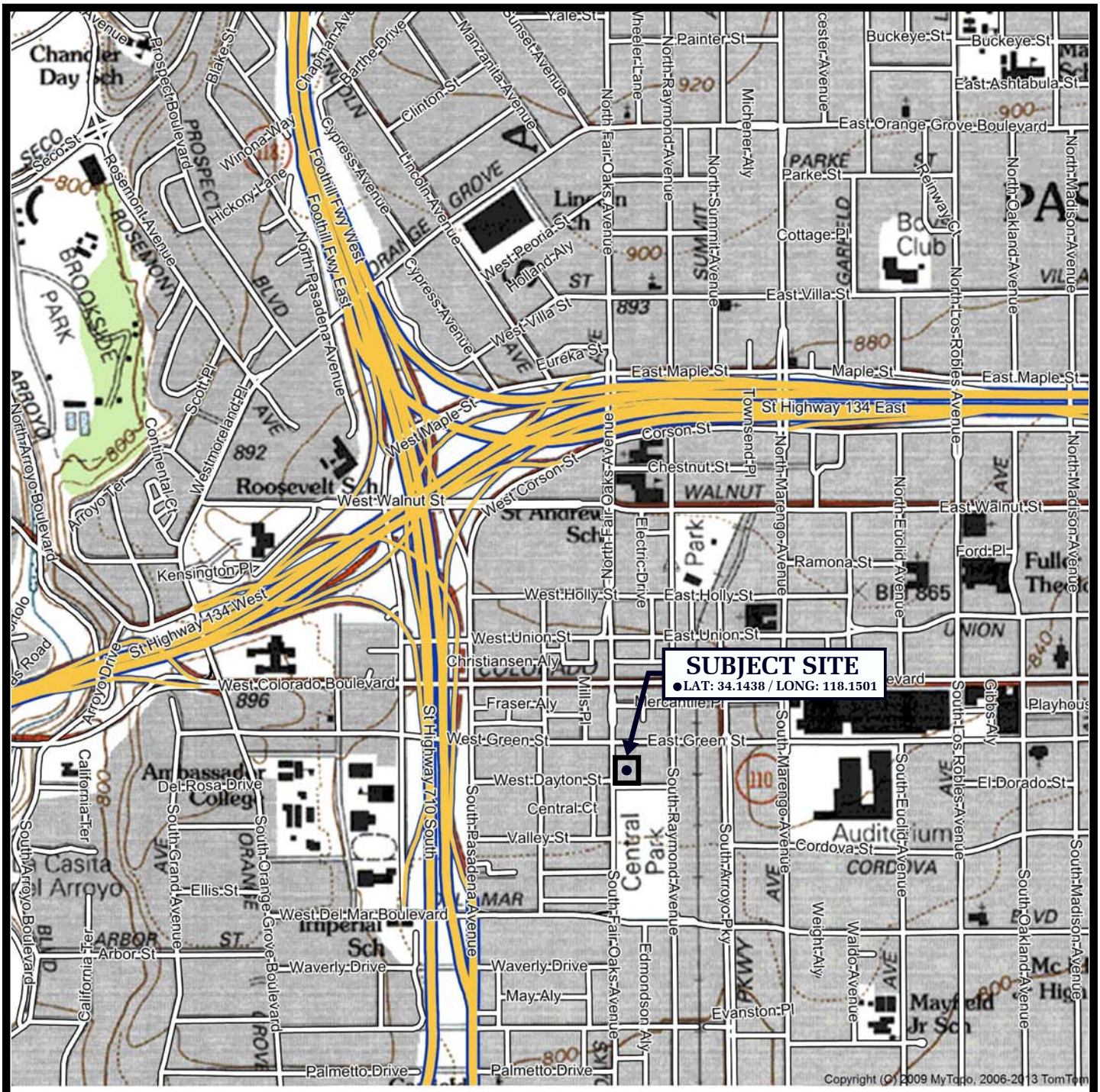
Gregory Geotechnical Software, 2001, GSTABL with STEDwin Slope Stability Analysis System, version 2.0.

Hart, E.W. and Bryant, W.A., 1999 (updated 2005), Fault Rupture Zones in California, Division of Mines and Geology, Special Publication 42, 25pp.

Leighton and Associates, Inc. (1990), Technical Appendix to the Safety Element of the Los Angeles County General Plan: Hazard Reduction in Los Angeles County.

United States Geological Survey, 2008, U.S.G.S. Interactive Deaggregation Program. http://eqint.cr.usgs.gov/deaggint/2008/index.php.

United States Geological Survey, 2013, U.S.G.S. U.S. Seismic Design Maps tool (Version 3.1.0). http://geohazards.usgs.gov/designmaps/us/application.php.



SCALE 1:12000

0.0 0.1 0.2 0.3 0.4 0.5 0.6
MILES

0 1000 2000 3000
FEET

N

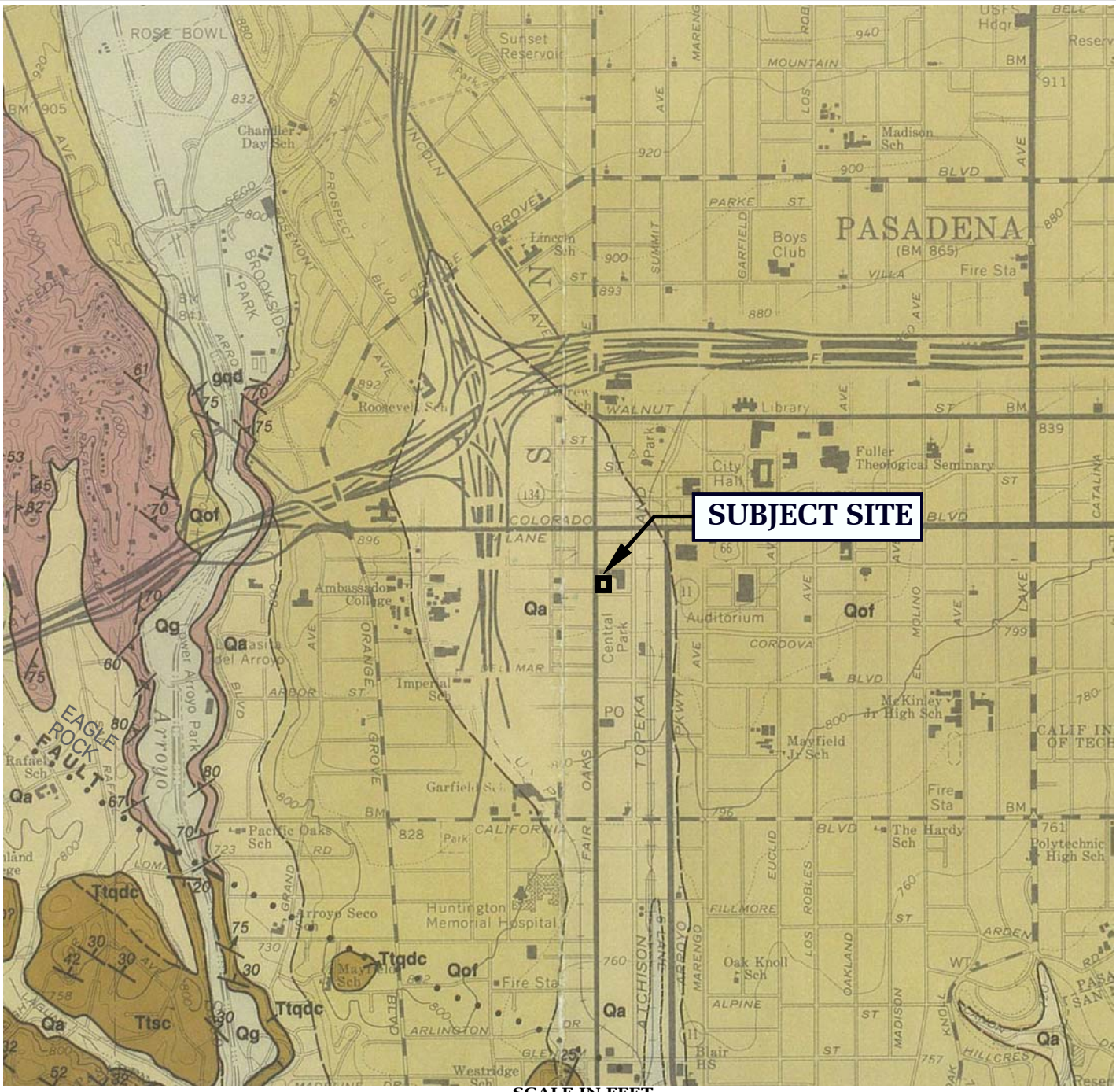
REFERENCE: U.S.G.S. TOPOGRAPHIC MAPS, 7.5 MINUTE SERIES, PASADENA, CA QUADRANGLE

VICINITY MAP

Geotechnologies, Inc.
Consulting Geotechnical Engineers

GREEN HOTEL APARTMENTS

FILE NO. 21674



LEGEND

- **Qg:** Surficial Sediments -Stream channel deposits of gravel, sand and silt
- **Qa:** Surficial Sediments - Alluvium: Unconsolidated floodplain deposits of silt, sand and gravel.
- **Qof:** Older Surficial Sediments - Alluvial fan graveland sand derived from the San Gabriel Mountains
- **gqd:** Quartz Diorite - Massive to gneissod
- —••••? Fault - dashed where indefinite or inferred, dotted where concealed, queried where existence is doubtful

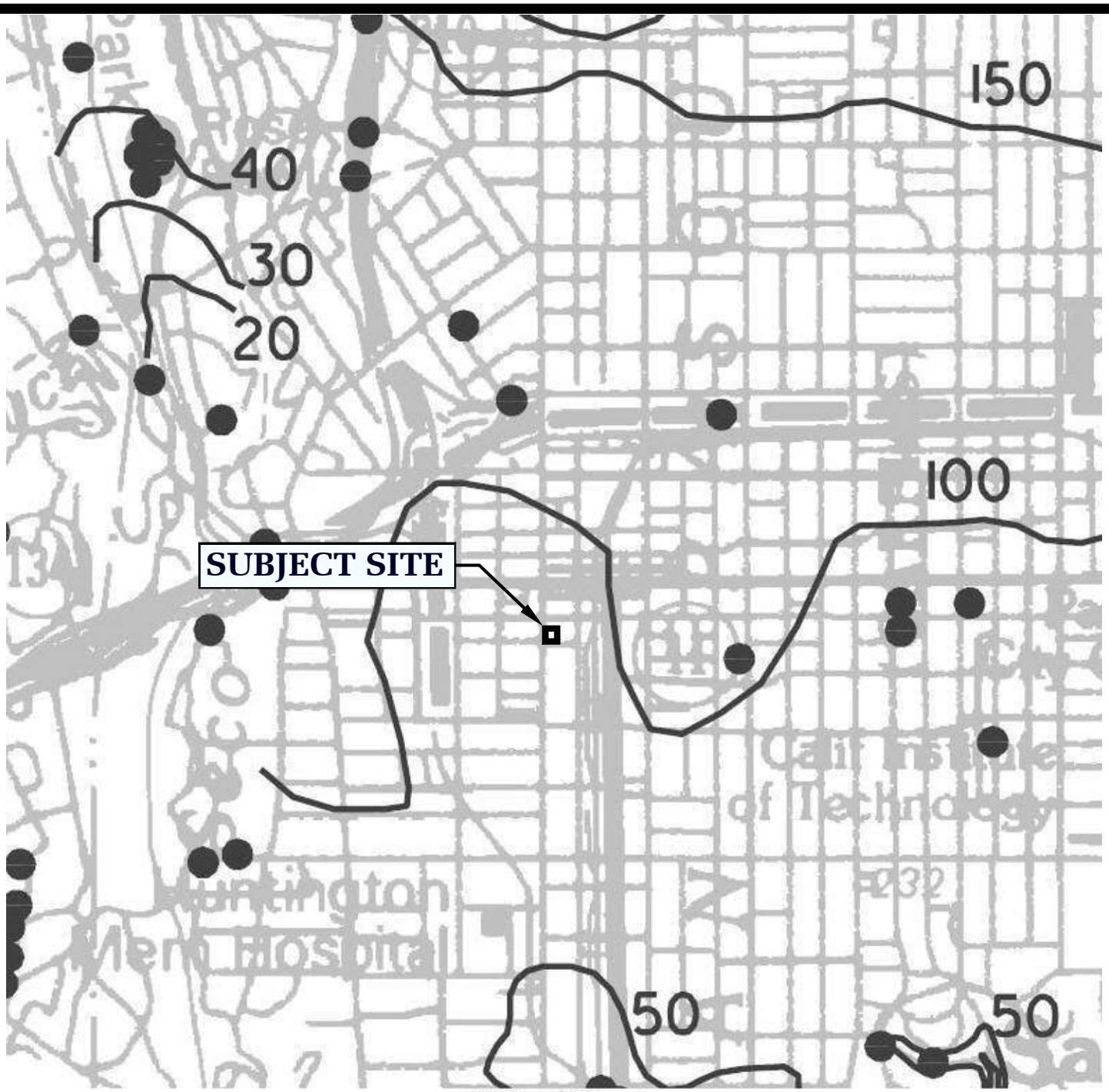
REFERENCE: DIBBLEE, T.W., (1989), GEOLOGIC MAP OF THE PASADENA QUADRANGLE, MAP #DF-23

LOCAL GEOLOGIC MAP

Geotechnologies, Inc.
Consulting Geotechnical Engineers

GREEN HOTEL APARTMENTS

FILE NO. 21674



20 Depth to groundwater in feet

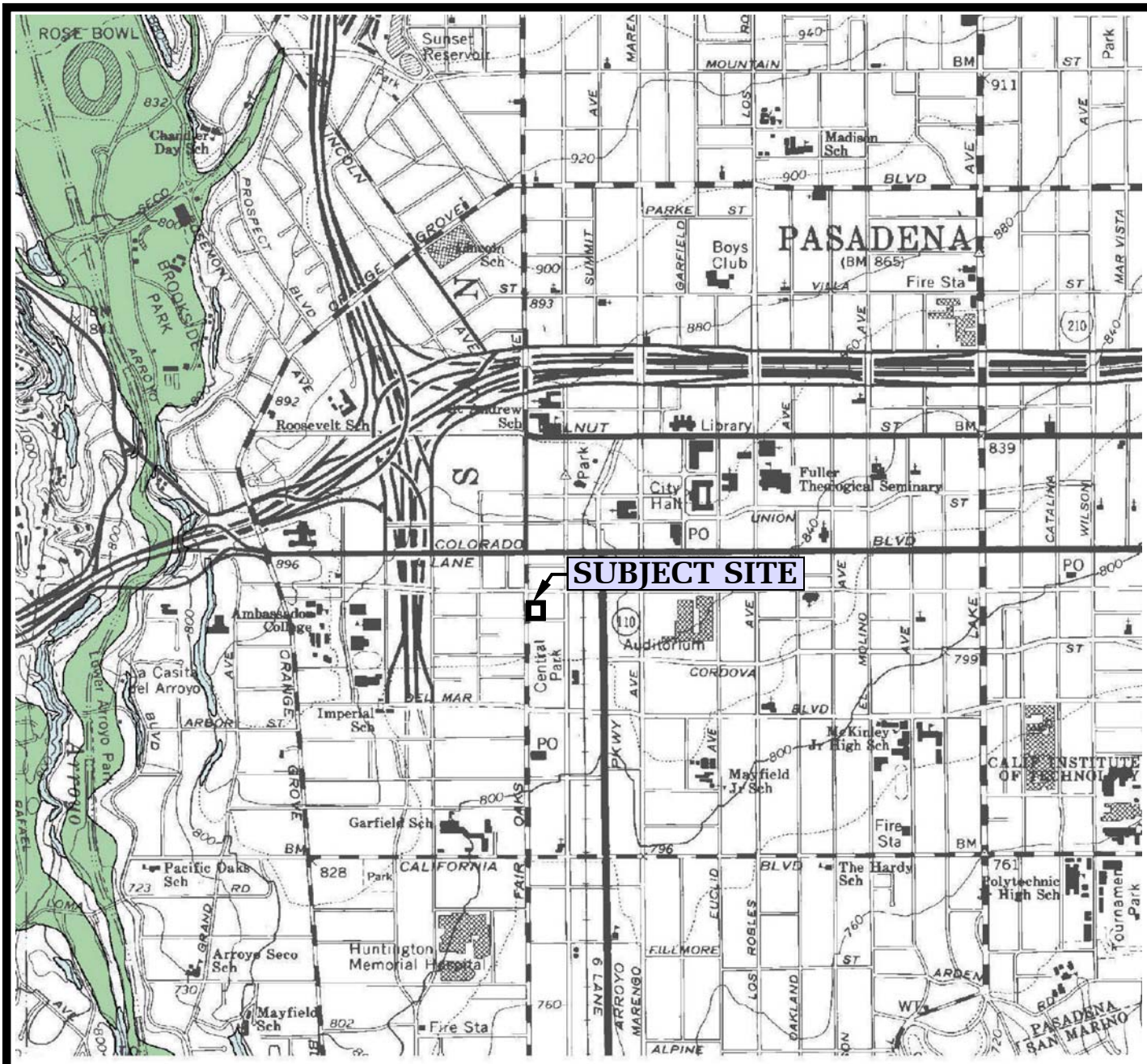
REFERENCE: CDMG, SEISMIC HAZARD ZONE REPORT, 014
PASADENA 7.5 - MINUTE QUADRANGLE, LOS ANGELES COUNTY, CALIFORNIA (1998, REVISED 2006)

HISTORICALLY HIGHEST GROUNDWATER LEVELS

Geotechnologies, Inc.
Consulting Geotechnical Engineers

GREEN HOTEL APARTMENTS

FILE NO. 21674



LIQUEFACTION AREA

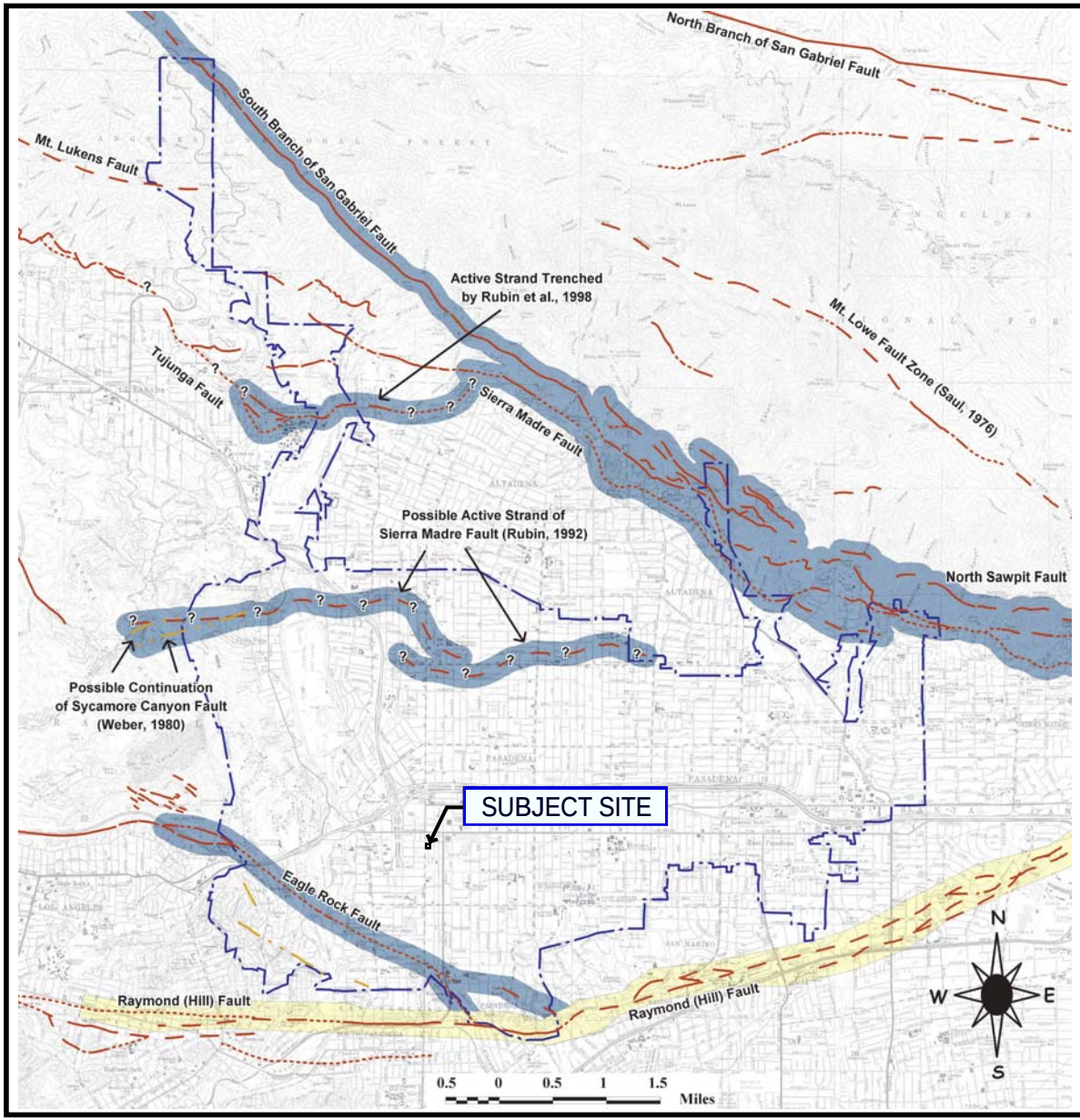
REFERENCE: SEISMIC HAZARD ZONES, PASADENA QUADRANGLE OFFICIAL MAP (CDMG, 1999)

SEISMIC HAZARD ZONE MAP

Geotechnologies, Inc.
Consulting Geotechnical Engineers

GREEN HOTEL APARTMENTS

FILE NO. 21674



EXPLANATION

- Lineaments observed in aerial photographs (Weber, 1980)
- Alquist-Priolo Earthquake Fault Zone
- Fault Hazard Management Zones
- Fault; solid where location known, dashed where approximate, dotted where concealed, queried where inferred. (?-?)
- Pasadena City Boundary

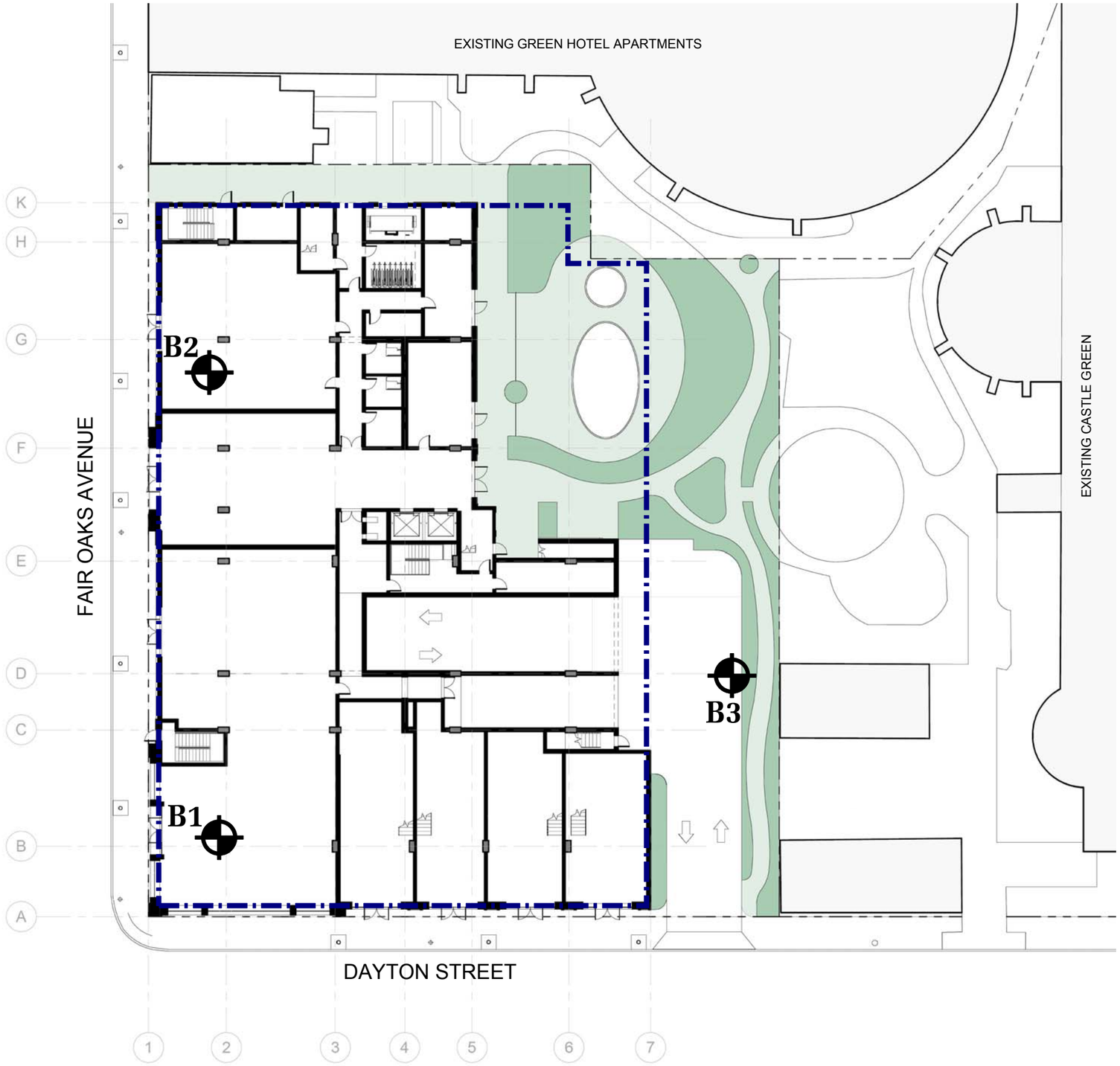
REFERENCE: City of Pasadena Safety Element. Plate 1-2, Fault Map by Earth Consultants International, dated June 2002.

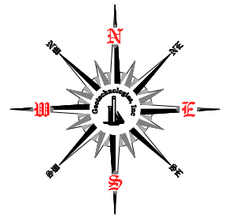
CITY OF PASADENA FAULT MAP

Geotechnologies, Inc.
Consulting Geotechnical Engineers

GREEN HOTEL APARTMENTS

FILE No. 21674





SCALE IN FEET

0 30 60

LEGEND

B3 LOCATION & NUMBER OF BORING

LIMITS OF PROPOSED SUBTERRANEAN GARAGE

REFERENCE: GROUND FLOOR PLAN BACKGROUND BY ARCHITECTURAL RESOURCES GROUP
NOT DATED

Geotechnologies, Inc.
Consulting Geotechnical Engineers

PLOT PLAN

GREEN HOTEL APARTMENTS

File No.: 21674

Date: March '19

BORING LOG NUMBER 1

Green Hotel Apartments **Date: 09/24/18** **Elevation: 834.1'***

File No. 21674 **Method: 8-inch diameter Hollow Stem Auger**

km

*Reference: Site Survey by S.E.C. Civil Engineers, Inc., dated 12/4/09

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description Surface Conditions: Asphalt for Parking
				0 --		4-inch Asphalt over 4-inch Base
				-		
				1 --		FILL: Silty Sand, dark brown, moist, medium dense, fine grained
				-		
				2 --		
2.5	16	8.7	98.9	-		
				3 --		
				-	SM	NATIVE SOILS: Silty Sand, dark brown, moist, medium dense, fine grained
				4 --		
				-		
5	26	4.4	SPT	5 --		
				-	SP	Sand, dark and yellowish brown, moist, medium dense, fine grained
				6 --		
				-		
				7 --		
7.5	72	3.1	127.3	-		
				8 --	SW	Cobbley Sand, yellowish brown, moist, dense, fine to coarse grained
				-		
				9 --		
				-		
10	20	25.0	SPT	10 --		
				-	ML	Sandy Silt, dark and yellowish brown, moist, stiff
				11 --		
				-		
				12 --		
12.5	68	9.5	124.4	-		
				13 --	SM/SP	Silty Sand to Sand, dark and yellowish brown, moist, dense, fine to medium grained
				-		
				14 --		
				-		
15	36	4.4	SPT	15 --		
				-	SP	Sand, dark and yellowish brown, moist, medium dense, fine grained, minor gravel
				16 --		
				-		
17	45	5.8	111.3	17 --		
				-		dark brown, medium dense to dense, fine to medium grained
				18 --		
				-		
				19 --		
				-		
20	41	4.5	SPT	20 --		
				-		
				21 --		
				-		
				22 --		
22.5	79	4.2	114.1	-		
				23 --		dark and yellowish brown, very dense, minor gravel
				-		
				24 --		
				-		
25	70	4.2	SPT	25 --		
				-		

BORING LOG NUMBER 1

Green Hotel Apartments

File No. 21674

km

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description
				26		
				27		
27.5	90	9.8	130.8	28	SM/SP	Silty Sand to Sand, dark and yellowish brown, moist, very dense, fine to medium grained
				29		
30	33 50/5"	6.2	SPT	30	SP/SW	Sand to Gravelly Sand, dark and yellowish brown, moist, very dense, fine to coarse grained
				31		
				32		
32.5	28 50/5"	4.0	112.2	33	SP	Sand, dark brown, moist, very dense, fine to medium grained
				34		
35	88	4.0	SPT	35		
				36		
				37		
37.5	100/8"	4.1	119.1	38	SM/SP	Silty Sand to Sand, dark and yellowish brown, moist, very dense, fine to medium grained
				39		
40	53	3.8	SPT	40	SP	Sand, dark brown, moist, dense, fine to medium grained, minor gravel
				41		
				42		
42.5	84	4.1	116.4	43		dark and yellowish brown, moist, very dense, fine grained
				44		
45	90	3.7	SPT	45		
				46		
				47		
47.5	100/8"	1.7	119.9	48		
				49		
50	63 50/5"	3.0	SPT	50		

BORING LOG NUMBER 1

Green Hotel Apartments

File No. 21674

km

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description
				51		
				52		
52.5	100/10"	3.5	116.1	53		
				54		
55	45 50/2"	4.8	SPT	55	SP/SM	Sand to Silty Sand, dark and yellowish brown, moist, very dense, fine to medium grained, minor gravel
				56		
				57		
57.5	100/9"	3.0	116.1	58	SP	Sand, dark brown, moist, very dense, fine grained
				59		
60	50/6"	2.8	SPT	60		
				61		
				62		
62.5	100/10"	2.5	114.3	63		fine to medium grained, minor cobbles
				64		
65	50/6"	2.8	SPT	65		
				66		
				67		
67.5	100/9"	2.1	112.6	68		
				69		
70	45	2.6	SPT	70		dense
				71		
				72		
72.5	49	2.0	115.2	73		
				74		
75	49	1.8	SPT	75	SM/SP	Silty Sand to Sand, dark and yellowish brown, moist, dense, fine to medium grained

BORING LOG NUMBER 1

Green Hotel Apartments

File No. 21674

km

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description
				76 --		
				77 --		
77.5	83	14.5	109.5	78 --	SM/ML	Silty Sand to Sandy Silt, dark brown, moist, very dense or very stiff, fine to medium grained
				79 --		
80	48	17.8	SPT	80 --		Total Depth 80 feet No Water Fill to 3 feet
				81 --		
				82 --		
				83 --		NOTE: The stratification lines represent the approximate boundary between earth types; the transition may be gradual.
				84 --		
				85 --		Used 8-inch diameter Hollow-Stem Auger 140-lb. Automatic Hammer, 30-inch drop Modified California Sampler used unless otherwise noted
				86 --		
				87 --		SPT=Standard Penetration Test
				88 --		
				89 --		
				90 --		
				91 --		
				92 --		
				93 --		
				94 --		
				95 --		
				96 --		
				97 --		
				98 --		
				99 --		
				100 --		

BORING LOG NUMBER 2

Green Hotel Apartments **Date: 09/25/18** **Elevation: 835.0'***

File No. 21674 **Method: 8-inch diameter Hollow Stem Auger**

km *Reference: Site Survey by S.E.C. Civil Engineers, Inc., dated 12/4/09

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description Surface Conditions: Asphalt for Parking
				0 --		2½-inch Asphalt, No Base
				-		
				1 --		FILL: Silty Sand, dark brown, moist, medium dense, fine grained, minor cobbles
				-		
				2 --		
2.5	34	2.7	127.4	-		
				3 --		
				-	SM/SP	NATIVE SOILS: Silty Sand to Sand with Cobble, dark brown, moist, medium dense, fine to medium grained
				4 --		
				-		
5	28	2.1	119.6	5 --	SP/SW	Sand to Gravelly Sand, dark and yellowish brown, moist, medium dense, fine to coarse grained
				-		
				6 --		
				-		
				7 --		
7.5	35	3.0	119.5	-		
				8 --	SW	Gravelly Sand, dark and yellowish brown, moist, medium dense, fine to coarse grained
				-		
				9 --		
				-		
10	39	2.1	96.4	10 --	SM/ML	Silty Sand to Sandy Silt, dark and yellowish brown mottling, moist, medium dense, stiff, fine grained
				-		
				11 --		
				-		
				12 --		
				-		
				13 --		
				-		
				14 --		
				-		
15	48	6.7	117.4	15 --	SM/SP	Silty Sand to Sand, dark brown, moist, dense, fine grained
				-		
				16 --		
				-		
				17 --		
				-		
				18 --		
				-		
				19 --		
				-		
20	85	4.8	127.0	20 --	SP	Sand, dark and yellowish brown, moist, very dense, fine to medium grained
				-		
				21 --		
				-		
				22 --		
				-		
				23 --		
				-		
				24 --		
				-		
25	73 50/5"	6.2	116.7	25 --		
				-		

BORING LOG NUMBER 2

Green Hotel Apartments

File No. 21674

km

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description
				- 26 -- - 27 -- - 28 -- - 29 -- -		
30	88	3.0	115.2	30 -- - 31 -- - 32 -- - 33 -- - 34 -- -	SP/SW	Sand to Gravelly Sand, dark and yellowish brown, moist, very dense, fine to coarse grained
35	40 50/5"	3.7	117.0	35 -- - 36 -- - 37 -- - 38 -- - 39 -- -		
40	45 50/4"	5.5	106.3	40 -- - 41 -- - 42 -- - 43 -- - 44 -- -	SP	Sand, dark and yellowish brown, moist, very dense, fine to medium grained
45	45 50/5"	3.7	114.8	45 -- - 46 -- - 47 -- - 48 -- - 49 -- -		NOTE: The stratification lines represent the approximate boundary between earth types; the transition may be gradual. Used 8-inch diameter Hollow-Stem Auger 140-lb. Automatic Hammer, 30-inch drop Modified California Sampler used unless otherwise noted
50	100/9"	3.3	Disturbed	50 -- -		
						Total Depth 50 feet No Water Fill to 3 feet

BORING LOG NUMBER 3

Green Hotel Apartments **Date: 09/25/18** **Elevation: 833.0'***

File No. 21674 **Method: 8-inch diameter Hollow Stem Auger**

km

*Reference: Site Survey by S.E.C. Civil Engineers, Inc., dated 12/4/09

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description Surface Conditions: Asphalt for Parking
				0 --		3-inch Asphalt, No Base
				-		
				1 --		FILL: Silty Sand, dark brown, moist, medium dense, fine grained, minor cobbles
				-		
				2 --		
2.5	37	4.1	115.9	-		
				3 --		
				-	SM/SW	NATIVE SOILS: Silty Sand to Cobbley Sand, dark and yellowish brown, moist, medium dense, fine to coarse grained
				4 --		
				-		
5	49	1.5	115.9	5 --		
				-	SW	Gravelly Sand, dark brown, slightly moist, medium dense to dense, fine to coarse grained
				6 --		
				-		
				7 --		
7.5	65	8.2	113.1	-		
				8 --	SP/SW	Sand to Gravelly Sand, dark and yellowish brown, moist, dense, fine to medium grained
				-		
				9 --		
				-		
10	50	24.8	99.3	10 --		
				-	ML	Sandy Silt, dark and yellowish brown mottling, moist, very stiff
				11 --		
				-		
				12 --		
				-		
				13 --		
				-		
				14 --		
				-		
15	72	9.3	125.6	15 --		
				-	SP	Sand, dark and yellowish brown, moist, very dense, fine to medium grained
				16 --		
				-		
				17 --		
				-		
				18 --		
				-		
				19 --		
				-		
20	65 50/4"	11.6	118.8	20 --		
				-		
				21 --		
				-		
				22 --		
				-		
				23 --		
				-		
				24 --		
				-		
25	90	11.6	120.6	25 --		
				-	SM/SP	Silty Sand to Sand, dark and yellowish brown, moist, very dense, fine grained

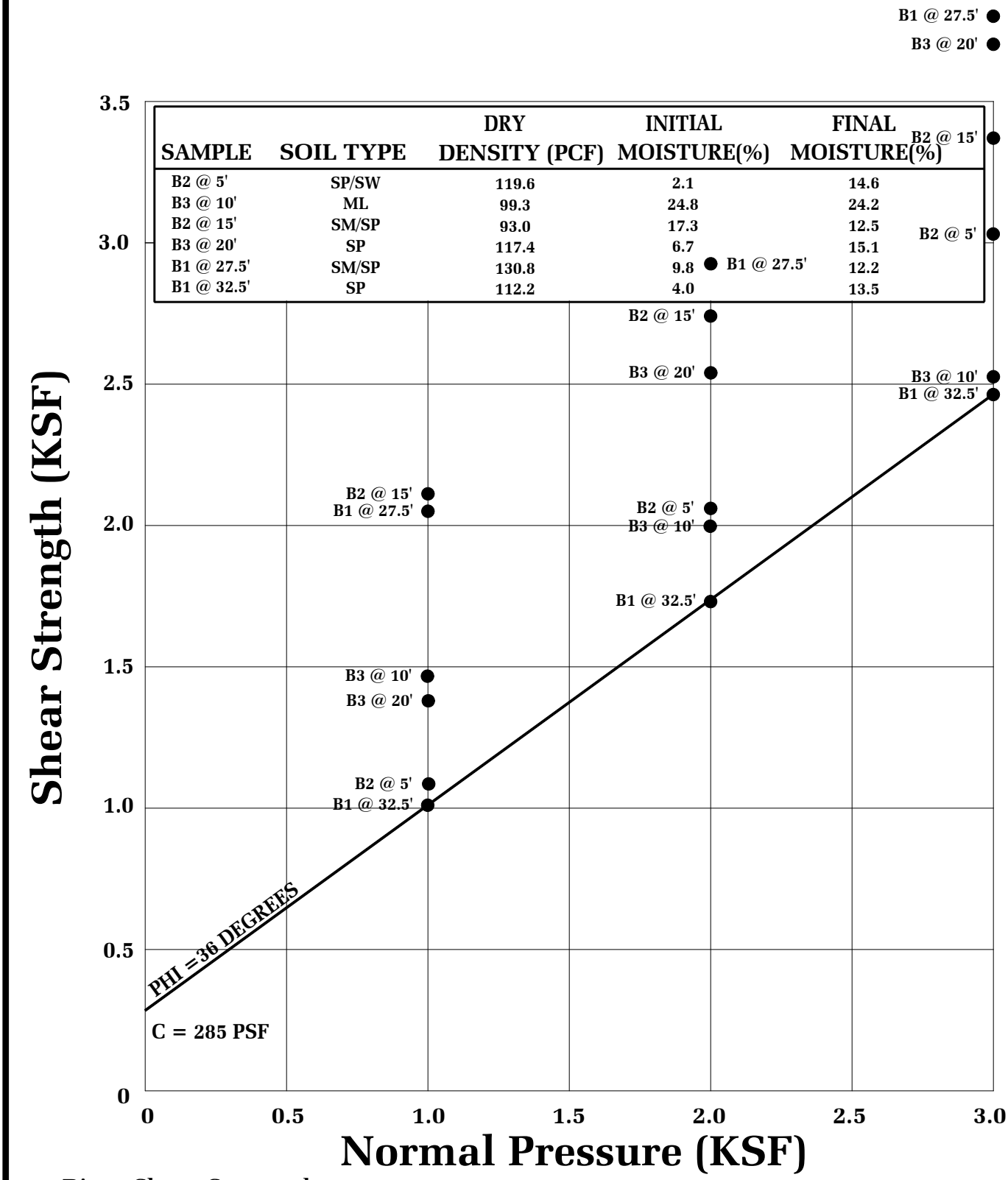
BORING LOG NUMBER 3

Green Hotel Apartments

File No. 21674

km

Sample Depth ft.	Blows per ft.	Moisture content %	Dry Density p.c.f.	Depth in feet	USCS Class.	Description
				26 --		
				27 --		
				28 --		
				29 --		
30	26 50/5"	6.0	115.4	30 --		
				31 --		
				32 --		
				33 --		
				34 --		
35	100/9"	2.7	112.5	35 --	SP	Sand, dark and yellowish brown, moist, very dense, fine to medium grained
				36 --		
				37 --		
				38 --		
				39 --		
40	100/10"	3.0	104.3	40 --		
				41 --		
				42 --		
				43 --		
				44 --		
45	39 50/5"	11.4	115.1	45 --	SM	Silty Sand, dark brown, moist, very dense, fine grained
				46 --		NOTE: The stratification lines represent the approximate boundary between earth types; the transition may be gradual.
				47 --		
				48 --		Used 8-inch diameter Hollow-Stem Auger 140-lb. Automatic Hammer, 30-inch drop Modified California Sampler used unless otherwise noted
				49 --		
50	100/9"	8.8	109.9	50 --		Total Depth 50 feet No Water Fill to 3 feet



SAMPLE	SOIL TYPE	DRY DENSITY (PCF)	INITIAL MOISTURE(%)	FINAL MOISTURE(%)
B2 @ 5'	SP/SW	119.6	2.1	14.6
B3 @ 10'	ML	99.3	24.8	24.2
B2 @ 15'	SM/SP	93.0	17.3	12.5
B3 @ 20'	SP	117.4	6.7	15.1
B1 @ 27.5'	SM/SP	130.8	9.8	12.2
B1 @ 32.5'	SP	112.2	4.0	13.5

● Direct Shear, Saturated

SHEAR TEST DIAGRAM

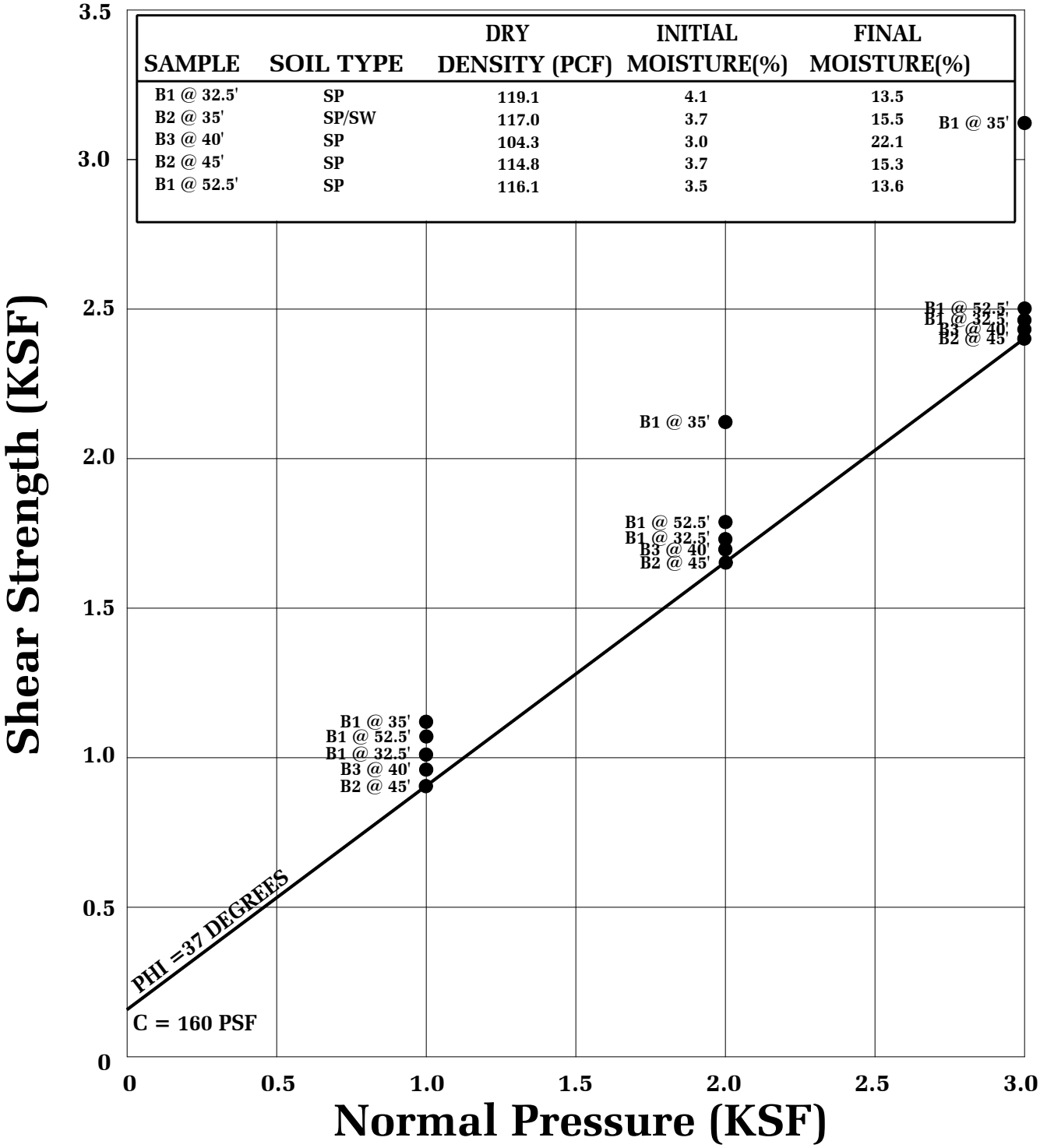
Geotechnologies, Inc.
Consulting Geotechnical Engineers

GREEN HOTEL APARTMENTS

FILE NO. 21674

PLATE: B-1

SAMPLE	SOIL TYPE	DRY DENSITY (PCF)	INITIAL MOISTURE(%)	FINAL MOISTURE(%)
B1 @ 32.5'	SP	119.1	4.1	13.5
B2 @ 35'	SP/SW	117.0	3.7	15.5
B3 @ 40'	SP	104.3	3.0	22.1
B2 @ 45'	SP	114.8	3.7	15.3
B1 @ 52.5'	SP	116.1	3.5	13.6



● Direct Shear, Saturated

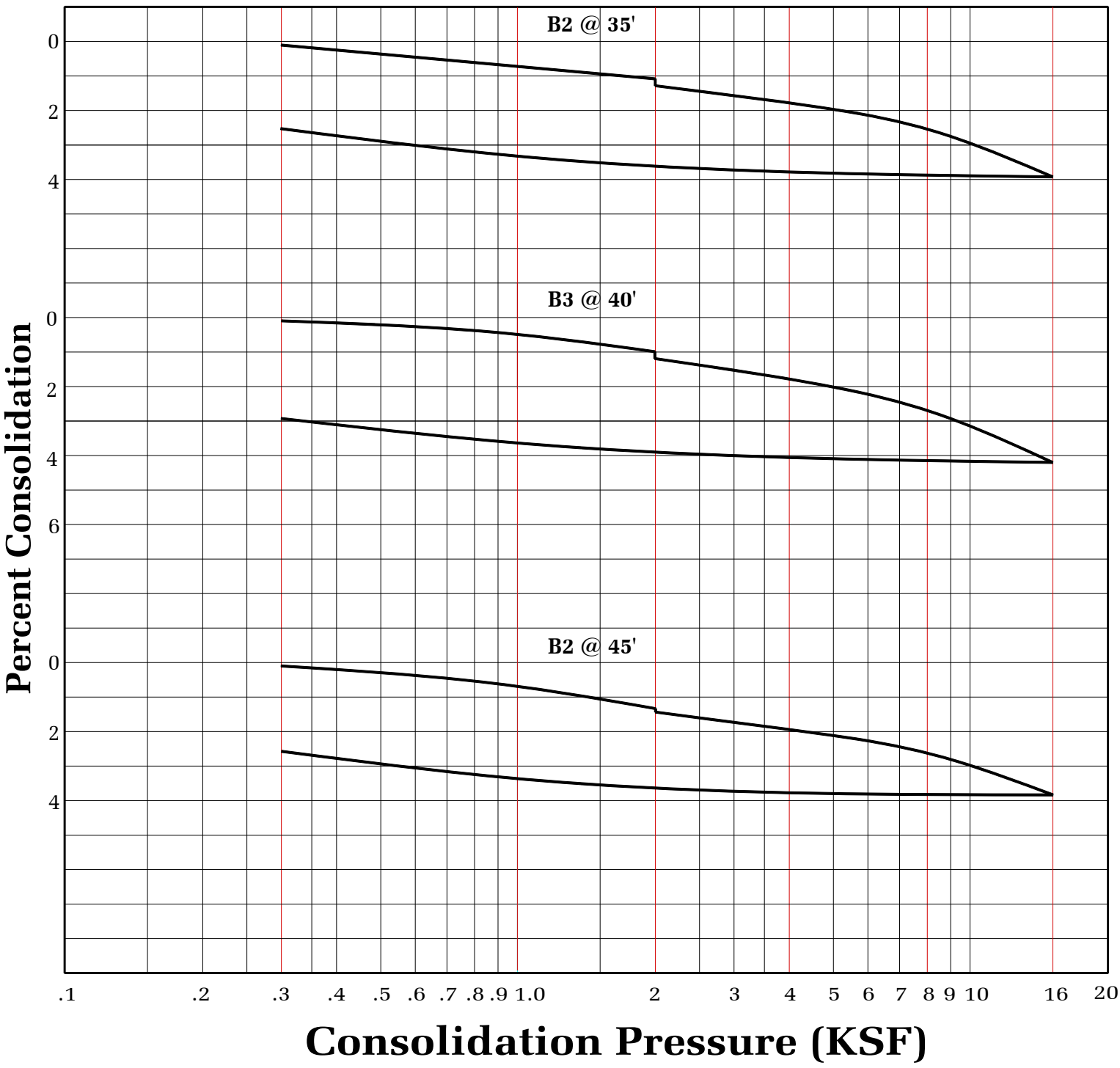
SHEAR TEST DIAGRAM

Geotechnologies, Inc.
Consulting Geotechnical Engineers

GREEN HOTEL APARTMENTS

FILE NO. 21674 | PLATE: B-2

WATER ADDED AT 2 KSF



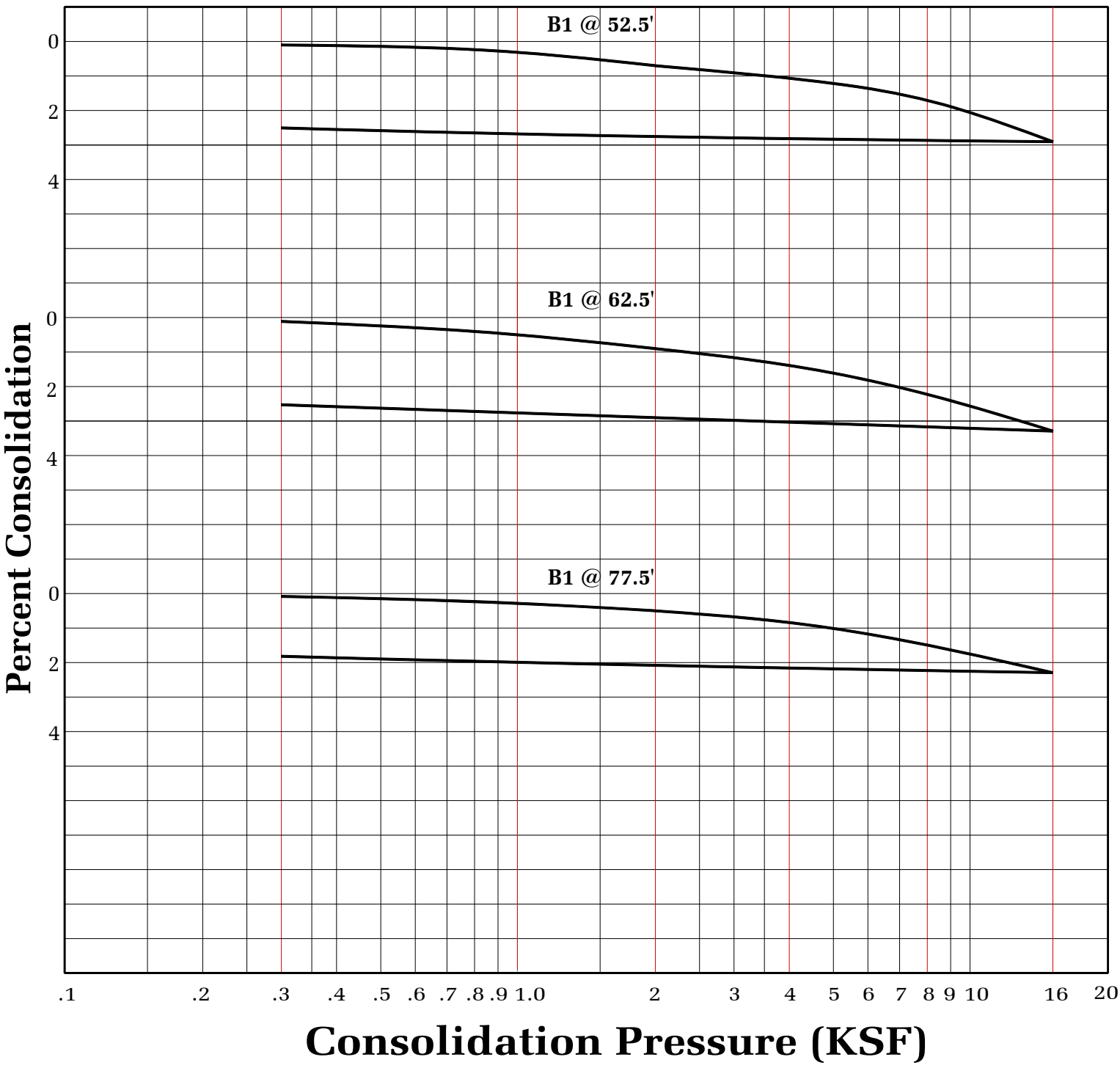
CONSOLIDATION TEST

Geotechnologies, Inc.
Consulting Geotechnical Engineers

GREEN HOTEL APARTMENTS

FILE NO. 21674 | **PLATE: C-1**

WATER ADDED AT 2 KSF



CONSOLIDATION TEST

Geotechnologies, Inc.
Consulting Geotechnical Engineers

GREEN HOTEL APARTMENTS

FILE NO. 21674 | **PLATE: C-2**

ASTM D-1557

SAMPLE	B2 @ 1- 5'	B3 @ 1-5'
SOIL TYPE:	SM/SP	SM/SW
MAXIMUM DENSITY pcf.	129.3	124.4
OPTIMUM MOISTURE %	9.5	10.5

ASTM D 4829

SAMPLE	B2 @ 1- 5'	B3 @ 1-5'
SOIL TYPE:	SM/SP	SM/SW
EXPANSION INDEX UBC STANDARD 18-2	2	3
EXPANSION CHARACTER	VERY LOW	VERYLOW

SULFATE CONTENT

SAMPLE	B2 @ 1-5'	B3 @ 1-5'	B1 @ 10'	B1 @ 20'	B1 @ 30'
SULFATE CONTENT: (percentage by weight)	< 0.2 %	< 0.1 %	< 0.1 %	< 0.1 %	< 0.1 %

COMPACTION/EXPANSION/SULFATE DATA SHEET

Geotechnologies, Inc.
Consulting Geotechnical Engineers

GREEN HOTEL APARTMENTS

FILE NO. 21674 | **PLATE: D**

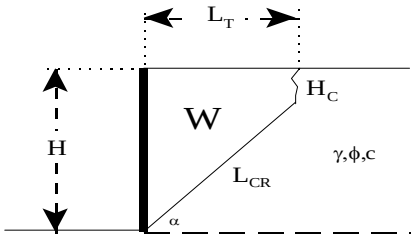
Geotechnologies, Inc.

Project: Green Hotel Apartments
File No.: 21674
Description: Drained Cantilever Retaining Walls

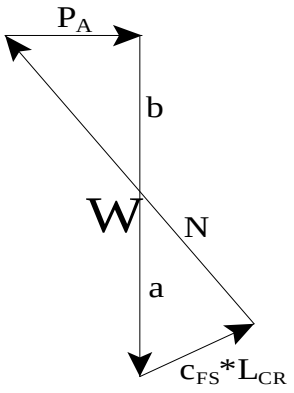
Retaining Wall Design with Level Backfill (Vector Analysis)

Input:

Retaining Wall Height	(H)	54.00	feet
Unit Weight of Retained Soils	(γ)	125.0	pcf
Friction Angle of Retained Soils	(ϕ)	36.0	degrees
Cohesion of Retained Soils	(c)	285.0	psf
Factor of Safety	(FS)	1.50	
Factored Parameters:	(ϕ_{FS})	25.8	degrees
	(c_{FS})	190.0	psf



Failure Angle (α)	Height of Tension Crack (H_C)	Area of Wedge (A)	Weight of Wedge (W)	Length of Failure Plane (L_{CR})	a	b	Active Pressure (P_A)
degrees	feet	$feet^2$	lbs/lineal foot	feet	lbs/lineal foot	lbs/lineal foot	lbs/lineal foot
40	7.3	1706	213225.9	72.6	50795.5	162430.4	40969.2
41	6.9	1650	206199.0	71.7	46921.6	159277.3	43144.1
42	6.6	1595	199371.3	70.8	43518.0	155853.4	45150.5
43	6.3	1542	192744.3	69.9	40509.8	152234.4	46997.0
44	6.1	1491	186314.9	69.0	37837.1	148477.8	48691.4
45	5.9	1441	180077.6	68.0	35450.6	144627.0	50240.6
46	5.7	1392	174025.5	67.1	33310.1	140715.4	51651.2
47	5.6	1345	168150.7	66.2	31382.3	136768.3	52928.8
48	5.4	1300	162444.9	65.4	29639.5	132805.5	54078.6
49	5.3	1255	156899.9	64.5	28058.2	128841.8	55105.2
50	5.2	1212	151507.5	63.7	26618.7	124888.8	56012.6
51	5.1	1170	146259.7	62.9	25304.4	120955.3	56804.4
52	5.0	1129	141148.7	62.1	24100.9	117047.8	57483.6
53	5.0	1089	136167.1	61.4	22995.8	113171.3	58052.9
54	4.9	1050	131307.8	60.7	21978.6	109329.2	58514.3
55	4.9	1013	126564.1	59.9	21040.0	105524.0	58869.6
56	4.9	975	121929.5	59.3	20172.0	101757.4	59120.2
57	4.9	939	117397.9	58.6	19367.6	98030.4	59267.0
58	4.9	904	112963.7	58.0	18620.5	94343.2	59310.5
59	4.9	869	108621.2	57.3	17925.2	90696.0	59250.9
60	4.9	835	104365.2	56.7	17276.9	87088.3	59087.9
61	4.9	802	100190.9	56.1	16671.3	83519.5	58821.1
62	4.9	769	96093.4	55.6	16104.5	79988.9	58449.2
63	5.0	737	92068.4	55.0	15573.0	76495.4	57971.1
64	5.1	705	88111.5	54.5	15073.7	73037.9	57384.8
65	5.1	674	84218.7	53.9	14603.6	69615.1	56688.2



Design Equations (Vector Analysis):

$a = c_{FS}*L_{CR}*\sin(90+\phi_{FS})/\sin(\alpha-\phi_{FS})$

$b = W-a$

$P_A = b*\tan(\alpha-\phi_{FS})$

$EFP = 2*P_A/H^2$

Maximum Active Pressure Resultant

$P_{A,\,max}$ 59310.5 lbs/lineal foot

Equivalent Fluid Pressure (per lineal foot of wall)

$EFP = 2*P_A/H^2$

EFP 40.7 pcf

Design Wall for an Equivalent Fluid Pressure: 41 pcf

Geotechnologies, Inc.

Project: Green Hotel Apartments
File No.: 21674

Soil Weight	γ	125	pcf
Internal Friction Angle	ϕ	36	degrees
Cohesion	c	0	psf
Height of Retaining Wall	H	54	feet

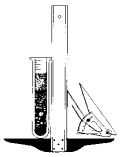
Restrained Retaining Wall Design based on At Rest Earth Pressure

$\sigma'_h = K_o\sigma'_v$

$K_o = 1 - \sin\phi$	0.412	
$\sigma'_v = \gamma H$	6750.0	psf

σ'_h =	2782.4	psf	
EFP =	51.5	pcf	
P_o =	75126.1	lbs/ft	(based on a triangular distribution of pressure)

Design wall for an EFP of 52 pcf



Geotechnologies, Inc.
Project: Green Hotel Apartments
File No.: 21674

Seismically Induced Lateral Soil Pressure on Retaining Wall

Input:

Height of Retaining Wall:	(H)	54.0	feet
Retained Soil Unit Weight:	(γ)	125.0	pcf
Horizontal Ground Acceleration:	(k_h)	0.36	g

Seismic Increment (ΔP_{AE}):

$\Delta P_{AE} = (0.5*\gamma*H^2)*(0.75*k_h)$

ΔP_{AE} = 49207.5 lbs/ft

Force applied at 0.6H above the base of the wall
Transfer load to 2/3 of the height of the wall

$T*(2/3)*H = \Delta P_{AE}*0.6*H$

T = 44286.8 lbs/ft

$EFP = 2*T/H^2$

EFP = 30 pcf
triangular distribution of pressure

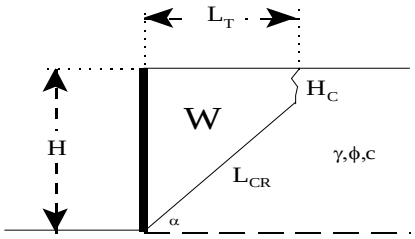
Geotechnologies, Inc.

Project: Green Hotel Apartments
File No.: 21674
Description: Temporary Shoring (up to 20 feet in height)

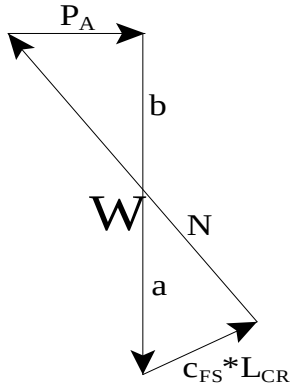
Shoring Design with Level Backfill (Vector Analysis)

Input:

Shoring Height	(H)	20.00	feet
Unit Weight of Retained Soils	(γ)	125.0	pcf
Friction Angle of Retained Soils	(ϕ)	36.0	degrees
Cohesion of Retained Soils	(c)	285.0	psf
Factor of Safety	(FS)	1.25	
Factored Parameters:	(ϕ_{FS})	30.2	degrees
	(c_{FS})	228.0	psf



Failure Angle (α)	Height of Tension Crack (H_C)	Area of Wedge (A)	Weight of Wedge (W)	Length of Failure Plane (L_{CR})	a	b	Active Pressure (P_A)
degrees	feet	$feet^2$	lbs/lineal foot	feet	lbs/lineal foot	lbs/lineal foot	lbs/lineal foot
40	12.1	152	18971.7	12.4	14268.6	4703.1	815.2
41	11.1	159	19873.3	13.5	14200.1	5673.1	1085.6
42	10.3	163	20332.5	14.4	13865.8	6466.6	1354.9
43	9.7	164	20493.0	15.1	13393.2	7099.9	1617.4
44	9.2	164	20447.4	15.6	12854.7	7592.7	1869.6
45	8.7	162	20257.1	16.0	12292.4	7964.7	2109.3
46	8.3	160	19963.9	16.2	11730.6	8233.3	2335.0
47	8.0	157	19597.1	16.4	11183.0	8414.1	2545.7
48	7.7	153	19177.4	16.6	10657.3	8520.1	2741.0
49	7.4	150	18719.9	16.6	10157.3	8562.6	2920.5
50	7.2	146	18235.4	16.7	9684.5	8551.0	3084.2
51	7.0	142	17732.1	16.7	9238.9	8493.2	3231.9
52	6.9	138	17215.9	16.6	8819.8	8396.1	3363.9
53	6.8	134	16691.3	16.6	8426.1	8265.3	3480.1
54	6.6	129	16161.8	16.5	8056.2	8105.5	3580.6
55	6.5	125	15629.7	16.4	7708.6	7921.1	3665.6
56	6.5	121	15097.1	16.3	7381.8	7715.3	3735.3
57	6.4	117	14565.2	16.2	7074.0	7491.3	3789.6
58	6.4	112	14035.2	16.1	6783.7	7251.5	3828.7
59	6.3	108	13507.8	15.9	6509.5	6998.2	3852.6
60	6.3	104	12983.4	15.8	6250.1	6733.3	3861.4
61	6.3	100	12462.4	15.6	6003.9	6458.5	3855.1
62	6.4	96	11945.0	15.4	5769.8	6175.1	3833.7
63	6.4	91	11431.1	15.3	5546.6	5884.5	3797.2
64	6.5	87	10920.8	15.1	5333.1	5587.7	3745.4
65	6.5	83	10413.9	14.9	5128.1	5285.8	3678.3



Design Equations (Vector Analysis):

$a = c_{FS}*L_{CR}*\sin(90+\phi_{FS})/\sin(\alpha-\phi_{FS})$

$b = W-a$

$P_A = b*\tan(\alpha-\phi_{FS})$

$EFP = 2*P_A/H^2$

Maximum Active Pressure Resultant

$P_{A,\,max}$ 3861.4 lbs/lineal foot

Equivalent Fluid Pressure (per lineal foot of shoring)

$EFP = 2*P_A/H^2$

EFP 19.3 pcf

Design Shoring for an Equivalent Fluid Pressure: 28 pcf

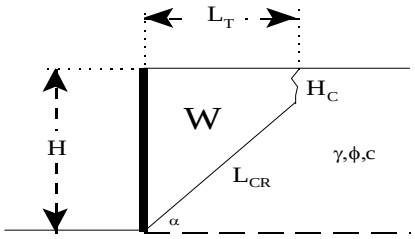
Geotechnologies, Inc.

Project: Green Hotel Apartments
File No.: 21674
Description: Temporary Shoring (up to 25 feet in height)

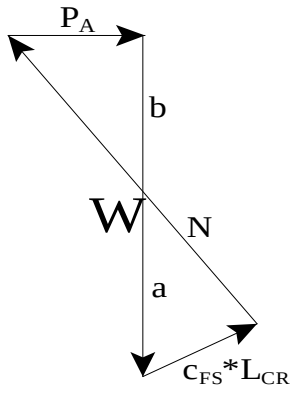
Shoring Design with Level Backfill (Vector Analysis)

Input:

Shoring Height	(H)	25.00	feet
Unit Weight of Retained Soils	(γ)	125.0	pcf
Friction Angle of Retained Soils	(ϕ)	36.0	degrees
Cohesion of Retained Soils	(c)	285.0	psf
Factor of Safety	(FS)	1.25	
Factored Parameters:	(ϕ_{FS})	30.2	degrees
	(c_{FS})	228.0	psf



Failure Angle (α) degrees	Height of Tension Crack (H_C) feet	Area of Wedge (A) $feet^2$	Weight of Wedge (W) lbs/lineal foot	Length of Failure Plane (L_{CR}) feet	a lbs/lineal foot	b lbs/lineal foot	Active Pressure (P_A) lbs/lineal foot
40	12.1	286	35730.7	20.1	23246.8	12484.0	2163.8
41	11.1	288	36050.3	21.2	22193.2	13857.2	2651.8
42	10.3	288	35950.5	21.9	21048.7	14901.7	3122.2
43	9.7	285	35573.2	22.4	19899.5	15673.7	3570.6
44	9.2	280	35009.6	22.8	18788.8	16220.8	3994.2
45	8.7	275	34319.6	23.0	17737.0	16582.6	4391.6
46	8.3	268	33543.9	23.2	16752.4	16791.5	4762.1
47	8.0	262	32710.6	23.3	15836.7	16873.9	5105.3
48	7.7	255	31839.4	23.3	14988.0	16851.4	5421.2
49	7.4	248	30944.3	23.3	14202.8	16741.5	5710.2
50	7.2	240	30035.3	23.2	13476.6	16558.7	5972.4
51	7.0	233	29119.7	23.1	12804.8	16314.9	6208.3
52	6.9	226	28202.7	23.0	12182.9	16019.9	6418.3
53	6.8	218	27288.2	22.8	11606.4	15681.8	6602.8
54	6.6	211	26378.8	22.7	11071.2	15307.6	6762.1
55	6.5	204	25476.4	22.5	10573.5	14902.8	6896.6
56	6.5	197	24582.3	22.3	10110.0	14472.3	7006.6
57	6.4	190	23697.5	22.2	9677.4	14020.1	7092.3
58	6.4	183	22822.4	22.0	9272.9	13549.5	7154.0
59	6.3	176	21957.4	21.8	8893.8	13063.6	7191.7
60	6.3	169	21102.4	21.5	8537.7	12564.6	7205.6
61	6.3	162	20257.4	21.3	8202.5	12054.8	7195.6
62	6.4	155	19422.1	21.1	7886.2	11535.9	7161.9
63	6.4	149	18596.3	20.9	7586.8	11009.5	7104.2
64	6.5	142	17779.6	20.6	7302.6	10477.0	7022.6
65	6.5	136	16971.4	20.4	7032.0	9939.4	6916.6



Design Equations (Vector Analysis):

$a = c_{FS}*L_{CR}*\sin(90+\phi_{FS})/\sin(\alpha-\phi_{FS})$

$b = W-a$

$P_A = b*\tan(\alpha-\phi_{FS})$

$EFP = 2*P_A/H^2$

Maximum Active Pressure Resultant

$P_{A,\,max}$ 7205.6 lbs/lineal foot

Equivalent Fluid Pressure (per lineal foot of shoring)

$EFP = 2*P_A/H^2$

EFP 23.1 pcf

Design Shoring for an Equivalent Fluid Pressure: 32 pcf

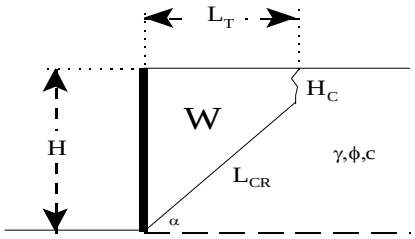
Geotechnologies, Inc.

Project: Green Hotel Apartments
File No.: 21674
Description: Temporary Shoring (up to 40 feet in height)

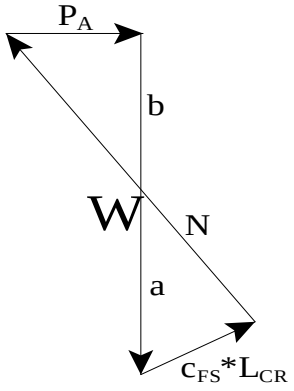
Shoring Design with Level Backfill (Vector Analysis)

Input:

Shoring Height	(H)	40.00	feet
Unit Weight of Retained Soils	(γ)	125.0	pcf
Friction Angle of Retained Soils	(ϕ)	36.0	degrees
Cohesion of Retained Soils	(c)	285.0	psf
Factor of Safety	(FS)	1.25	
Factored Parameters:	(ϕ_{FS})	30.2	degrees
	(c_{FS})	228.0	psf



Failure Angle (α)	Height of Tension Crack (H_C)	Area of Wedge (A)	Weight of Wedge (W)	Length of Failure Plane (L_{CR})	a	b	Active Pressure (P_A)
degrees	feet	$feet^2$	lbs/lineal foot	feet	lbs/lineal foot	lbs/lineal foot	lbs/lineal foot
40	12.1	867	108353.2	43.5	50181.4	58171.8	10082.9
41	11.1	849	106150.9	44.0	46172.2	59978.7	11477.8
42	10.3	829	103628.4	44.3	42597.4	61031.1	12787.2
43	9.7	807	100920.7	44.4	39418.7	61502.0	14010.6
44	9.2	785	98112.2	44.4	36591.1	61521.1	15149.1
45	8.7	762	95257.1	44.2	34070.7	61186.4	16204.3
46	8.3	739	92390.5	44.0	31817.8	60572.7	17178.5
47	8.0	716	89535.7	43.8	29797.6	59738.1	18074.0
48	7.7	694	86707.7	43.5	27980.0	58727.8	18893.2
49	7.4	671	83916.4	43.1	26339.1	57577.3	19638.4
50	7.2	649	81167.9	42.8	24853.0	56314.9	20311.7
51	7.0	628	78465.9	42.4	23502.7	54963.2	20915.2
52	6.9	606	75812.3	42.0	22272.1	53540.3	21450.8
53	6.8	586	73207.9	41.6	21147.2	52060.7	21920.0
54	6.6	565	70652.5	41.2	20116.0	50536.4	22324.4
55	6.5	545	68145.3	40.8	19168.3	48977.0	22665.2
56	6.5	525	65685.2	40.4	18294.8	47390.4	22943.5
57	6.4	506	63270.8	40.0	17487.8	45782.9	23160.1
58	6.4	487	60900.4	39.7	16740.5	44160.0	23315.8
59	6.3	469	58572.3	39.3	16046.6	42525.7	23411.0
60	6.3	450	56284.7	38.9	15400.8	40883.8	23446.0
61	6.3	432	54035.6	38.5	14798.5	39237.1	23421.0
62	6.4	415	51823.2	38.1	14235.2	37587.9	23335.9
63	6.4	397	49645.5	37.7	13707.3	35938.3	23190.3
64	6.5	380	47500.8	37.3	13211.1	34289.6	22983.8
65	6.5	363	45387.0	36.9	12743.7	32643.3	22715.9



Design Equations (Vector Analysis):

$a = c_{FS}*L_{CR}*\sin(90+\phi_{FS})/\sin(\alpha-\phi_{FS})$

$b = W-a$

$P_A = b*\tan(\alpha-\phi_{FS})$

$EFP = 2*P_A/H^2$

Maximum Active Pressure Resultant

$P_{A,\,max}$ 23446.0 lbs/lineal foot

Equivalent Fluid Pressure (per lineal foot of shoring)

$EFP = 2*P_A/H^2$

EFP 29.3 pcf

Design Shoring for an Equivalent Fluid Pressure: 35 pcf

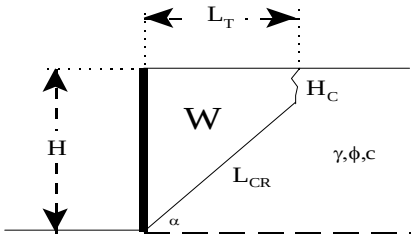
Geotechnologies, Inc.

Project: Green Hotel Apartments
File No.: 21674
Description: Temporary Shoring (up to 58 feet in height)

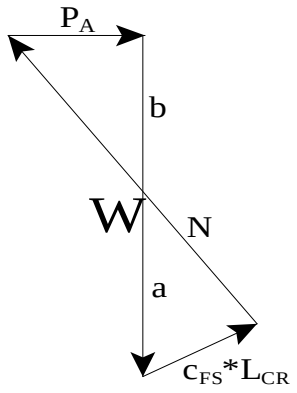
Shoring Design with Level Backfill (Vector Analysis)

Input:

Shoring Height	(H)	58.00	feet
Unit Weight of Retained Soils	(γ)	125.0	pcf
Friction Angle of Retained Soils	(ϕ)	36.0	degrees
Cohesion of Retained Soils	(c)	285.0	psf
Factor of Safety	(FS)	1.25	
Factored Parameters:	(ϕ_{FS})	30.2	degrees
	(c_{FS})	228.0	psf



Failure Angle (α)	Height of Tension Crack (H_C)	Area of Wedge (A)	Weight of Wedge (W)	Length of Failure Plane (L_{CR})	a	b	Active Pressure (P_A)
degrees	feet	$feet^2$	lbs/lineal foot	feet	lbs/lineal foot	lbs/lineal foot	lbs/lineal foot
40	12.1	1918	239744.0	71.5	82503.0	157241.1	27254.6
41	11.1	1864	232979.0	71.5	74947.0	158032.0	30241.7
42	10.3	1809	226073.5	71.2	68455.7	157617.7	33023.9
43	9.7	1753	219149.3	70.8	62841.6	156307.7	35608.0
44	9.2	1698	212279.4	70.3	57953.8	154325.6	38001.4
45	8.7	1644	205507.1	69.7	53671.1	151835.9	40211.5
46	8.3	1591	198857.7	69.1	49896.3	148961.4	42245.6
47	8.0	1539	192345.5	68.4	46550.7	145794.8	44110.8
48	7.7	1488	185977.3	67.7	43570.4	142406.9	45813.4
49	7.4	1438	179755.3	67.0	40902.8	138852.5	47359.6
50	7.2	1389	173678.7	66.3	38504.7	135174.0	48754.6
51	7.0	1342	167744.6	65.6	36340.2	131404.4	50003.5
52	6.9	1296	161949.1	64.9	34379.1	127570.0	51110.6
53	6.8	1250	156287.2	64.2	32596.2	123691.1	52079.8
54	6.6	1206	150753.8	63.5	30969.9	119783.9	52914.4
55	6.5	1163	145343.2	62.8	29481.9	115861.3	53617.4
56	6.5	1120	140049.8	62.2	28116.6	111933.2	54191.1
57	6.4	1079	134868.0	61.5	26860.4	108007.6	54637.6
58	6.4	1038	129792.3	60.9	25701.5	104090.7	54958.4
59	6.3	999	124817.2	60.3	24629.9	100187.3	55154.5
60	6.3	960	119937.5	59.7	23636.5	96301.0	55226.7
61	6.3	921	115148.2	59.1	22713.6	92434.6	55175.1
62	6.4	884	110444.1	58.5	21854.1	88590.1	54999.7
63	6.4	847	105820.7	57.9	21051.9	84768.8	54699.7
64	6.5	810	101273.3	57.3	20301.4	80971.9	54274.3
65	6.5	774	96797.4	56.8	19597.8	77199.6	53721.9



Design Equations (Vector Analysis):

$a = c_{FS}*L_{CR}*\sin(90+\phi_{FS})/\sin(\alpha-\phi_{FS})$

$b = W-a$

$P_A = b*\tan(\alpha-\phi_{FS})$

$EFP = 2*P_A/H^2$

Maximum Active Pressure Resultant

$P_{A,\,max}$ 55226.7 lbs/lineal foot

Equivalent Fluid Pressure (per lineal foot of shoring)

$EFP = 2*P_A/H^2$

EFP 32.8 pcf

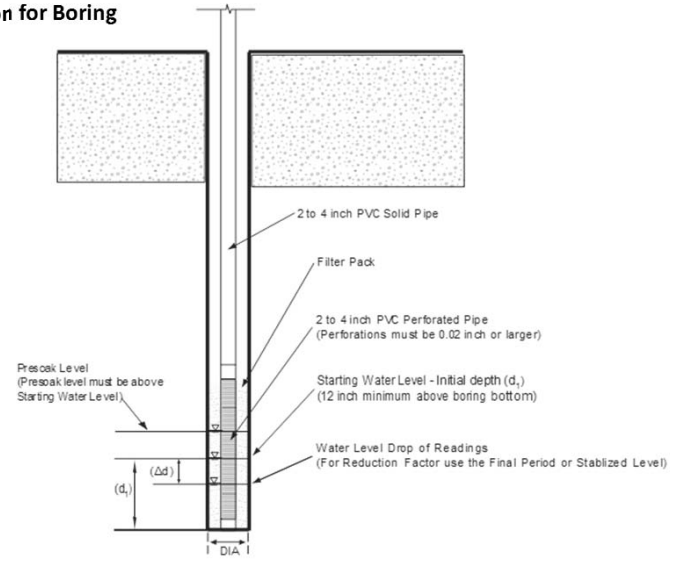
Design Shoring for an Equivalent Fluid Pressure: 40 pcf

Test Date: 24-Sep-18
File No. 21674
File Name : Green Hotel Apartments

Infiltration Rate Calculation for Boring

Testing Boring Number	1	
Boring Diameter (DIA)	8	inches
Depth of Boring	80	feet
Ground surface elevation	N.A.	feet
Length of Casing (dc)	80	feet
Top of Casing elevation	N.A.	feet
finish floor elevation	N.A.	feet
Elevation Bottom of Casing	#VALUE!	feet
Pre-soak Time	2	hours
Measured By	H.C.	

Terms
Initial water depth (d1) =dc-di
Water level drop (Δd) = di-df



Reading Number	Clock Time	Elapsed Time	Water Measurement (d_i) and (d_f)	Percolation Rate	Preadjusted Percolation Rate		Initial Water depth (d1)	Water level Drop (Δd)	Raw Percolation Rate	Percolation Rate Variation
							d1 = dc-di	Δd = di-df	Vol. H2o / Bor. Surface	
		Min	feet	ft/min	in/hour		in	in	in/hr	Percent
1	14:10		50.00				360			
	14:20	10	73.90	2.39	1720.80			286.8	6.89	
2	14:23		50.00				360			
	14:33	10	73.40	2.34	1684.80			280.8	6.65	-2.1
3	14:40		50.00				360			
	14:50	10	73.00	2.30	1656.00			276	6.47	-1.7
4	14:55		50.00				360			
	15:05	10	72.80	2.28	1641.60			273.6	6.38	-0.9
5	15:09		50.00				360			
	15:19	10	72.50	2.25	1620.00			270	6.24	-1.3
6	15:22		50.00				360			
	15:32	10	72.50	2.25	1620.00			270	6.24	0.0

Note: Calculation based on County of Los Angeles, Administrative Manual, Low Impact Development Best Management PracticeGuideline for Design, Investigation, and Reporting, dated 6/30/17.
LA County Minimum 0.3 Inches per hour

Raw Percolation Rate= 6.2 in/hr
RF_t= 2
RF_v= 1
RF_s= 1

Design Infiltration Rate = 3.12 in/hr

Architectural
Resources Group

Central Park Apartments
86 S. Fair Oaks, Pasadena, CA

Appendix B: Title 24 Building Energy Analysis Report

BUILDING ENERGY ANALYSIS REPORT

PROJECT:

Central Park Apartments
86 S. Fair Oaks Avenue
Pasadena, CA 91105

Project Designer:

Architectural Resources Group
360 E. 2nd St., Suite 225
Los Angeles, CA 90012
626-583-1401

Report Prepared by:

Paul A. Breen, P.E.
Breen Engineering Inc.
1983 West 190th Street, Suite 200
Torrance, CA 90504
(310) 464-8404

Job Number:

687-18-004

Date:

July 2019

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2016 Building Energy Efficiency Standards.

This program developed by EnergySoft Software – www.energysoft.com.

TABLE OF CONTENTS

Cover Page	1
Table of Contents	2
Form PRF-01-E Certificate of Compliance	3
Form ENV-MM Envelope Mandatory Measures	45
HVAC System Heating and Cooling Loads Summary	46

Project Name:	Central Park Apartments	NRCC-PRF-01-E	Page 1 of 42
Project Address:	86 S. Fair Oaks Avenue Pasadena 91105	Calculation Date/Time:	20:35, Wed, Jul 31, 2019
Compliance Scope:	NewEnvelopeAndMechanical	Input File Name:	Central Park Apartments.cibd16x

A. PROJECT GENERAL INFORMATION

1.	Project Location (city)	Pasadena	**8.**	Standards Version	Compliance2016
2.	CA Zip Code	91105	**9.**	Compliance Software (version)	EnergyPro 7.2
3.	Climate Zone	9	**10.**	Weather File	BURBANK-GLENDALE_722880_CZ2010.epw
4.	Total Conditioned Floor Area in Scope	73,683 ft^2	**11.**	Building Orientation (deg)	(W) 270 deg
5.	Total Unconditioned Floor Area	19,672 ft^2	**12.**	Permitted Scope of Work	NewEnvelopeAndMechanical
6.	Total # of Stories (Habitable Above Grade)	6	13	Building Type(s)	High-Rise Residential
7.	Total # of dwelling units	88 (including live/work units)	14	Gas Type	NaturalGas

B. COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft^2-yr) **§ 140.1**

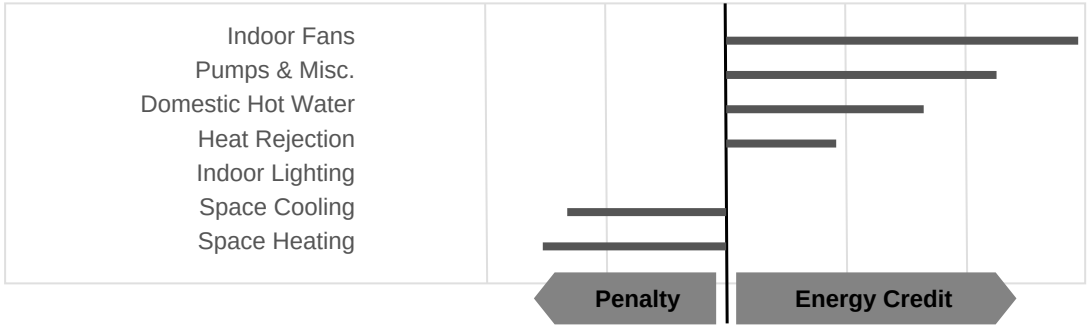
BUILDING COMPLIES

1. Energy Component	2. Standard Design (TDV)	3. Proposed Design (TDV)	4. Compliance Margin (TDV)	5. Percent Better than Standard
Space Heating	3.95	7.66	-3.71	-93.9%
Space Cooling	38.90	42.11	-3.21	-8.3%
Indoor Fans	21.91	14.75	7.16	32.7%
Heat Rejection	2.21	--	2.21	--
Pumps & Misc.	5.49	--	5.49	--
Domestic Hot Water	17.51	13.51	4.00	22.8%
Indoor Lighting	16.13	16.13	--	0.0%
COMPLIANCE TOTAL	**106.10**	**94.16**	**11.94**	**11.3%**
Receptacle	41.41	41.41	0.0	0.0%
Process	--	--	--	--
Other Ltg	30.41	30.41	0.0	0.0%
Process Motors	--	--	--	--
TOTAL	**177.92**	**165.98**	**11.9**	**6.7%**

C. PRIORITY PLAN CHECK/ INSPECTION ITEMS (in order of highest to lowest TDV energy savings)

1st	Indoor Fans: Check envelope and mechanical
2nd	Pumps & Misc.: Check mechanical
3rd	Domestic Hot Water: Check mechanical
4th	Heat Rejection: Check envelope and mechanical
5th	Indoor Lighting: Check lighting
6th	Space Cooling: Check envelope and mechanical
7th	Space Heating: Check envelope and mechanical

Compliance Margin By Energy Component (from Table B column 4)



D. EXCEPTIONAL CONDITIONS

This project includes partial performance compliance scope options. The building must show compliance with all other applicable compliance scope options (performance or prescriptively) before occupying.

The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.

This project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.

This project includes Domestic Hot Water in the analysis. Please verify that Domestic Hot Water is included in the design for the permitted scope of work.

E. HERS VERIFICATION

This Section Does Not Apply

F. ADDITIONAL REMARKS

None Provided

G. COMPLIANCE PATH & CERTIFICATE OF COMPLIANCE SUMMARY

Identify which building components use the performance or prescriptive path for compliance. "NA"= not in project

For components that utilize the performance path, indicate the sheet number that includes mandatory notes on plans.

Building Component	Compliance Path		Compliance Forms *(required for submittal)*	Location of Mandatory Notes on Plans
Envelope	☒	Performance	NRCC-PRF-ENV-DETAILS (section of the NRCC-PRF-01-E)	
	☐	Prescriptive	NRCC-ENV-01 / 02 / 03 / 04 / 05 / 06-E	
	☐	NA		
Mechanical	☒	Performance	NRCC-PRF-MCH-DETAILS (section of the NRCC-PRF-01-E)	
	☐	Prescriptive	NRCC-MCH-01 / 02 / 03 / 04 / 05 / 06 / 07-E	
	☐	NA		
Domestic Hot Water	☒	Performance	NRCC-PRF-PLB-DETAILS (section of the NRCC-PRF-01-E)	
	☐	Prescriptive	NRCC-PLB-01-E	
	☐	NA		
Lighting (Indoor Conditioned)	☐	Performance	NRCC-PRF-LTI-DETAILS (section of the NRCC-PRF-01-E)	
	☒	Prescriptive	NRCC-LTI-01 / 02 / 03 / 04 / 05-E	
	☐	NA		
Covered Process: Commercial Kitchens	☐	Performance	S2 (section of the NRCC-PRF-01-E)	
	☐	Prescriptive	NRCC-PRC-01/ 03-E	
	☒	NA		
Covered Process: Computer Rooms	☐	Performance	S3 (section of the NRCC-PRF-01-E)	
	☐	Prescriptive	NRCC-PRC-01/ 04-E	
	☒	NA		
Covered Process: Laboratory Exhaust	☐	Performance	S4 (section of the NRCC-PRF-01-E)	
	☐	Prescriptive	NRCC-PRC-01/ 09-E	
	☒	NA		

G. COMPLIANCE PATH & CERTIFICATE OF COMPLIANCE SUMMARY

The following building components are only eligible for prescriptive compliance. Indicate which are relevant to the project.				*The following building components may have mandatory requirements per Part 6. Indicate which are relevant to the project.*			
Yes	**NA**	**Prescriptive Requirement**	**Compliance Forms**	**Yes**	**NA**	**Mandatory Requirement**	**Compliance Forms**
☒	☐	Lighting (Indoor Unconditioned) §140.6	NRCC-LTI-01 / 02 / 03 / 04 / 05-E	☐ ☐	☒ ☒	Commissioning: §120.8 Simple Systems Complex Systems	 NRCC-CXR-01 / 02 / 03 / 05-E NRCC-CXR-01 / 02 / 04 / 05-E
☐	☒	Lighting (Outdoor) §140.7	NRCC-LTO-01 / 02 / 03-E	☐	☒	Electrical: §130.5	NRCC-ELC-01-E
☐	☒	Lighting (Sign) §140.8	NRCC-LTS-01-E	☐	☒	Solar Ready: §110.10	NRCC-SRA-01 / 02-E
☒	☐	Solar Thermal Water Heating: §140.5	NRCC-STH-01-E	☐ ☐ ☐ ☐ ☐	☒ ☒ ☒ ☒ ☒	Covered Process: §120.6 Parking Garage Commercial Refrigeration Warehouse Refrigeration Compressed Air Process Boilers	NRCC-PRC-01-E NRCC-PRC-02-E NRCC-PRC-05-E NRCC-PRC-06/07/08-E NRCC-PRC-10-E NRCC-PRC-11-E

H. CERTIFICATE OF INSTALLATION, CERTIFICATE OF ACCEPTANCE & CERTIFICATE OF VERIFICATION SUMMARY (NRCI/NRCA/NRCV) – Documentation Author to indicate which Certificates must be submitted for the features to be recognized for compliance (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify). See Tables G. and H. in MCH and LTI Details Sections for Acceptance Tests and forms by equipment.		**Confirmed**	
Building Component	**Compliance Forms *(required for submittal)***	**Pass**	**Fail**
Envelope	☒ NRCI-ENV-01-E - For all buildings	☐	☐
	☒ NRCA-ENV-02-F- NFRC label verification for fenestration	☐	☐
Mechanical	☒ NRCI-MCH-01-E - For all buildings with Mechanical Systems	☐	☐
	☒ NRCA-MCH-02-A- Outdoor Air	☐	☐
	☒ NRCA-MCH-03-A – Constant Volume Single Zone HVAC	☐	☐
	☐ NRCA-MCH-04-H- Air Distribution Duct Leakage	☐	☐
	☐ NRCA-MCH-05-A- Air Economizer Controls	☐	☐
	☐ NRCA-MCH-06-A- Demand Control Ventilation	☐	☐
	☐ NRCA-MCH-07-A – Supply Fan Variable Flow Controls	☐	☐
	☐ NRCA-MCH-08-A- Valve Leakage Test	☐	☐
	☒ NRCA-MCH-09-A – Supply Water Temp Reset Controls	☐	☐
	☐ NRCA-MCH-10-A- Hydronic System Variable Flow Controls	☐	☐
	☐ NRCA-MCH-11-A – Auto Demand Shed Controls	☐	☐
	☐ NRCA-MCH-12-A- Packaged Direct Expansion Units	☐	☐
	☐ NRCA-MCH-13-A- Air Handling Units and Zone Terminal Units	☐	☐
	☐ NRCA-MCH-14-A- Distributed Energy Storage	☐	☐
	☐ NRCA-MCH-15-A – Thermal Energy Storage	☐	☐
	☐ NRCA-MCH-16-A- Supply Air Temp Reset Controls	☐	☐
	☐ NRCA-MCH-17-A – Condensate Water Temp Reset Controls	☐	☐
	☐ NRCA-MCH-18-A- Energy Management Controls Systems	☐	☐
	☐ NRCV-MCH-04-H- Duct Leakage Test	☐	☐

H. CERTIFICATE OF INSTALLATION, CERTIFICATE OF ACCEPTANCE & CERTIFICATE OF VERIFICATION SUMMARY (NRCI/NRCA/NRCV) – Documentation Author to indicate which Certificates must be submitted for the features to be recognized for compliance (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify). See Tables G. and H. in MCH and LTI Details Sections for Acceptance Tests and forms by equipment.		**Confirmed**	
Building Component	**Compliance Forms *(required for submittal)***	**Pass**	**Fail**
Plumbing	☒ NRCI-PLB-01-E - For all buildings with Plumbing Systems	☐	☐
	☐ NRCI-PLB-02-E - required on central systems in high-rise residential, hotel/motel application.	☐	☐
	☐ NRCI-PLB-03-E - Single dwelling unit systems in high-rise residential, hotel/motel application.	☐	☐
	☐ NRCI-PLB-21-E - HERS verified central systems in high-rise residential, hotel/motel application.	☐	☐
	☐ NRCI-PLB-22-E - HERS verified single dwelling unit systems in high-rise residential, hotel/motel application.	☐	☐
	☐ NRCV-PLB-21-H- HERS verified central systems in high-rise residential, hotel/motel application.	☐	☐
	☐ NRCV-PLB-22-H - HERS verified single dwelling unit systems in high-rise residential, hotel/motel application.	☐	☐
	☒ NRCI-STH-01-E - Any solar water heating	☐	☐
Indoor Lighting	☐ NRCI-LTI-01-E - For all buildings	☐	☐
	☐ NRCI-LTI-02-E - Lighting control system, or for an Energy Management Control System (EMCS)	☐	☐
	☐ NRCI-LTI-03-E - Line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting	☐	☐
	☐ NRCI-LTI-04-E - Two interlocked systems serving an auditorium, a convention center, a conference room, or a theater	☐	☐
	☐ NRCI-LTI-05-E - Lighting Control Credit Power Adjustment Factor (PAF)	☐	☐
	☐ NRCI-LTI-06-E - Additional wattage installed in a video conferencing studio	☐	☐
	☐ NRCA-LTI-02-A - Occupancy sensors and automatic time switch controls.	☐	☐
	☒ NRCA-LTI-03-A - Automatic daylighting controls	☐	☐
	☐ NRCA-LTI-04-A - Demand responsive lighting controls	☐	☐
Outdoor Lighting	☐ NRCI-LTO-01-E – Outdoor Lighting	☐	☐
	☐ NRCI-LTO-02-E- EMCS Lighting Control System	☐	☐
	☐ NRCA-LTO-02-A - Outdoor Lighting Control	☐	☐
Sign Lighting	☐ NRCI-LTS-01-E – Sign Lighting	☐	☐
Electrical	☐ NRCI-ELC-01-E - Electrical Power Distribution	☐	☐
Photovoltaic	☐ NRCI-SPV-01-E Photovoltaic Systems	☐	☐

H. CERTIFICATE OF INSTALLATION, CERTIFICATE OF ACCEPTANCE & CERTIFICATE OF VERIFICATION SUMMARY (NRCI/NRCA/NRCV) – Documentation Author to indicate which Certificates must be submitted for the features to be recognized for compliance (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify). See Tables G. and H. in MCH and LTI Details Sections for Acceptance Tests and forms by equipment.		**Confirmed**	
Building Component	**Compliance Forms *(required for submittal)***	**Pass**	**Fail**
Covered Process	☐ NRCI-PRC-01-E Covered Processes	☐	☐
	☐ NRCA-PRC-01-F- Compressed Air Systems	☐	☐
	☐ NRCA-PRC-02-F- Kitchen Exhaust	☐	☐
	☐ NRCA-PRC-03-F- Garage Exhaust	☐	☐
	☐ NRCA-PRC-04-F- Refrigerated Warehouse- Evaporator Fan Motor Controls	☐	☐
	☐ NRCA-PRC-05-F- Refrigerated Warehouse- Evaporative Condenser Controls	☐	☐
	☐ NRCA-PRC-06-F- Refrigerated Warehouse- Air Cooled Condenser Controls	☐	☐
	☐ NRCA-PRC-07F- Refrigerated Warehouse- Variable Speed Compressor	☐	☐
	☐ NRCA-PRC-08-F- Electrical Resistance Underslab Heating System	☐	☐

I. ENVELOPE GENERAL INFORMATION (See NRCC-PRF-ENV-DETAILS for more information)

						Confirmed	
1.	Total Conditioned Floor Area	73,683 ft^2	**5.**	Number of Floors Above Grade	6		
2.	Total Unconditioned Floor Area	19,672 ft^2	**6.**	Number of Floors Below Grade	0	**Pass**	**Fail**
3.	Addition Conditioned Floor Area	0 ft^2					
4.	Addition Unconditioned Floor Area	0 ft^2					

7. Opaque Surfaces & Orientation	**8. Total Gross Surface Area**	**9. Total Fenestration Area**	**10. Window to Wall Ratio**	**Pass**	**Fail**
North Wall	4,089 ft^2	797 ft^2	19.5%	☐	☐
East Wall	11,794 ft^2	4,242 ft^2	36.0%	☐	☐
South Wall	6,663 ft^2	3,386 ft^2	50.8%	☐	☐
West Wall	11,515 ft^2	4,738 ft^2	41.1%	☐	☐
Total	**34,061 ft^2**	**13,162 ft^2**	**38.6%**	☐	☐
Roof	11,150 ft^2	0 ft^2	00.0%	☐	☐

J. FENESTRATION ASSEMBLY SUMMARY							§ 110.6		Confirmed	
1.	2.	3.	4.	5.	6.	7.	8.	9.	Pass	Fail
Fenestration Assembly Name / Tag or I.D.	Fenestration Type / Product Type / Frame Type	Certification Method[1]	Assembly Method	Area ft^2	Overall U-factor	Overall SHGC	Overall VT	Status[2]		
Glass Door	VerticalFenestration GlazedDoor N/A	NFRC Rated	Manufactured	4929	0.29	0.23	0.50	N	☐	☐
Glass Window	VerticalFenestration FixedWindow N/A	NFRC Rated	Manufactured	6402	0.29	0.23	0.50	N	☐	☐
Storefront Glass Door	VerticalFenestration FixedWindow N/A	NFRC Rated	Manufactured	583	0.92	0.79	0.87	N	☐	☐
Storefront Glass Window	VerticalFenestration FixedWindow N/A	NFRC Rated	Manufactured	1248	0.92	0.79	0.87	N	☐	☐

[1] Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.

[2] Status: N - New, A – Altered, E – Existing

Taking compliance credit for fenestration shading devices? (if "Yes", see NRCC-PRF-ENV-DETAILS for more information)	No

K. OPAQUE SURFACE ASSEMBLY SUMMARY						§ 120.7/ § 140.3		Confirmed	
1.	2.	3.	4.	5.	6.	7.	8.	Pass	Fail
Surface Name	Surface Type	Area (ft^2)	Framing Type	Cavity R-Value	Continuous R-Value	U-Factor / F-Factor / C-Factor	Status[1]		
R-19 Wall (Level 2 -Pent)7	ExteriorWall	25755	Wood	19	NA	U-Factor: 0.072	N	☐	☐
R-30 Floor No Crawlspace10	ExteriorFloor	73683	NA	0	NA	U-Factor: 0.229	N	☐	☐
R-30 Roof111	Roof	11150	Wood	30	NA	U-Factor: 0.031	N	☐	☐
8 CMU Wall (Level 1-Mez617	ExteriorWall	8306	NA	0	NA	U-Factor: 0.552	N	☐	☐
R-19 Wall (Interior)654	InteriorWall	150	Wood	19	NA	U-Factor: 0.066	N	☐	☐
Slab On Grade673	UndergroundFloor	19672	NA	0	NA	F-Factor: 0.730	N	☐	☐

[1] Status: N - New, A – Altered, E – Existing

L. ROOFING PRODUCT SUMMARY | **§ 140.3** | **Confirmed**

1.	2.	3.	4.	5.	6.	7.	Pass	Fail
Product Type	**Product Density (lb/ft²)**	**Aged Solar Reflectance**	**Thermal Emittance**	**SRI**	**Cool Roof Credit**	**Roofing Product Description**		
R-30 Roof111	7.135	0.55	0.75	Not Provided	Yes	CRRC Prod. ID: R-30 Roof	☐	☐

M. HVAC SYSTEM SUMMARY (see NRCC-PRF-MCH-DETAILS for more information) | **§ 110.1 / § 110.2**

Dry System Equipment [1] (Fan & Economizer info included below in Table N) | **Confirmed**

1.	2.	3.	4.	5.	6.	7.	8.	9.		10.	11.	Pass	Fail
Equip Name	**Equip Type**	**System Type (Simple [2] or Complex [3])**	**Qty**	**Total Heating Output (kBtu/h)**	**Supp Heat Source (Y/N)**	**Supp Heat Output (kBtuh)**	**Total Cooling Output (kBtu/h)**	**Efficiency**		**Acceptance Testing Required? (Y/N) [4]**	**Status[5]**		
								Cooling	**Heating**				
2nd Floor Studio Units3	Exhaust ()	Simple	5	0	No	0	0	NA	NA	No	N	☐	☐
3rd Floor Studio Units28	Exhaust ()	Simple	7	0	No	0	0	NA	NA	No	N	☐	☐
4th Floor Studio Units65	Exhaust ()	Simple	5	0	No	0	0	NA	NA	No	N	☐	☐
5th Floor Studio Units86	Exhaust ()	Simple	5	0	No	0	0	NA	NA	No	N	☐	☐
6th Floor Studio Units107	Exhaust ()	Simple	5	0	No	0	0	NA	NA	No	N	☐	☐
6th Floor Studio Units119	Exhaust ()	Simple	5	0	No	0	0	NA	NA	No	N	☐	☐
2nd Floor One Bed Units156	Exhaust ()	Simple	10	0	No	0	0	NA	NA	No	N	☐	☐
3rd Floor One Bed Units207	Exhaust ()	Simple	7	0	No	0	0	NA	NA	No	N	☐	☐
4th Floor One Bed Units242	Exhaust ()	Simple	7	0	No	0	0	NA	NA	No	N	☐	☐
5th Floor One Bed Units285	Exhaust ()	Simple	7	0	No	0	0	NA	NA	No	N	☐	☐

M. HVAC SYSTEM SUMMARY (see NRCC-PRF-MCH-DETAILS for more information) — **§ 110.1 / § 110.2**

Dry System Equipment [1] (Fan & Economizer info included below in Table N) — **Confirmed**

1.	2.	3.	4.	5.	6.	7.	8.	9.		10.	11.	Pass	Fail
Equip Name	**Equip Type**	**System Type (Simple [2] or Complex [3])**	**Qty**	**Total Heating Output (kBtu/h)**	**Supp Heat Source (Y/N)**	**Supp Heat Output (kBtuh)**	**Total Cooling Output (kBtu/h)**	**Efficiency**		**Acceptance Testing Required? (Y/N) [4]**	**Status[5]**		
								Cooling	**Heating**				
6th Floor One Bed Units328	Exhaust ()	Simple	6	0	No	0	0	NA	NA	No	N	☐	☐
2nd Floor Two Bed Units359	Exhaust ()	Simple	4	0	No	0	0	NA	NA	No	N	☐	☐
3rd Floor Two Bed Units407	Exhaust ()	Simple	3	0	No	0	0	NA	NA	No	N	☐	☐
4th Floor Two Bed Units445	Exhaust ()	Simple	4	0	No	0	0	NA	NA	No	N	☐	☐
5th Floor Two Bed Units495	Exhaust ()	Simple	4	0	No	0	0	NA	NA	No	N	☐	☐
6th Floor Two Bed Units545	Exhaust ()	Simple	5	0	No	0	0	NA	NA	No	N	☐	☐
6th Floor Two Bed Units575	Exhaust ()	Simple	5	0	No	0	0	NA	NA	No	N	☐	☐
Level 1 Work/Live Units614	Exhaust ()	Simple	4	0	No	0	0	NA	NA	No	N	☐	☐
Mezzanine Level_Amenity L	SZHP (Split1Phase)	Simple	1	56	No	0	55	SEER-14.000 / EER-11.000	HSPF-8.200	Yes	N	☐	☐
Level 1 Retail Space	SZHP (Split1Phase)	Simple	4	56	No	0	55	SEER-14.000 / EER-11.000	HSPF-8.200	Yes	N	☐	☐
Level 1 Restaurant	SZHP (Split1Phase)	Simple	3	56	No	0	55	SEER-14.000 / EER-11.000	HSPF-8.200	Yes	N	☐	☐
Level 1 Lobby	SZHP (Split1Phase)	Simple	2	56	No	0	55	SEER-14.000 / EER-11.000	HSPF-8.200	Yes	N	☐	☐

M. HVAC SYSTEM SUMMARY (see NRCC-PRF-MCH-DETAILS for more information) — **§ 110.1 / § 110.2**

Dry System Equipment [1] (Fan & Economizer info included below in Table N) — **Confirmed**

1.	2.	3.	4.	5.	6.	7.	8.	9.		10.	11.	Pass	Fail
Equip Name	**Equip Type**	**System Type (Simple [2] or Complex [3])**	**Qty**	**Total Heating Output (kBtu/h)**	**Supp Heat Source (Y/N)**	**Supp Heat Output (kBtuh)**	**Total Cooling Output (kBtu/h)**	**Efficiency**		**Acceptance Testing Required? (Y/N) [4]**	**Status[5]**		
								Cooling	**Heating**				
Level 1 Leasing Office	SZHP (Split1Phase)	Simple	1	14	No	0	12	SEER-21.100 / EER-13.000	HSPF-10.200	Yes	N	☐	☐
Level 1 Amenity Space	SZHP (Split1Phase)	Simple	1	14	No	0	12	SEER-21.100 / EER-13.000	HSPF-10.200	Yes	N	☐	☐
Mezzanine Level_Gym	SZHP (Split1Phase)	Simple	1	56	No	0	55	SEER-14.000 / EER-11.000	HSPF-8.200	Yes	N	☐	☐
Level 2 Studio Units	SZHP (Split1Phase)	Simple	5	14	No	0	12	SEER-21.100 / EER-13.000	HSPF-10.200	Yes	N	☐	☐
Level 3 Studio Units	SZHP (Split1Phase)	Simple	7	14	No	0	12	SEER-21.100 / EER-13.000	HSPF-10.200	Yes	N	☐	☐
Level 4 Studio Units	SZHP (Split1Phase)	Simple	5	14	No	0	12	SEER-21.100 / EER-13.000	HSPF-10.200	Yes	N	☐	☐
Level 5 Studio Units	SZHP (Split1Phase)	Simple	5	14	No	0	12	SEER-21.100 / EER-13.000	HSPF-10.200	Yes	N	☐	☐
Level 6 Studio Units	SZHP (Split1Phase)	Simple	5	14	No	0	12	SEER-21.100 / EER-13.000	HSPF-10.200	Yes	N	☐	☐
Level 6 T/H One Bed Units	SZHP (Split1Phase)	Simple	3	14	No	0	12	SEER-21.100 / EER-13.000	HSPF-10.200	Yes	N	☐	☐
Level 2 One Bed Units	SZHP (Split1Phase)	Simple	10	19	No	0	17	SEER-19.900 / EER-10.800	HSPF-10.200	Yes	N	☐	☐

M. HVAC SYSTEM SUMMARY (see NRCC-PRF-MCH-DETAILS for more information) — **§ 110.1 / § 110.2**

Dry System Equipment [1] (Fan & Economizer info included below in Table N) — **Confirmed**

1.	2.	3.	4.	5.	6.	7.	8.	9.		10.	11.	Pass	Fail
Equip Name	**Equip Type**	**System Type (Simple [2] or Complex [3])**	**Qty**	**Total Heating Output (kBtu/h)**	**Supp Heat Source (Y/N)**	**Supp Heat Output (kBtuh)**	**Total Cooling Output (kBtu/h)**	**Efficiency**		**Acceptance Testing Required? (Y/N) [4]**	**Status[5]**		
								Cooling	**Heating**				
Level 3 One Bed Units	SZHP (Split1Phase)	Simple	7	19	No	0	17	SEER-19.900 / EER-10.800	HSPF-10.200	Yes	N	☐	☐
Level 4 One Bed Units	SZHP (Split1Phase)	Simple	7	19	No	0	17	SEER-19.900 / EER-10.800	HSPF-10.200	Yes	N	☐	☐
Level 5 One Bed Units	SZHP (Split1Phase)	Simple	7	19	No	0	17	SEER-19.900 / EER-10.800	HSPF-10.200	Yes	N	☐	☐
Level 6 One Bed Units	SZHP (Split1Phase)	Simple	6	19	No	0	17	SEER-19.900 / EER-10.800	HSPF-10.200	Yes	N	☐	☐
Level 2 Two Bed Units	SZHP (Split1Phase)	Simple	4	26	No	0	23	SEER-19.600 / EER-11.700	HSPF-10.800	Yes	N	☐	☐
Level 3 Two Bed Units	SZHP (Split1Phase)	Simple	3	26	No	0	23	SEER-19.600 / EER-11.700	HSPF-10.800	Yes	N	☐	☐
Level 4 Two Bed Units	SZHP (Split1Phase)	Simple	4	26	No	0	23	SEER-19.600 / EER-11.700	HSPF-10.800	Yes	N	☐	☐
Level 5 Two Bed Units	SZHP (Split1Phase)	Simple	4	26	No	0	23	SEER-19.600 / EER-11.700	HSPF-10.800	Yes	N	☐	☐
Level 6 Two Bed Units	SZHP (Split1Phase)	Simple	3	26	No	0	23	SEER-19.600 / EER-11.700	HSPF-10.800	Yes	N	☐	☐
Level 6 T/H Two Bed Units	SZHP (Split1Phase)	Simple	2	32	No	0	34	SEER-15.500 / EER-11.700	HSPF-9.400	Yes	N	☐	☐

M. HVAC SYSTEM SUMMARY (see NRCC-PRF-MCH-DETAILS for more information) | **§ 110.1 / § 110.2**

Dry System Equipment [1] (Fan & Economizer info included below in Table N) | **Confirmed**

1.	2.	3.	4.	5.	6.	7.	8.	9.		10.	11.	Confirmed	
Equip Name	**Equip Type**	**System Type (Simple [2] or Complex [3])**	**Qty**	**Total Heating Output (kBtu/h)**	**Supp Heat Source (Y/N)**	**Supp Heat Output (kBtuh)**	**Total Cooling Output (kBtu/h)**	**Efficiency**		**Acceptance Testing Required? (Y/N) [4]**	**Status[5]**	**Pass**	**Fail**
								Cooling	**Heating**				
Level 1 + Mezzanine Work/	SZHP (Split1Phase)	Simple	4	32	No	0	34	SEER-15.500 / EER-11.700	HSPF-9.400	Yes	N	☐	☐

[1] Dry System Equipment includes furnaces, air handling units, heat pumps, etc.

[2] Simple Systems must complete NRCC-CXR-03-E commissioning design review form

[3] Complex Systems must complete NRCC-CXR-04-E commissioning design review form

[4] A summary of which acceptance tests are applicable is provided in NRCC-PRF-MCH-DETAILS

[5] Status: N - New, A – Altered, E – Existing

Wet System Equipment [1]								*Pumps*					Confirmed	
12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.		
Equip Name	**Equip Type**	**Qty**	**Vol (gal)**	**Rated Capacity (kBtu/h)**	**Efficiency**	**Standby Loss**	**Tank Ext. R Value**	**Qty**	**GPM**	**HP**	**VSD (Y/N)**	**Status[2]**	**Pass**	**Fail**
Raypak WH-902C1	Storage	2	356.00	900	Thrml. Eff.: 0.87	SBLF: 0.001	NA		NA		No	N	☐	☐
Raypak WH-902C1 2	Commercial Storage (TE & SBL)	2	356.00	900	Thrml. Eff.: 0.870	0.0010		NA	NA	0 (kW)	NA	N	☐	☐

[1] Wet System Equipment includes boilers, chillers, cooling towers, water heaters, etc.

[2] Status: N - New, A – Altered, E – Existing

Discrepancy between modeled and designed equipment sizing? (if "Yes", see Table F. "Additional Remarks" for an explanation)	No

N. ECONOMIZER & FAN SYSTEMS SUMMARY[1] | **§ 140.4** | **Confirmed**

1.	2.	3.					4.					5.		
Equip Name	Outside Air	Supply Fan					Return Fan					Economizer Type (if present)	Pass	Fail
	CFM	CFM	HP	BHP	TSP (inch WC)	Control	CFM	HP	BHP	TSP (inch WC)	Control			
Mezzanine Level_Amenity L	765	1750	0.500	0.500	0.91	ConstantVolume	NA	NA	NA	NA	NA	NoEconomizer	☐	☐
Level 1 Retail Space	211	1750	0.500	0.500	0.91	ConstantVolume	NA	NA	NA	NA	NA	NoEconomizer	☐	☐
Level 1 Restaurant	329	1750	0.500	0.500	0.91	ConstantVolume	NA	NA	NA	NA	NA	NoEconomizer	☐	☐
Level 1 Lobby	592	1750	0.500	0.500	0.91	ConstantVolume	NA	NA	NA	NA	NA	NoEconomizer	☐	☐
Level 1 Leasing Office	89	450	0.066	0.066	0.47	ConstantVolume	NA	NA	NA	NA	NA	NoEconomizer	☐	☐
Level 1 Amenity Space	394	450	0.066	0.066	0.47	ConstantVolume	NA	NA	NA	NA	NA	NoEconomizer	☐	☐
Mezzanine Level_Gym	348	1750	0.500	0.500	0.91	ConstantVolume	NA	NA	NA	NA	NA	NoEconomizer	☐	☐
Level 2 Studio Units	0	450	0.066	0.066	0.47	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 3 Studio Units	0	450	0.066	0.066	0.47	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 4 Studio Units	0	450	0.066	0.066	0.47	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 5 Studio Units	0	450	0.066	0.066	0.47	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 6 Studio Units	0	450	0.066	0.066	0.47	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 6 T/H One Bed Units	0	450	0.066	0.066	0.47	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 2 One Bed Units	0	560	0.066	0.066	0.37	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐

N. ECONOMIZER & FAN SYSTEMS SUMMARY[1] | **§ 140.4** | **Confirmed**

1.	2.	3.					4.					5.		
Equip Name	Outside Air	Supply Fan					Return Fan					Economizer Type (if present)	Pass	Fail
	CFM	CFM	HP	BHP	TSP (inch WC)	Control	CFM	HP	BHP	TSP (inch WC)	Control			
Level 3 One Bed Units	0	560	0.066	0.066	0.37	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 4 One Bed Units	0	560	0.066	0.066	0.37	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 5 One Bed Units	0	560	0.066	0.066	0.37	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 6 One Bed Units	0	560	0.066	0.066	0.37	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 2 Two Bed Units	0	700	0.094	0.094	0.43	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 3 Two Bed Units	0	700	0.094	0.094	0.43	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 4 Two Bed Units	0	700	0.094	0.094	0.43	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 5 Two Bed Units	0	700	0.094	0.094	0.43	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 6 Two Bed Units	0	700	0.094	0.094	0.43	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 6 T/H Two Bed Units	0	1200	0.189	0.189	0.50	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐
Level 1 + Mezzanine Work/	0	1200	0.189	0.189	0.50	ConstantVolume	NA	NA	NA	NA	NA	NA	☐	☐

[1] *Mechanical ventilation calculations and exhaust fans are included in the NRCC-PRF-MCH-DETAILS section*

O. EQUIPMENT CONTROLS			**§ 120.2**	**Confirmed**
1.	**2.**	**3.**	**Pass**	**Fail**
Equip Name	**Equip Type**	**Controls**		
2nd Floor Studio Units3	Exhaust	NA	☐	☐
3rd Floor Studio Units28	Exhaust	NA	☐	☐
4th Floor Studio Units65	Exhaust	NA	☐	☐
5th Floor Studio Units86	Exhaust	NA	☐	☐
6th Floor Studio Units107	Exhaust	NA	☐	☐
6th Floor Studio Units119	Exhaust	NA	☐	☐
2nd Floor One Bed Units156	Exhaust	NA	☐	☐
3rd Floor One Bed Units207	Exhaust	NA	☐	☐
4th Floor One Bed Units242	Exhaust	NA	☐	☐
5th Floor One Bed Units285	Exhaust	NA	☐	☐
6th Floor One Bed Units328	Exhaust	NA	☐	☐
2nd Floor Two Bed Units359	Exhaust	NA	☐	☐
3rd Floor Two Bed Units407	Exhaust	NA	☐	☐
4th Floor Two Bed Units445	Exhaust	NA	☐	☐
5th Floor Two Bed Units495	Exhaust	NA	☐	☐
6th Floor Two Bed Units545	Exhaust	NA	☐	☐
6th Floor Two Bed Units575	Exhaust	NA	☐	☐
Level 1 Work/Live Units614	Exhaust	NA	☐	☐
Mezzanine Level_Amenity L	SZHP	No DCV Controls No Economizer No Supply Air Temp. Control No Optimum Start No Evaporative Cooler No Heat Recovery	☐	☐
Level 1 Retail Space	SZHP	No DCV Controls No Economizer No Supply Air Temp. Control No Optimum Start No Evaporative Cooler No Heat Recovery	☐	☐

O. EQUIPMENT CONTROLS			**§ 120.2**	**Confirmed**
1.	**2.**	**3.**	**Pass**	**Fail**
Equip Name	**Equip Type**	**Controls**		
Level 1 Restaurant	SZHP	No DCV Controls No Economizer No Supply Air Temp. Control No Optimum Start No Evaporative Cooler No Heat Recovery	☐	☐
Level 1 Lobby	SZHP	No DCV Controls No Economizer No Supply Air Temp. Control No Optimum Start No Evaporative Cooler No Heat Recovery	☐	☐
Level 1 Leasing Office	SZHP	No DCV Controls No Economizer No Supply Air Temp. Control No Optimum Start No Evaporative Cooler No Heat Recovery	☐	☐
Level 1 Amenity Space	SZHP	No DCV Controls No Economizer No Supply Air Temp. Control No Optimum Start No Evaporative Cooler No Heat Recovery	☐	☐
Mezzanine Level_Gym	SZHP	No DCV Controls No Economizer No Supply Air Temp. Control No Optimum Start No Evaporative Cooler No Heat Recovery	☐	☐
DHW2 - SHW	Service Hot Water, Primary Only	Fixed Temperature Control, No DDC No Heat Recovery	☐	☐

P. SYSTEM DISTRIBUTION SUMMARY — **§ 120.4/ § 140.4(l)**

		Dry System Distribution					Confirmed	
1.	2.	3.	4.	5.		6.		
Equip Name	Equip Type	Duct Leakage and Sealing Required per 140.4(l)	Duct Leakage will be verified per NA1 and NA2	Ducts		Status[1]	Pass	Fail
				Insulation R-Value	Location			
Mezzanine Level_Amenity L	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 1 Retail Space	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 1 Restaurant	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 1 Lobby	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 1 Leasing Office	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 1 Amenity Space	SZHP	No	No	8	Unconditioned	N	☐	☐
Mezzanine Level_Gym	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 2 Studio Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 3 Studio Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 4 Studio Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 5 Studio Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 6 Studio Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 6 T/H One Bed Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 2 One Bed Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 3 One Bed Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 4 One Bed Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 5 One Bed Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 6 One Bed Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 2 Two Bed Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 3 Two Bed Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 4 Two Bed Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 5 Two Bed Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 6 Two Bed Units	SZHP	No	No	8	Unconditioned	N	☐	☐
Level 6 T/H Two Bed Units	SZHP	No	No	8	Unconditioned	N	☐	☐

P. SYSTEM DISTRIBUTION SUMMARY — **§ 120.4/ § 140.4(l)**

		Dry System Distribution					Confirmed	
1.	**2.**	**3.**	**4.**	**5.**		**6.**		
Equip Name	**Equip Type**	**Duct Leakage and Sealing Required per 140.4(l)**	**Duct Leakage will be verified per NA1 and NA2**	**Ducts**		**Status[1]**	**Pass**	**Fail**
				Insulation R-Value	**Location**			
Level 1 + Mezzanine Work/	SZHP	No	No	8	Unconditioned	N	☐	☐

[1] *Status: N - New, E – Existing*

Does the Project Include Zonal Systems? (if "Yes", see NRCC-PRF-MCH-DETAILS for system information)	Yes
Does the Project Include a Solar Hot Water System? (if "Yes", see NRCC-PRF-MCH-DETAILS for system information)	Yes
Multifamily or Hotel/ Motel Occupancy? (if "Yes", see NRCC-PRF-MCH-DETAILS for DHW system information)	Yes

Q. INDOOR CONDITIONED LIGHTING GENERAL INFO (see NRCC-PRF-LTI-DETAILS for more info)

This Section Does Not Apply

R. INDOOR CONDITIONED LIGHTING SCHEDULE (Adapted from NRCC-LTI-01-E)[1] — **§ 130.0**

This Section Does Not Apply

[1] *If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.*

S1. COVERED PROCESS SUMMARY – ENCLOSED PARKING GARAGES — **§ 140.9**

This Section Does Not Apply

S2. COVERED PROCESS SUMMARY – COMMERCIAL KITCHENS — **§ 140.9**

This Section Does Not Apply

S3. COVERED PROCESS SUMMARY – COMPUTER ROOMS — **§ 140.9**

This Section Does Not Apply

S4. COVERED PROCESS SUMMARY – LABORATORY EXHAUSTS — **§ 140.9**

This Section Does Not Apply

T. UNMET LOAD HOURS

Thermal Zone Name	Cooling Unmet Load Hour Limit for Thermal Zone	Proposed Cooling Unmet Load Hours	Heating Unmet Load Hour Limit for Thermal Zone	Proposed Heating Unmet Load Hours
24-Lobby + Low Ceiling	150	779.5	150	256.5
25-Leasing Office	150	981.25	150	19.5
26-Amenity	150	2843	150	11

U. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.0	33.6	--	174.4	--	--
Space Cooling	66.8	54.9	11.9	--	--	--
Indoor Fans	60.3	47.2	13.1	--	--	--
Heat Rejection	4.5	--	--	--	--	--
Pumps & Misc.	16.5	--	--	--	--	--
Domestic Hot Water	0.3	0.5	-0.2	886.9	679.1	207.8
Indoor Lighting	48.7	48.7	0.0	--	--	--
COMPLIANCE TOTAL	**197.1**	**184.9**	**12.2**	**1,061.3**	**679.1**	**--**
Receptacle	137.9	137.9	0.0	43.3	43.3	0.0
Process	--	--	--	--	--	--
Other Ltg	107.6	107.6	0.0	--	--	--
Process Motors	--	--	--	--	--	--
TOTAL	**442.6**	**430.4**	**12.2**	**1,104.6**	**722.4**	**--**

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	**§ 10-103**
I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Paul A. Breen, P.E. Company: Breen Engineering Inc.	Signature:
Address: 1983 West 190th Street, Suite 200	Signature Date: 7/31/2019
City/State/Zip: Torrance CA 90504	CEA Identification (If applicable): M-30533
Phone: (310) 464-8404	

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1	I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation; and that I am licensed in the State of California as a civil engineer, mechanical engineer, electrical engineer, or I am a licensed architect.
2	I affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code by section 5537.2 or 6737.3 to sign this document as the person responsible for its preparation; and that I am a licensed contractor performing this work.
3	I affirm that I am eligible under Division 3 of the Business and Professions Code to sign this document because it pertains to a structure or type of work described as exempt pursuant to Business and Professions Code Sections 5537, 5538 and 6737.1.

Responsible Envelope Designer Name: Company: Architectural Resources Group	**Signature:**	
Address: 360 E. 2nd St., Suite 225	Date Signed:	
City/State/Zip: Los Angeles CA 90012	Declaration Statement Type:	
Phone: 626-583-1401	Title:	License #:
Responsible Lighting Designer Name: Company:	**Signature: NOT IN SCOPE**	
Address:	Date Signed:	
City/State/Zip:	Declaration Statement Type:	
Phone:	Title:	License #:
Responsible Mechanical Designer Name: Paul A. Breen, P.E. Company: Breen Engineering Inc.	**Signature:**	
Address: 1983 West 190th Street, Suite 200	Date Signed: 7/31/2019	
City/State/Zip: Torrance CA 90504	Declaration Statement Type:	
Phone: (310) 464-8404	Title:	License #: M-30533

NRCC-PRF-ENV-DETAILS -SECTION START-

A. OPAQUE SURFACE ASSEMBLY DETAILS				Confirmed	
1.	2.	3.	4.	Pass	Fail
Surface Name	Surface Type	Description of Assembly Layers	Notes		
R-19 Wall (Level 2 -Pent)7	ExteriorWall	Stucco - 7/8 in. Vapor permeable felt - 1/8 in. Wood framed wall, 16in. OC, 5.5in., R-19 Gypsum Board - 5/8 in.		☐	☐
R-30 Floor No Crawlspace10	ExteriorFloor	Concrete - 140 lb/ft3 - 12 in. Carpet - 3/4 in.		☐	☐
R-30 Roof111	Roof	Clay tile - 1/2 in. Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Air - Ceiling - 3/4 in. Wood framed roof, 16in. OC, 11.25in., R-30 Gypsum Board - 5/8 in.		☐	☐
8 CMU Wall (Level 1-Mez617	ExteriorWall	Concrete - Solid Grout - 105 lb/ft3 - 8 in.		☐	☐
R-19 Wall (Interior)654	InteriorWall	Gypsum Board - 5/8 in. Wood framed wall, 16in. OC, 5.5in., R-19 Gypsum Board - 5/8 in.		☐	☐
Slab On Grade673	UndergroundFloor	Slab Type = UnheatedSlabOnGrade Insulation Orientation = None Insulation R-Value = R0		☐	☐

B. OVERHANG DETAILS (Adapted from NRCC-ENV-02-E)					Confirmed	
1.	2.	3.		4.	Pass	Fail
Fenestration Tag/ID	Fenestration Orientation	Overhang Dimensions		Side fin		
		Horizontal Projection	Distance Above Window	Vertical Projection		
Balcony Door67	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door71	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door75	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door79	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐

B. OVERHANG DETAILS (Adapted from NRCC-ENV-02-E)					Confirmed	
1.	2.	3.		4.	Pass	Fail
Fenestration Tag/ID	Fenestration Orientation	Overhang Dimensions		Side fin		
		Horizontal Projection	Distance Above Window	Vertical Projection		
Balcony Door83	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window147	North	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window148	North	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window149	North	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window150	North	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window151	North	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door211	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door217	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door221	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door225	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door231	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door235	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door239	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door246	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door252	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door258	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door262	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door270	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door276	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door282	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door418	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door419	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door432	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door436	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window439	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐

B. OVERHANG DETAILS (Adapted from NRCC-ENV-02-E)					Confirmed	
1.	2.	3.		4.	Pass	Fail
Fenestration Tag/ID	Fenestration Orientation	Overhang Dimensions		Side fin		
		Horizontal Projection	Distance Above Window	Vertical Projection		
Window440	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window441	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window442	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door456	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door457	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door470	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door478	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door479	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door487	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window490	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window491	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window492	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door8	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door13	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door17	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door21	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door25	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door160	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door166	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door170	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door192	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door196	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door200	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door204	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door370	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐

B. OVERHANG DETAILS (Adapted from NRCC-ENV-02-E)					Confirmed	
1.	2.	3.		4.	Pass	Fail
Fenestration Tag/ID	Fenestration Orientation	Overhang Dimensions		Side fin		
		Horizontal Projection	Distance Above Window	Vertical Projection		
Balcony Door371	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door384	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door398	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window401	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window402	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window403	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window404	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door30	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door34	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window38	South	5.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window39	South	5.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door40	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window48	South	5.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Window49	South	5.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door50	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door54	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door88	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door92	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door96	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door100	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door104	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door289	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door295	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door301	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐
Balcony Door305	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.	☐	☐

B. OVERHANG DETAILS (Adapted from NRCC-ENV-02-E) — Confirmed: Pass ☐ Fail ☐

1. Fenestration Tag/ID	2. Fenestration Orientation	3. Overhang Dimensions: Horizontal Projection	3. Overhang Dimensions: Distance Above Window	4. Side fin: Vertical Projection
Balcony Door313	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.
Balcony Door319	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.
Balcony Door325	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.
Balcony Door506	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.
Balcony Door507	West	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.
Balcony Door520	East	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.
Balcony Door528	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.
Balcony Door529	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.
Balcony Door537	South	1.0 ft.	2.0 ft.	Left: 0 ft., Right: 0 ft.
Window540	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.
Window541	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.
Window542	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.
Window586	East	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.
Window587	East	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.
Window589	East	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.
Window608	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.
Window609	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.
Window610	West	2.0 ft.	0.1 ft.	Left: 0 ft., Right: 0 ft.

C. OPAQUE DOOR SUMMARY — Confirmed: Pass ☐ Fail ☐

1. Opaque Door Assembly Name / Tag or I.D.	2. Door Type	3. Certification Method	4. Operation	5. Area	6. Overall U-factor	7. Status[1]
Wood Door145	WoodGreaterThanOrEqualTo1.75inThickDoor	DefaultPerformance	Swinging	42	0.500	N

[1] *Status: N - New, A – Altered, E – Existing*

NRCC-PRF-MCH-DETAILS -SECTION START-

A. MECHANICAL VENTILATION AND REHEAT *(Adapted from 2016-NRCC-MCH-03-E)* — **Confirmed**

	1. DESIGN AIR FLOWS							2. VENTILATION (§ 120.1)										
CONDITIONED ZONE NAME	**HEATING/COOLING SYSTEM ID**	**DESIGN PRIMARY AIR FLOW (CFM)**	**DESIGN PRIMARY MINIMUM AIR FLOW (CFM)**	**MINIMUM PRIMARY AIR FLOW FRACTION**	**MAXIMUM HEATING AIR FLOW (CFM)**	**MAXIMUM HEATING AIR FLOW FRACTION**	**DDC CONTROL (Y/N)**	**VENT SYSTEM ID**	**CONDITIONED AREA (ft2)**	**MIN. VENT PER AREA (CFM/ft2)**	**DESIGN NUM. OF PEOPLE**	**MIN. VENT PER PERSON (CFM/person)**	**REQ'D VENT AIR FLOW (CFM)**	**DESIGN VENT AIR FLOW (CFM)**	**TRANSFER AIRFLOW (CFM)**	**DCV (Y/N)**	**Operable Window Interlock § 140.4(n) (Y/N)**	**Pass**	**Fail**
1-2nd Floor Studio Units	Level 2 Studio Units	NA	NA	NA	NA	NA	N	2nd Floor Studio Units3	2,375	NA	10.00	19.25	193	193	NA	N	NA	☐	☐
2-3rd Floor Studio Units	Level 3 Studio Units	NA	NA	NA	NA	NA	N	3rd Floor Studio Units28	3,155	NA	14.00	18.52	259	259	NA	N	NA	☐	☐
3-4th Floor Studio Units	Level 4 Studio Units	NA	NA	NA	NA	NA	N	4th Floor Studio Units65	2,375	NA	10.00	19.25	193	193	NA	N	NA	☐	☐
4-5th Floor Studio Units	Level 5 Studio Units	NA	NA	NA	NA	NA	N	5th Floor Studio Units86	2,375	NA	10.00	19.25	193	193	NA	N	NA	☐	☐
5-6th Floor Studio Units	Level 6 Studio Units	NA	NA	NA	NA	NA	N	6th Floor Studio Units107	1,030	NA	4.00	20.45	82	82	NA	N	NA	☐	☐
6-6th Floor Studio Units	Level 6 T/H One Bed Units	NA	NA	NA	NA	NA	N	6th Floor Studio Units119	1,686	NA	6.00	21.86	131	131	NA	N	NA	☐	☐
7-2nd Floor One Bed Units	Level 2 One Bed Units	NA	NA	NA	NA	NA	N	2nd Floor One Bed Units156	6,835	NA	20.00	25.50	510	510	NA	N	NA	☐	☐

A. MECHANICAL VENTILATION AND REHEAT *(Adapted from 2016-NRCC-MCH-03-E)* — **Confirmed**

1. DESIGN AIR FLOWS								2. VENTILATION (§ 120.1)										
CONDITIONED ZONE NAME	**HEATING/COOLING SYSTEM ID**	**DESIGN PRIMARY AIR FLOW (CFM)**	**DESIGN PRIMARY MINIMUM AIR FLOW (CFM)**	**MINIMUM PRIMARY AIR FLOW FRACTION**	**MAXIMUM HEATING AIR FLOW (CFM)**	**MAXIMUM HEATING AIR FLOW FRACTION**	**DDC CONTROL (Y/N)**	**VENT SYSTEM ID**	**CONDITIONED AREA (ft2)**	**MIN. VENT PER AREA (CFM/ft2)**	**DESIGN NUM. OF PEOPLE**	**MIN. VENT PER PERSON (CFM/person)**	**REQ'D VENT AIR FLOW (CFM)**	**DESIGN VENT AIR FLOW (CFM)**	**TRANSFER AIRFLOW (CFM)**	**DCV (Y/N)**	**Operable Window Interlock § 140.4(n) (Y/N)**	**Pass**	**Fail**
8-3rd Floor One Bed Units	Level 3 One Bed Units	NA	NA	NA	NA	NA	N	3rd Floor One Bed Units207	4,840	NA	14.00	25.74	360	360	NA	N	NA	☐	☐
9-4th Floor One Bed Units	Level 4 One Bed Units	NA	NA	NA	NA	NA	N	4th Floor One Bed Units242	4,840	NA	14.00	25.74	360	360	NA	N	NA	☐	☐
10-5th Floor One Bed Units	Level 5 One Bed Units	NA	NA	NA	NA	NA	N	5th Floor One Bed Units285	4,840	NA	14.00	25.74	360	360	NA	N	NA	☐	☐
11-6th Floor One Bed Units	Level 6 One Bed Units	NA	NA	NA	NA	NA	N	6th Floor One Bed Units328	3,990	NA	12.00	24.95	299	299	NA	N	NA	☐	☐
12-2nd Floor Two Bed Units	Level 2 Two Bed Units	NA	NA	NA	NA	NA	N	2nd Floor Two Bed Units359	3,140	NA	12.00	20.70	248	248	NA	N	NA	☐	☐
13-3rd Floor Two Bed Units	Level 3 Two Bed Units	NA	NA	NA	NA	NA	N	3rd Floor Two Bed Units407	2,370	NA	9.00	20.80	187	187	NA	N	NA	☐	☐
14-4th Floor Two Bed Units	Level 4 Two Bed Units	NA	NA	NA	NA	NA	N	4th Floor Two Bed Units445	3,300	NA	12.00	21.50	258	258	NA	N	NA	☐	☐
15-5th Floor Two Bed Units	Level 5 Two Bed Units	NA	NA	NA	NA	NA	N	5th Floor Two Bed Units495	3,300	NA	12.00	21.50	258	258	NA	N	NA	☐	☐

A. MECHANICAL VENTILATION AND REHEAT *(Adapted from 2016-NRCC-MCH-03-E)* — **Confirmed**

	1. DESIGN AIR FLOWS							2. VENTILATION (§ 120.1)										
CONDITIONED ZONE NAME	**HEATING/COOLING SYSTEM ID**	**DESIGN PRIMARY AIR FLOW (CFM)**	**DESIGN PRIMARY MINIMUM AIR FLOW (CFM)**	**MINIMUM PRIMARY AIR FLOW FRACTION**	**MAXIMUM HEATING AIR FLOW (CFM)**	**MAXIMUM HEATING AIR FLOW FRACTION**	**DDC CONTROL (Y/N)**	**VENT SYSTEM ID**	**CONDITIONED AREA (ft2)**	**MIN. VENT PER AREA (CFM/ft2)**	**DESIGN NUM. OF PEOPLE**	**MIN. VENT PER PERSON (CFM/person)**	**REQ'D VENT AIR FLOW (CFM)**	**DESIGN VENT AIR FLOW (CFM)**	**TRANSFER AIRFLOW (CFM)**	**DCV (Y/N)**	**Operable Window Interlock § 140.4(n) (Y/N)**	**Pass**	**Fail**
16-6th Floor Two Bed Units	Level 6 Two Bed Units	NA	NA	NA	NA	NA	N	6th Floor Two Bed Units545	2,350	NA	9.00	20.67	186	186	NA	N	NA	☐	☐
17-6th Floor Two Bed Units	Level 6 T/H Two Bed Units	NA	NA	NA	NA	NA	N	6th Floor Two Bed Units575	1,850	NA	6.00	23.50	141	141	NA	N	NA	☐	☐
18-Level 1 Work/Live Units	Level 1 + Mezzanine Work/	NA	NA	NA	NA	NA	N	Level 1 Work/Live Units614	5,242	NA	8.00	44.31	355	355	NA	N	NA	☐	☐
19-Amenity Lounge	Mezzanine Level_Amenity L	1,750	NA	NA	NA	NA	N	Mezzanine Level_Amenity L	1,530	NA	51.00	15.00	765	765	NA	N	NA	☐	☐
20-Retail Space	Level 1 Retail Space	1,750	NA	NA	NA	NA	N	Level 1 Retail Space	4,218	NA	35.16	24.00	844	844	NA	N	NA	☐	☐
22-Restaurant	Level 1 Restaurant	1,750	NA	NA	NA	NA	N	Level 1 Restaurant	1,974	NA	65.80	15.00	987	987	NA	N	NA	☐	☐
23-Lobby + High Ceiling	Level 1 Lobby	1,324	NA	NA	NA	NA	N	Level 1 Lobby	1,792	NA	59.74	15.00	896	896	NA	N	NA	☐	☐
24-Lobby + Low Ceiling	Level 1 Lobby	426	NA	NA	NA	NA	N	Level 1 Lobby	577	NA	19.23	15.00	289	289	NA	N	NA	☐	☐
25-Leasing Office	Level 1 Leasing Office	450	NA	NA	NA	NA	N	Level 1 Leasing Office	590	NA	2.95	30.00	89	89	NA	N	NA	☐	☐

A. MECHANICAL VENTILATION AND REHEAT *(Adapted from 2016-NRCC-MCH-03-E)* — **Confirmed**

1. DESIGN AIR FLOWS								2. VENTILATION (§ 120.1)									Confirmed	
CONDITIONED ZONE NAME	**HEATING/COOLING SYSTEM ID**	**DESIGN PRIMARY AIR FLOW (CFM)**	**DESIGN PRIMARY MINIMUM AIR FLOW (CFM)**	**MINIMUM PRIMARY AIR FLOW FRACTION**	**MAXIMUM HEATING AIR FLOW (CFM)**	**MAXIMUM HEATING AIR FLOW FRACTION**	**DDC CONTROL (Y/N)**	**VENT SYSTEM ID**	**CONDITIONED AREA (ft2)**	**MIN. VENT PER AREA (CFM/ft2)**	**DESIGN NUM. OF PEOPLE**	**MIN. VENT PER PERSON (CFM/person)**	**REQ'D VENT AIR FLOW (CFM)**	**DESIGN VENT AIR FLOW (CFM)**	**TRANSFER AIRFLOW (CFM)**	**DCV (Y/N)**	**Operable Window Interlock § 140.4(n) (Y/N)**	**Pass**	**Fail**
26-Amenity	Level 1 Amenity Space	450	NA	NA	NA	NA	N	Level 1 Amenity Space	788	NA	26.27	15.00	394	394	NA	N	NA	☐	☐
27-Gym	Mezzanine Level_Gym	1,750	NA	NA	NA	NA	N	Mezzanine Level_Gym	2,321	NA	23.21	15.00	348	348	NA	N	NA	☐	☐
								TOTAL	73,683		479.36		9,185	9,185	NA			☐	☐

B. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY — **§ 140.4**

1.	2.	3.	4.		5.	6.	7.			8.			Confirmed	
System ID	**System Type**	**Qty**	**Rated Capacity (kBtuh)**		**Economizer**	**Zone Name**	**Airflow (cfm)**			**Fan**			**Pass**	**Fail**
			Heating	**Cooling**			**Design**	**Min.**	**Min. Ratio**	**BHP**	**Cycles**	**ECM Motor**		
Level 2 Studio Units	SZHP	5	14.00	12.00	No	1-2nd Floor Studio Units	450	NA	NA	0.066	☒	☐	☐	☐
Level 3 Studio Units	SZHP	7	14.00	12.00	No	2-3rd Floor Studio Units	450	NA	NA	0.066	☒	☐	☐	☐
Level 4 Studio Units	SZHP	5	14.00	12.00	No	3-4th Floor Studio Units	450	NA	NA	0.066	☒	☐	☐	☐
Level 5 Studio Units	SZHP	5	14.00	12.00	No	4-5th Floor Studio Units	450	NA	NA	0.066	☒	☐	☐	☐
Level 6 Studio Units	SZHP	5	14.00	12.00	No	5-6th Floor Studio Units	450	NA	NA	0.066	☒	☐	☐	☐
Level 6 T/H One Bed Units	SZHP	3	14.00	12.00	No	6-6th Floor Studio Units	450	NA	NA	0.066	☒	☐	☐	☐
Level 2 One Bed Units	SZHP	10	19.00	17.00	No	7-2nd Floor One Bed Units	560	NA	NA	0.066	☒	☐	☐	☐

B. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY — **§ 140.4**

1.	2.	3.	4.		5.	6.	7.			8.			Confirmed	
System ID	System Type	Qty	Rated Capacity (kBtuh)		Economizer	Zone Name	Airflow (cfm)			Fan			Pass	Fail
			Heating	Cooling			Design	Min.	Min. Ratio	BHP	Cycles	ECM Motor		
Level 3 One Bed Units	SZHP	7	19.00	17.00	No	8-3rd Floor One Bed Units	560	NA	NA	0.066	☒	☐	☐	☐
Level 4 One Bed Units	SZHP	7	19.00	17.00	No	9-4th Floor One Bed Units	560	NA	NA	0.066	☒	☐	☐	☐
Level 5 One Bed Units	SZHP	7	19.00	17.00	No	10-5th Floor One Bed Units	560	NA	NA	0.066	☒	☐	☐	☐
Level 6 One Bed Units	SZHP	6	19.00	17.00	No	11-6th Floor One Bed Units	560	NA	NA	0.066	☒	☐	☐	☐
Level 2 Two Bed Units	SZHP	4	26.00	23.00	No	12-2nd Floor Two Bed Units	700	NA	NA	0.094	☒	☐	☐	☐
Level 3 Two Bed Units	SZHP	3	26.00	23.00	No	13-3rd Floor Two Bed Units	700	NA	NA	0.094	☒	☐	☐	☐
Level 4 Two Bed Units	SZHP	4	26.00	23.00	No	14-4th Floor Two Bed Units	700	NA	NA	0.094	☒	☐	☐	☐
Level 5 Two Bed Units	SZHP	4	26.00	23.00	No	15-5th Floor Two Bed Units	700	NA	NA	0.094	☒	☐	☐	☐
Level 6 Two Bed Units	SZHP	3	26.00	23.00	No	16-6th Floor Two Bed Units	700	NA	NA	0.094	☒	☐	☐	☐
Level 6 T/H Two Bed Units	SZHP	2	32.00	34.00	No	17-6th Floor Two Bed Units	1200	NA	NA	0.189	☒	☐	☐	☐
Level 1 + Mezzanine Work/	SZHP	4	32.00	34.00	No	18-Level 1 Work/Live Units	1200	NA	NA	0.189	☒	☐	☐	☐
19-Amenity Lounge-Trm	Uncontrolled	1	NA	NA	NA	19-Amenity Lounge	1750	NA	NA	NA	NA	☐	☐	☐
20-Retail Space-Trm	Uncontrolled	4	NA	NA	NA	20-Retail Space	1750	NA	NA	NA	NA	☐	☐	☐
22-Restaurant-Trm	Uncontrolled	3	NA	NA	NA	22-Restaurant	1750	NA	NA	NA	NA	☐	☐	☐
24-Lobby + Low Ceiling-Trm	Uncontrolled	2	NA	NA	NA	24-Lobby + Low Ceiling	426	NA	NA	NA	NA	☐	☐	☐
23-Lobby + High Ceiling-Trm	Uncontrolled	2	NA	NA	NA	23-Lobby + High Ceiling	1324	NA	NA	NA	NA	☐	☐	☐

B. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY — **§ 140.4**

1.	2.	3.	4.		5.	6.	7.			8.			Confirmed	
System ID	System Type	Qty	Rated Capacity (kBtuh)		Economizer	Zone Name	Airflow (cfm)			Fan			Pass	Fail
			Heating	Cooling			Design	Min.	Min. Ratio	BHP	Cycles	ECM Motor		
25-Leasing Office-Trm	Uncontrolled	1	NA	NA	NA	25-Leasing Office	450	NA	NA	NA	NA	☐	☐	☐
26-Amenity-Trm	Uncontrolled	1	NA	NA	NA	26-Amenity	450	NA	NA	NA	NA	☐	☐	☐
27-Gym-Trm	Uncontrolled	1	NA	NA	NA	27-Gym	1750	NA	NA	NA	NA	☐	☐	☐

C. EXHAUST FAN SUMMARY — **Confirmed**

1.	2.	3.	4.	5.	6.	Pass	Fail
System ID	Zone Name	Qty	CFM	Motor BHP	Total Static Pressure (in H20)		
2nd Floor Studio Units3	1-2nd Floor Studio Units	5	60	0.023	1.47	☐	☐
3rd Floor Studio Units28	2-3rd Floor Studio Units	7	60	0.023	1.47	☐	☐
4th Floor Studio Units65	3-4th Floor Studio Units	5	60	0.023	1.47	☐	☐
5th Floor Studio Units86	4-5th Floor Studio Units	5	60	0.023	1.47	☐	☐
6th Floor Studio Units107	5-6th Floor Studio Units	5	60	0.023	1.47	☐	☐
6th Floor Studio Units119	6-6th Floor Studio Units	5	60	0.023	1.47	☐	☐
2nd Floor One Bed Units156	7-2nd Floor One Bed Units	10	60	0.023	1.47	☐	☐
3rd Floor One Bed Units207	8-3rd Floor One Bed Units	7	60	0.023	1.47	☐	☐
4th Floor One Bed Units242	9-4th Floor One Bed Units	7	60	0.023	1.47	☐	☐
5th Floor One Bed Units285	10-5th Floor One Bed Units	7	60	0.023	1.47	☐	☐
6th Floor One Bed Units328	11-6th Floor One Bed Units	6	60	0.023	1.47	☐	☐
2nd Floor Two Bed Units359	12-2nd Floor Two Bed Units	4	80	0.023	1.10	☐	☐
3rd Floor Two Bed Units407	13-3rd Floor Two Bed Units	3	80	0.023	1.10	☐	☐
4th Floor Two Bed Units445	14-4th Floor Two Bed Units	4	80	0.023	1.10	☐	☐
5th Floor Two Bed Units495	15-5th Floor Two Bed Units	4	80	0.023	1.10	☐	☐
6th Floor Two Bed Units545	16-6th Floor Two Bed Units	5	80	0.023	1.10	☐	☐
6th Floor Two Bed Units575	17-6th Floor Two Bed Units	5	80	0.023	1.10	☐	☐

C. EXHAUST FAN SUMMARY — **Confirmed**

1. System ID	2. Zone Name	3. Qty	4. CFM	5. Motor BHP	6. Total Static Pressure (in H20)	Pass	Fail
Level 1 Work/Live Units614	18-Level 1 Work/Live Units	4	91	0.023	0.97	☐	☐
1-2nd Floor Studio Units PropExhFan	1-2nd Floor Studio Units	5	300	NA	1.55081	☐	☐
2-3rd Floor Studio Units PropExhFan	2-3rd Floor Studio Units	7	420	NA	1.55081	☐	☐
3-4th Floor Studio Units PropExhFan	3-4th Floor Studio Units	5	300	NA	1.55081	☐	☐
4-5th Floor Studio Units PropExhFan	4-5th Floor Studio Units	5	300	NA	1.55081	☐	☐
5-6th Floor Studio Units PropExhFan	5-6th Floor Studio Units	5	300	NA	1.55081	☐	☐
6-6th Floor Studio Units PropExhFan	6-6th Floor Studio Units	3	300	NA	1.55081	☐	☐
7-2nd Floor One Bed Units PropExhFan	7-2nd Floor One Bed Units	10	600	NA	1.55081	☐	☐
8-3rd Floor One Bed Units PropExhFan	8-3rd Floor One Bed Units	7	420	NA	1.55081	☐	☐
9-4th Floor One Bed Units PropExhFan	9-4th Floor One Bed Units	7	420	NA	1.55081	☐	☐
10-5th Floor One Bed Units PropExhFan	10-5th Floor One Bed Units	7	420	NA	1.55081	☐	☐
11-6th Floor One Bed Units PropExhFan	11-6th Floor One Bed Units	6	360	NA	1.55081	☐	☐
12-2nd Floor Two Bed Units PropExhFan	12-2nd Floor Two Bed Units	4	320	NA	1.16311	☐	☐
13-3rd Floor Two Bed Units PropExhFan	13-3rd Floor Two Bed Units	3	240	NA	1.16311	☐	☐
14-4th Floor Two Bed Units PropExhFan	14-4th Floor Two Bed Units	4	320	NA	1.16311	☐	☐
15-5th Floor Two Bed Units PropExhFan	15-5th Floor Two Bed Units	4	320	NA	1.16311	☐	☐
16-6th Floor Two Bed Units PropExhFan	16-6th Floor Two Bed Units	3	400	NA	1.16311	☐	☐
17-6th Floor Two Bed Units PropExhFan	17-6th Floor Two Bed Units	2	400	NA	1.16311	☐	☐

C. EXHAUST FAN SUMMARY — Confirmed

1. System ID	2. Zone Name	3. Qty	4. CFM	5. Motor BHP	6. Total Static Pressure (in H20)	Pass	Fail
18-Level 1 Work/Live Units PropExhFan	18-Level 1 Work/Live Units	4	364	NA	1.02251	☐	☐

D. DHW EQUIPMENT SUMMARY – *(Adapted from NRCC-PLB-01)* — § 110.3 — Confirmed

1. DHW Name	2. Heater Element Type	3. Tank Type	4. Qty	5. Tank Vol (gal)	6. Rated Input (kBtu/h)	7. Efficiency	8. Tank Insulation R-value (Int/Ext)	9. Standby Loss Fraction	10. Heat Pump Type	11. Tank Location or Ambient Condition	Pass	Fail
Raypak WH-902C1	Gas	Storage	2	356.00	900	Thrml. Eff.: 0.87	NA	SBLF: 0.001	NA	NA	☐	☐
Raypak WH-902C1 2	Gas	Commercial Storage (TE & SBL)	2	356.00	900	Thrml. Eff.: 0.870	/	0.0010	NA	Unconditioned	☐	☐

E. MULTI-FAMILY CENTRAL DHW SYSTEM DETAILS — § 110.3 — Confirmed

1. System Name	2. Number of Dwelling Units Served by System	3. System Type	4. Number of Water Heaters / System	5. Multi-Family Distribution Type	6. Solar Fraction (%)	7. Recirculating Pump		8. Number of Recirculation Loops	9. Recirculation Loop Insulation Thickness	10. Recirculation Loop Location	Pass	Fail
						Eff	BHP					
MF-Raypak WH-902C1	88	Standard	2	Demand Control (Standard Design for new construction)	0.25	0.85	0.17	2	1.5	Conditioned	☐	☐

F. SOLAR HOT WATER HEATING SUMMARY (Adapted from NRCC-STH-01) — G. § RA4

1.	2. Collector											
System Name	Manufacturer	Brand	Model #	SRRC Cert	Type	Area ft^2	Rated Eff.Curve Slope	Rated Eff.Curve Intercept	Number	Fluid	Angle from true north (degrees)	Slope from horizontal (degrees)
DHW2 - SHW												

F. SOLAR HOT WATER HEATING SUMMARY (Adapted from NRCC-STH-01) — **G. § RA4**

1.	2. Collector											
System Name	**Manufacturer**	**Brand**	**Model #**	**SRRC Cert**	**Type**	**Area ft²**	**Rated Eff.Curve Slope**	**Rated Eff.Curve Intercept**	**Number**	**Fluid**	**Angle from true north (degrees)**	**Slope from horizontal (degrees)**
MF-Raypak WH-902C1												

F. SOLAR HOT WATER HEATING SUMMARY (Adapted from NRCC-STH-01) — **G. § RA4**

1.	3. Software		4. Storage		5.	6	Confirmed	
System Name	**Name of program used**	**Version**	**Water Heater Tank Volume (gallons)**	**Secondary Tank Volume (gallons)**	**# of Identical Dwelling Units**	**Solar Fraction**	**Pass**	**Fail**
DHW2 - SHW			712			0.25	☐	☐
MF-Raypak WH-902C1						0.25	☐	☐

G. MECHANICAL HVAC ACCEPTANCE TESTS & FORMS *(Adapted from 2016-NRCC-MCH-01-E)* — **§ RA4**

Declaration of Required Acceptance Certificates (NRCA) – Acceptance Certificates that may be submitted. (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify).

Test Description		MCH-02A	MCH-03A	MCH-04A	MCH-05A	MCH-06A	MCH-07A	MCH-08A	MCH-09A	MCH-10A	MCH-11A	MCH-12A	MCH-13A	MCH-14A	MCH-15A	MCH-16A	MCH-17A	MCH-18A	Confirmed	
Equipment Requiring Testing or Verification	# of units	Outdoor Air	Single Zone Unitary	Air Dist. Ducts	Economizer Controls	DCV	Supply Fan VAV	Valve leakage	Supply Water Temp. Reset	Hyd. Variable Flow Control	Auto Demand Shed Control	FDD for DX Units	Auto FDD for Air & Zone	Dist. Energy Storage DX AC	TES Systems	Supply Air Temp. Reset	Condenser Water Reset Controls	ECMS	Pass	Fail
DHW2 - SHW	1	--	--	--	--	--	--	--	X	--	--	--	--	--	--	--	--	--	☐	☐
2nd Floor Studio Units3	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐

G. MECHANICAL HVAC ACCEPTANCE TESTS & FORMS *(Adapted from 2016-NRCC-MCH-01-E)* **§ RA4**

Declaration of Required Acceptance Certificates (NRCA) – Acceptance Certificates that may be submitted. (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify).

Test Description		MCH-02A	MCH-03A	MCH-04A	MCH-05A	MCH-06A	MCH-07A	MCH-08A	MCH-09A	MCH-10A	MCH-11A	MCH-12A	MCH-13A	MCH-14A	MCH-15A	MCH-16A	MCH-17A	MCH-18A	Confirmed	
Equipment Requiring Testing or Verification	# of units	Outdoor Air	Single Zone Unitary	Air Dist. Ducts	Economizer Controls	DCV	Supply Fan VAV	Valve leakage	Supply Water Temp. Reset	Hyd. Variable Flow Control	Auto Demand Shed Control	FDD for DX Units	Auto FDD for Air & Zone	Dist. Energy Storage DX AC	TES Systems	Supply Air Temp. Reset	Condenser Water Reset Controls	ECMS	Pass	Fail
3rd Floor Studio Units28	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
4th Floor Studio Units65	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
5th Floor Studio Units86	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
6th Floor Studio Units107	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
6th Floor Studio Units119	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
2nd Floor One Bed Units156	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
3rd Floor One Bed Units207	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐

G. MECHANICAL HVAC ACCEPTANCE TESTS & FORMS *(Adapted from 2016-NRCC-MCH-01-E)* **§ RA4**

Declaration of Required Acceptance Certificates (NRCA) – Acceptance Certificates that may be submitted. (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify).

Test Description		MCH-02A	MCH-03A	MCH-04A	MCH-05A	MCH-06A	MCH-07A	MCH-08A	MCH-09A	MCH-10A	MCH-11A	MCH-12A	MCH-13A	MCH-14A	MCH-15A	MCH-16A	MCH-17A	MCH-18A	Confirmed	
Equipment Requiring Testing or Verification	# of units	Outdoor Air	Single Zone Unitary	Air Dist. Ducts	Economizer Controls	DCV	Supply Fan VAV	Valve leakage	Supply Water Temp. Reset	Hyd. Variable Flow Control	Auto Demand Shed Control	FDD for DX Units	Auto FDD for Air & Zone	Dist. Energy Storage DX AC	TES Systems	Supply Air Temp. Reset	Condenser Water Reset Controls	ECMS	Pass	Fail
4th Floor One Bed Units242	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
5th Floor One Bed Units285	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
6th Floor One Bed Units328	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
2nd Floor Two Bed Units359	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
3rd Floor Two Bed Units407	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
4th Floor Two Bed Units445	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
5th Floor Two Bed Units495	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐

G. MECHANICAL HVAC ACCEPTANCE TESTS & FORMS *(Adapted from 2016-NRCC-MCH-01-E)* **§ RA4**

Declaration of Required Acceptance Certificates (NRCA) – Acceptance Certificates that may be submitted. (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify).

Test Description		MCH-02A	MCH-03A	MCH-04A	MCH-05A	MCH-06A	MCH-07A	MCH-08A	MCH-09A	MCH-10A	MCH-11A	MCH-12A	MCH-13A	MCH-14A	MCH-15A	MCH-16A	MCH-17A	MCH-18A	Confirmed	
Equipment Requiring Testing or Verification	# of units	Outdoor Air	Single Zone Unitary	Air Dist. Ducts	Economizer Controls	DCV	Supply Fan VAV	Valve leakage	Supply Water Temp. Reset	Hyd. Variable Flow Control	Auto Demand Shed Control	FDD for DX Units	Auto FDD for Air & Zone	Dist. Energy Storage DX AC	TES Systems	Supply Air Temp. Reset	Condenser Water Reset Controls	ECMS	Pass	Fail
6th Floor Two Bed Units545	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
6th Floor Two Bed Units575	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 1 Work/Live Units614	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Mezzanine Level_Amenity L	1	X	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 1 Retail Space	4	X	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 1 Restaurant	3	X	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 1 Lobby	2	X	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 1 Leasing Office	1	X	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐

G. MECHANICAL HVAC ACCEPTANCE TESTS & FORMS *(Adapted from 2016-NRCC-MCH-01-E)* **§ RA4**

Declaration of Required Acceptance Certificates (NRCA) – Acceptance Certificates that may be submitted. (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify).

Test Description		**MCH-02A**	**MCH-03A**	**MCH-04A**	**MCH-05A**	**MCH-06A**	**MCH-07A**	**MCH-08A**	**MCH-09A**	**MCH-10A**	**MCH-11A**	**MCH-12A**	**MCH-13A**	**MCH-14A**	**MCH-15A**	**MCH-16A**	**MCH-17A**	**MCH-18A**	**Confirmed**	
Equipment Requiring Testing or Verification	# of units	Outdoor Air	Single Zone Unitary	Air Dist. Ducts	Economizer Controls	DCV	Supply Fan VAV	Valve leakage	Supply Water Temp. Reset	Hyd. Variable Flow Control	Auto Demand Shed Control	FDD for DX Units	Auto FDD for Air & Zone	Dist. Energy Storage DX AC	TES Systems	Supply Air Temp. Reset	Condenser Water Reset Controls	ECMS	**Pass**	**Fail**
Level 1 Amenity Space	1	X	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Mezzanine Level_Gym	1	X	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 2 Studio Units	5	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 3 Studio Units	7	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 4 Studio Units	5	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 5 Studio Units	5	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 6 Studio Units	5	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 6 T/H One Bed Units	3	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 2 One Bed Units	10	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐

G. MECHANICAL HVAC ACCEPTANCE TESTS & FORMS *(Adapted from 2016-NRCC-MCH-01-E)* **§ RA4**

Declaration of Required Acceptance Certificates (NRCA) – Acceptance Certificates that may be submitted. (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify).

Test Description		MCH-02A	MCH-03A	MCH-04A	MCH-05A	MCH-06A	MCH-07A	MCH-08A	MCH-09A	MCH-10A	MCH-11A	MCH-12A	MCH-13A	MCH-14A	MCH-15A	MCH-16A	MCH-17A	MCH-18A	Confirmed	
Equipment Requiring Testing or Verification	# of units	Outdoor Air	Single Zone Unitary	Air Dist. Ducts	Economizer Controls	DCV	Supply Fan VAV	Valve leakage	Supply Water Temp. Reset	Hyd. Variable Flow Control	Auto Demand Shed Control	FDD for DX Units	Auto FDD for Air & Zone	Dist. Energy Storage DX AC	TES Systems	Supply Air Temp. Reset	Condenser Water Reset Controls	ECMS	Pass	Fail
Level 3 One Bed Units	7	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 4 One Bed Units	7	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 5 One Bed Units	7	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 6 One Bed Units	6	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 2 Two Bed Units	4	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 3 Two Bed Units	3	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 4 Two Bed Units	4	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 5 Two Bed Units	4	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 6 Two Bed Units	3	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐
Level 6 T/H Two Bed Units	2	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐

G. MECHANICAL HVAC ACCEPTANCE TESTS & FORMS *(Adapted from 2016-NRCC-MCH-01-E)* **§ RA4**

Declaration of Required Acceptance Certificates (NRCA) – Acceptance Certificates that may be submitted. (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify).

Test Description		MCH-02A	MCH-03A	MCH-04A	MCH-05A	MCH-06A	MCH-07A	MCH-08A	MCH-09A	MCH-10A	MCH-11A	MCH-12A	MCH-13A	MCH-14A	MCH-15A	MCH-16A	MCH-17A	MCH-18A	Confirmed	
Equipment Requiring Testing or Verification	# of units	Outdoor Air	Single Zone Unitary	Air Dist. Ducts	Economizer Controls	DCV	Supply Fan VAV	Valve leakage	Supply Water Temp. Reset	Hyd. Variable Flow Control	Auto Demand Shed Control	FDD for DX Units	Auto FDD for Air & Zone	Dist. Energy Storage DX AC	TES Systems	Supply Air Temp. Reset	Condenser Water Reset Controls	ECMS	Pass	Fail
Level 1 + Mezzanine Work/	4	X	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	☐	☐

H. EVAPORATIVE COOLER SUMMARY

This Section Does Not Apply

NRCC-PRF-LTI-DETAILS -SECTION START-

A. INDOOR CONDITIONED LIGHTING CONTROL CREDITS (Adapted from NRCC-LTI-02-E) **§ 140.6**

This Section Does Not Apply

B. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROLS (Adapted from NRCC-LTI-02-E) **§ 130.1**

This Section Does Not Apply

C. TAILORED METHOD CONDITIONED LIGHTING POWER ALLOWANCE SUMMARY AND CHECKLIST (Adapted from NRCC-LTI-04-E) **§ 140.6**

This Section Does Not Apply

D. GENERAL LIGHTING POWER (Adapted from NRCC-LTI-04-E)	**§ 140.6-D**
This Section Does Not Apply	

E. GENERAL LIGHTING FROM SPECIAL FUNCTION AREAS (Adapted from NRCC-LTI-04-E)	**§ 140.6(c) 3H**
This Section Does Not Apply	

F. ROOM CAVITY RATIO (Adapted from NRCC-LTI-04-E)
This Section Does Not Apply

G. ADDITIONAL "USE IT OR LOSE IT" (Adapted from NRCC-LTI-04-E)
This Section Does Not Apply

H. INDOOR & OUTDOOR LIGHTING ACCEPTANCE TESTS & FORMS (Adapted from NRCC-LTI-01-E and NRCC-LTO-01-E)	**§ 130.4**
This Section Does Not Apply	

ENVELOPE MANDATORY MEASURES: NONRESIDENTIAL — ENV-MM

Project Name	Date
Central Park Apartments	*7/31/2019*

DESCRIPTION

Building Envelope Measures:

§110.8(a):	Installed insulating material shall have been certified by the manufacturer to comply with the California Quality Standards for insulating material, Title 20 Chapter 4, Article 3.
§110.8(c):	All Insulating Materials shall be installed in compliance with the flame spread rating and smoke density requirements of Sections 2602 and 707 of Title 24, Part 2.
§110.8(g):	Heated slab floors shall be insulated according to the requirements in Table 110.8-A.
§110.7(a):	All Exterior Joints and openings in the building that are observable sources of air leakage shall be caulked, gasketed, weatherstripped or otherwise sealed.
§110.6(a):	Manufactured fenestration products and exterior doors shall have air infiltration rates not exceeding 0.3 cfm/ft.² of window area, 0.3 cfm/ft.² of door area for residential doors, 0.3 cfm/ft.² of door area for nonresidential single doors (swinging and sliding), and 1.0 cfm/ft.² for nonresidential double doors (swinging).
§110.6(a):	Fenestration U-factor shall be rated in accordance with NFRC 100, or the applicable default U-factor.
§110.6(a) :	Fenestration SHGC shall be rated in accordance with NFRC 200, or NFRC 100 for site-built fenestration, or the applicable default SHGC.
§110.6(b):	Site Constructed Doors, Windows and Skylights shall be caulked between the unit and the building, and shall be weatherstripped (except for unframed glass doors and fire doors).
§120.7(a):	The opaque portions of the roof/ceiling that separates conditioned spaces from unconditioned spaces or ambient air shall meet the applicable U-Factor requirements as follows: **Metal Building-** The weighted average U-factor of the roof assembly shall not exceed 0.098. **Wood Framed and Others-** The weighted average U-factor of the roof assembly shall not exceed 0.075.
§120.7(b):	The opaque portions of walls that separate conditioned spaces from unconditioned spaces or ambient air shall meet the applicable U-factor as follows: **Metal Building-** The weighted average U-factor of the wall assembly shall not exceed 0.113. **Metal Framed-** The weighted average U-factor of the wall assembly shall not exceed 0.151. **Light Mass Walls-** A 6 inch or greater Hollow Core Concrete Masonry Unit shall have a U-factor not to exceed 0.440. **Heavy Mass Walls-** An 8 inch or greater Hollow Core Concrete Masonry Unit shall have a U-factor not to exceed 0.690. **Wood Framed and Others-** The weighted average U-factor of the wall assembly shall not exceed 0.110. **Spandrel Panels and Opaque Curtain Wall-** The weighted average U-factor of the spandrel panels and opaque curtain wall assembly shall not exceed 0.280. **Demising Walls-**. The opaque portions of framed demising walls shall meet the requirements of Item A or B below: A. Wood framed walls shall be insulated to meet a U-factor not greater than 0.099. B. Metal Framed walls shall be insulated to meet a U-factor not greater than 0.151.
§120.7(c):	The opaque portions of floors and soffits that separate conditioned spaces from unconditioned spaces or ambient air shall meet the applicable U-Factor requirements as follows: **Raised Mass Floors-** Shall have a minimum of 3 inches of lightweight concrete over a metal deck or the weighted average U-factor of the floor assembly shall not exceed 0.269. **Other Floors-**The weighted average U-factor of the floor assembly shall not exceed 0.071.

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 2 Studio Units	2,375

ENGINEERING CHECKS

Number of Systems	5
Heating System	
Output per System	14,000
Total Output (Btuh)	70,000
Output (Btuh/sqft)	29.5
Cooling System	
Output per System	12,000
Total Output (Btuh)	60,000
Total Output (Tons)	5.0
Total Output (Btuh/sqft)	25.3
Total Output (sqft/Ton)	475.0
Air System	
CFM per System	450
Airflow (cfm)	2,250
Airflow (cfm/sqft)	0.95
Airflow (cfm/Ton)	450.0
Outside Air (%)	15.8 %
Outside Air (cfm/sqft)	0.15
Note: values above given at ARI conditions	

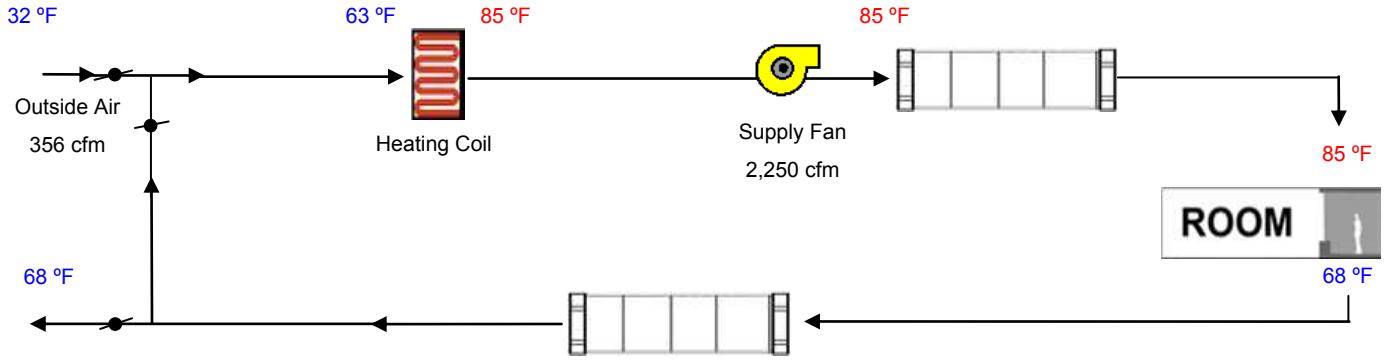
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	1,379	23,790	1,841	457	8,048
Return Vented Lighting		0			
Return Air Ducts		1,189			402
Return Fan		0			0
Ventilation	356	6,558	-988	356	13,354
Supply Fan		1,451			-1,451
Supply Air Ducts		1,189			402
TOTAL SYSTEM LOAD		34,177	852		20,756

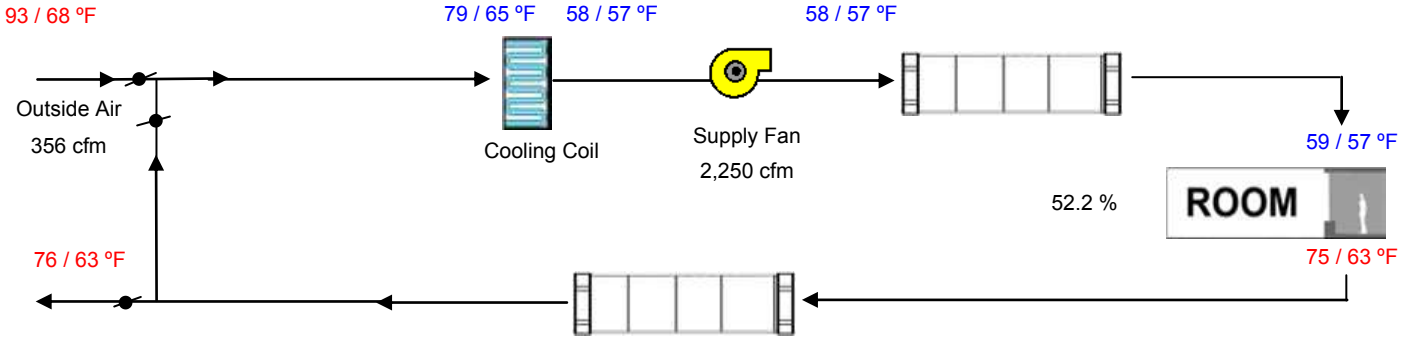
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A12NKA7/PEAD-A12AA7	47,806	10,514		51,051
Total Adjusted System Output (Adjusted for Peak Design conditions)	47,806	10,514		51,051
TIME OF SYSTEM PEAK		Jul 4 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 3 Studio Units	3,155

ENGINEERING CHECKS

Number of Systems	7
Heating System	
Output per System	14,000
Total Output (Btuh)	98,000
Output (Btuh/sqft)	31.1
Cooling System	
Output per System	12,000
Total Output (Btuh)	84,000
Total Output (Tons)	7.0
Total Output (Btuh/sqft)	26.6
Total Output (sqft/Ton)	450.7
Air System	
CFM per System	450
Airflow (cfm)	3,150
Airflow (cfm/sqft)	1.00
Airflow (cfm/Ton)	450.0
Outside Air (%)	15.0 %
Outside Air (cfm/sqft)	0.15
Note: values above given at ARI conditions	

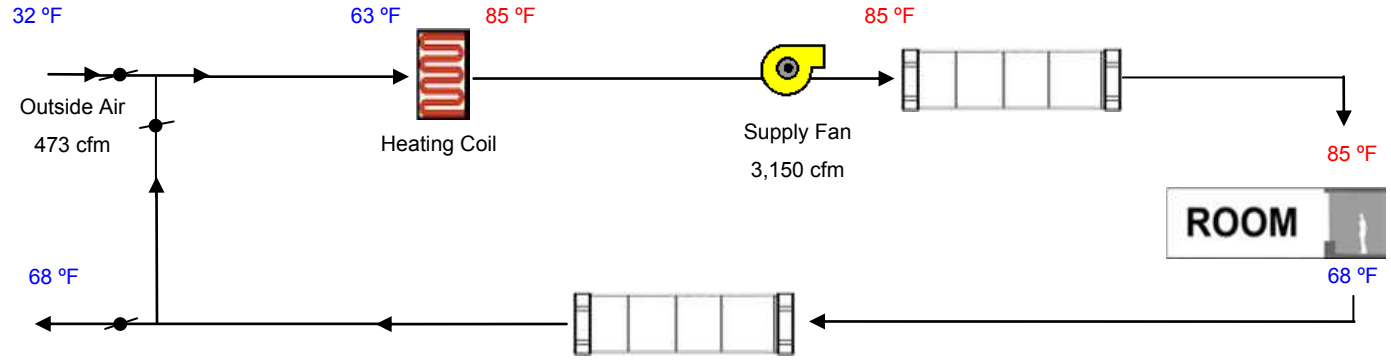
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	1,954	33,706	2,445	716	12,590
Return Vented Lighting		0			
Return Air Ducts		1,685			629
Return Fan		0			0
Ventilation	473	8,708	-1,279	473	17,730
Supply Fan		2,031			-2,031
Supply Air Ducts		1,685			629
TOTAL SYSTEM LOAD		47,816	1,166		29,548

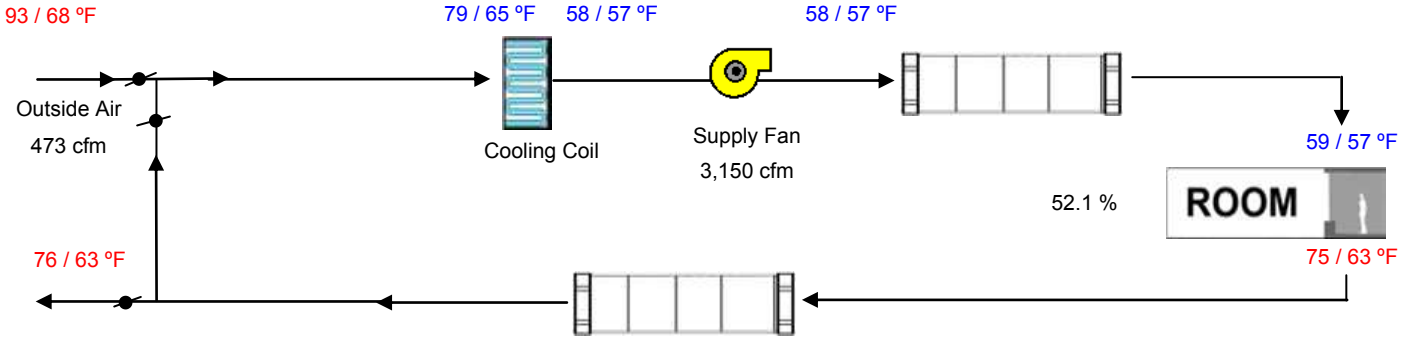
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A12NKA7/PEAD-A12AA7	66,693	14,879		71,471
Total Adjusted System Output (Adjusted for Peak Design conditions)	66,693	14,879		71,471
TIME OF SYSTEM PEAK		Aug 4 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 4 Studio Units	2,375

ENGINEERING CHECKS

Number of Systems	5
Heating System	
Output per System	14,000
Total Output (Btuh)	70,000
Output (Btuh/sqft)	29.5
Cooling System	
Output per System	12,000
Total Output (Btuh)	60,000
Total Output (Tons)	5.0
Total Output (Btuh/sqft)	25.3
Total Output (sqft/Ton)	475.0
Air System	
CFM per System	450
Airflow (cfm)	2,250
Airflow (cfm/sqft)	0.95
Airflow (cfm/Ton)	450.0
Outside Air (%)	15.8 %
Outside Air (cfm/sqft)	0.15
Note: values above given at ARI conditions	

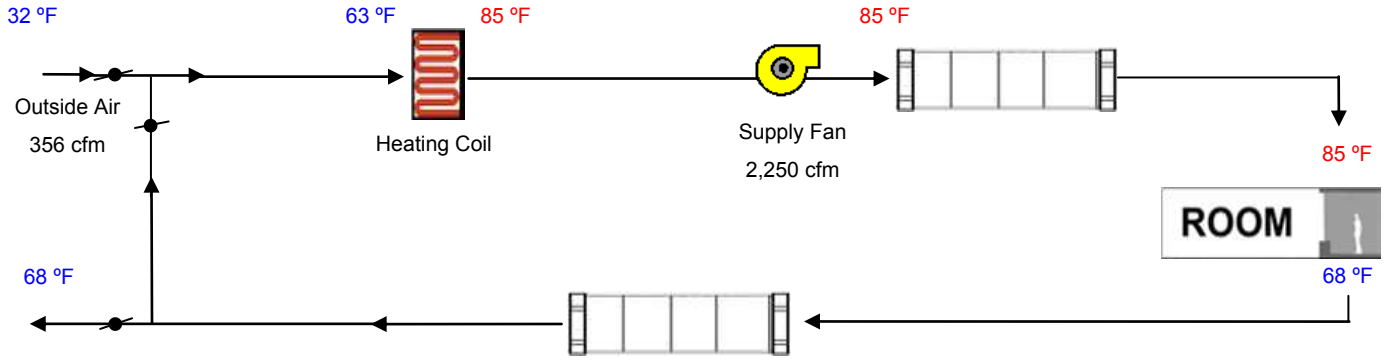
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	1,379	23,790	1,841	457	8,048
Return Vented Lighting		0			
Return Air Ducts		1,189			402
Return Fan		0			0
Ventilation	356	6,558	-988	356	13,354
Supply Fan		1,451			-1,451
Supply Air Ducts		1,189			402
TOTAL SYSTEM LOAD		34,177	852		20,756

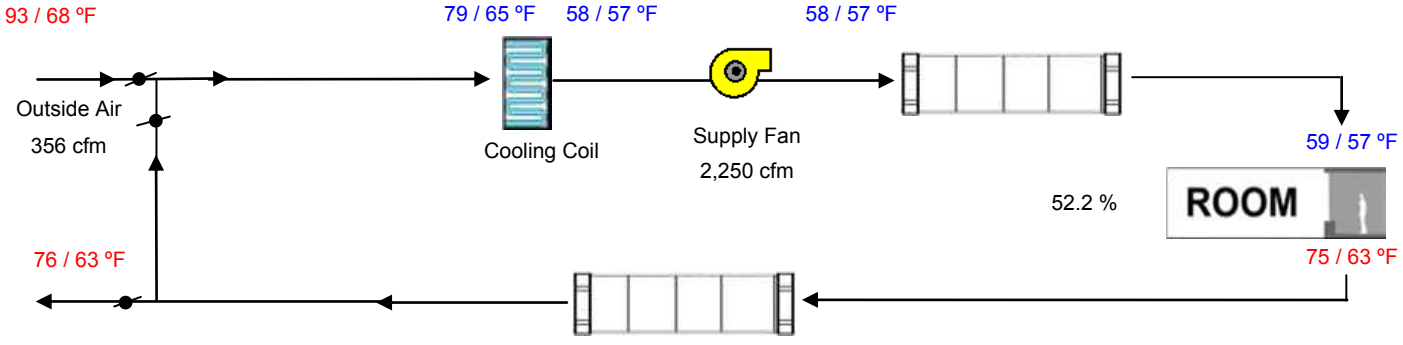
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A12NKA7/PEAD-A12AA7	47,806	10,514		51,051
Total Adjusted System Output (Adjusted for Peak Design conditions)	47,806	10,514		51,051
TIME OF SYSTEM PEAK		Jul 4 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 5 Studio Units	2,375

ENGINEERING CHECKS

Number of Systems	5
Heating System	
Output per System	14,000
Total Output (Btuh)	70,000
Output (Btuh/sqft)	29.5
Cooling System	
Output per System	12,000
Total Output (Btuh)	60,000
Total Output (Tons)	5.0
Total Output (Btuh/sqft)	25.3
Total Output (sqft/Ton)	475.0
Air System	
CFM per System	450
Airflow (cfm)	2,250
Airflow (cfm/sqft)	0.95
Airflow (cfm/Ton)	450.0
Outside Air (%)	15.8 %
Outside Air (cfm/sqft)	0.15
Note: values above given at ARI conditions	

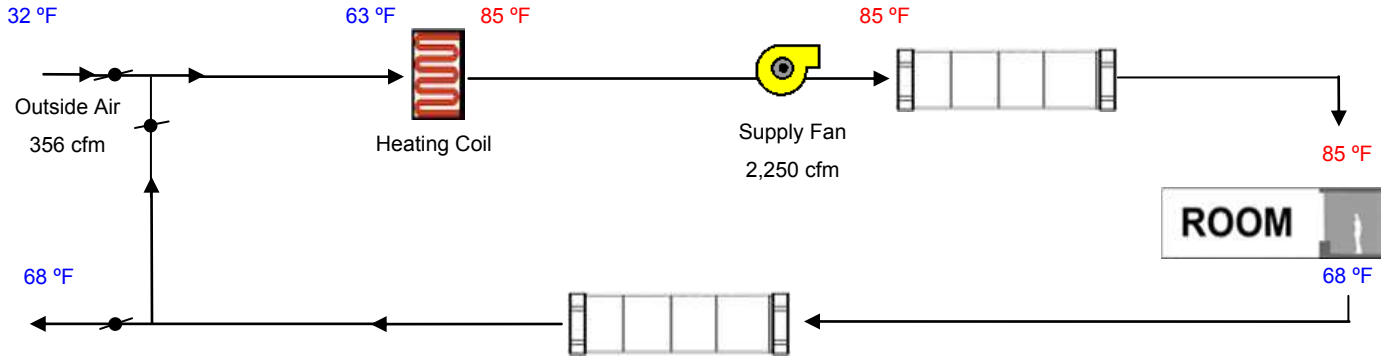
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	1,379	23,790	1,841	457	8,048
Return Vented Lighting		0			
Return Air Ducts		1,189			402
Return Fan		0			0
Ventilation	356	6,558	-988	356	13,354
Supply Fan		1,451			-1,451
Supply Air Ducts		1,189			402
TOTAL SYSTEM LOAD		34,177	852		20,756

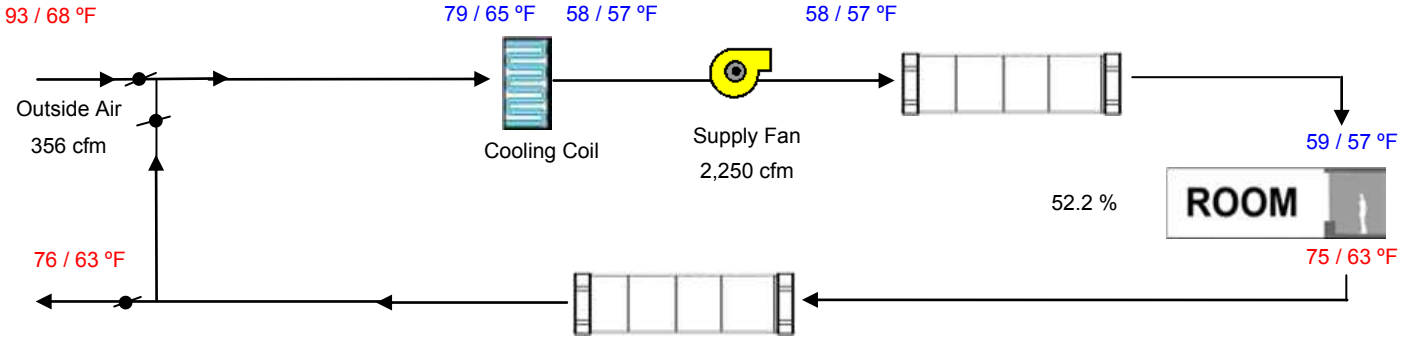
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A12NKA7/PEAD-A12AA7	47,806	10,514		51,051
Total Adjusted System Output (Adjusted for Peak Design conditions)	47,806	10,514		51,051
TIME OF SYSTEM PEAK		Jul 4 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 6 Studio Units	1,030

ENGINEERING CHECKS

Number of Systems	5
Heating System	
Output per System	14,000
Total Output (Btuh)	70,000
Output (Btuh/sqft)	68.0
Cooling System	
Output per System	12,000
Total Output (Btuh)	60,000
Total Output (Tons)	5.0
Total Output (Btuh/sqft)	58.3
Total Output (sqft/Ton)	206.0
Air System	
CFM per System	450
Airflow (cfm)	2,250
Airflow (cfm/sqft)	2.18
Airflow (cfm/Ton)	450.0
Outside Air (%)	13.3 %
Outside Air (cfm/sqft)	0.29
Note: values above given at ARI conditions	

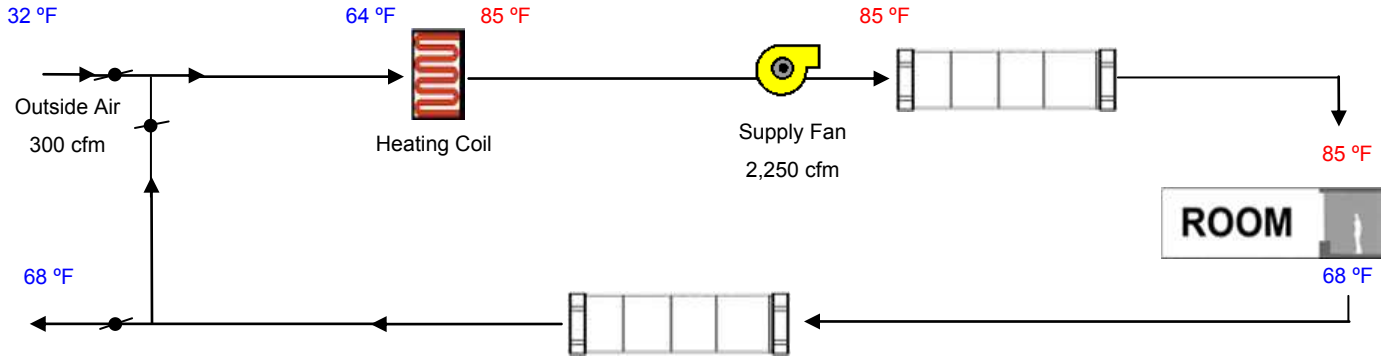
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	790	13,805	798	322	5,682
Return Vented Lighting		0			
Return Air Ducts		690			284
Return Fan		0			0
Ventilation	300	5,589	-574	300	11,261
Supply Fan		1,451			-1,451
Supply Air Ducts		690			284
TOTAL SYSTEM LOAD		22,225	224		16,061

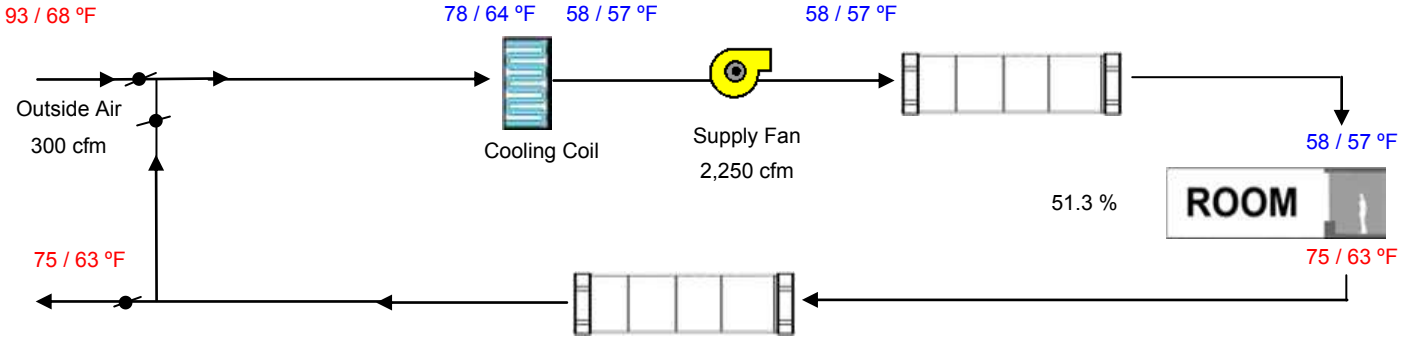
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A12NKA7/PEAD-A12AA7	47,360	10,573		51,051
Total Adjusted System Output (Adjusted for Peak Design conditions)	47,360	10,573		51,051
TIME OF SYSTEM PEAK		Jul 2 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 6 T/H One Bed Units	1,686

ENGINEERING CHECKS

Number of Systems	3
Heating System	
Output per System	14,000
Total Output (Btuh)	42,000
Output (Btuh/sqft)	24.9
Cooling System	
Output per System	12,000
Total Output (Btuh)	36,000
Total Output (Tons)	3.0
Total Output (Btuh/sqft)	21.4
Total Output (sqft/Ton)	562.0
Air System	
CFM per System	450
Airflow (cfm)	1,350
Airflow (cfm/sqft)	0.80
Airflow (cfm/Ton)	450.0
Outside Air (%)	22.2 %
Outside Air (cfm/sqft)	0.18
Note: values above given at ARI conditions	

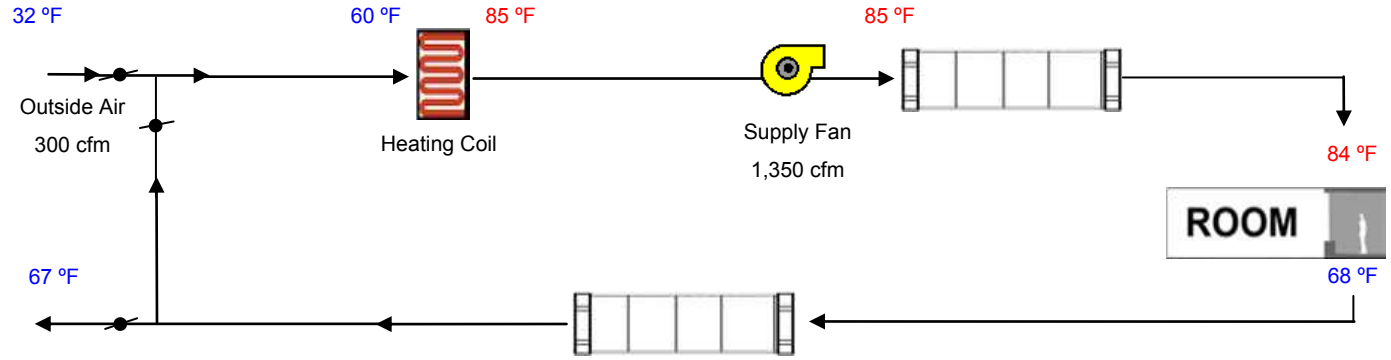
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	2,332	38,175	1,307	920	15,816
Return Vented Lighting		0			
Return Air Ducts		1,909			791
Return Fan		0			0
Ventilation	300	4,598	-898	300	11,123
Supply Fan		870			-870
Supply Air Ducts		1,909			791
TOTAL SYSTEM LOAD		47,460	409		27,650

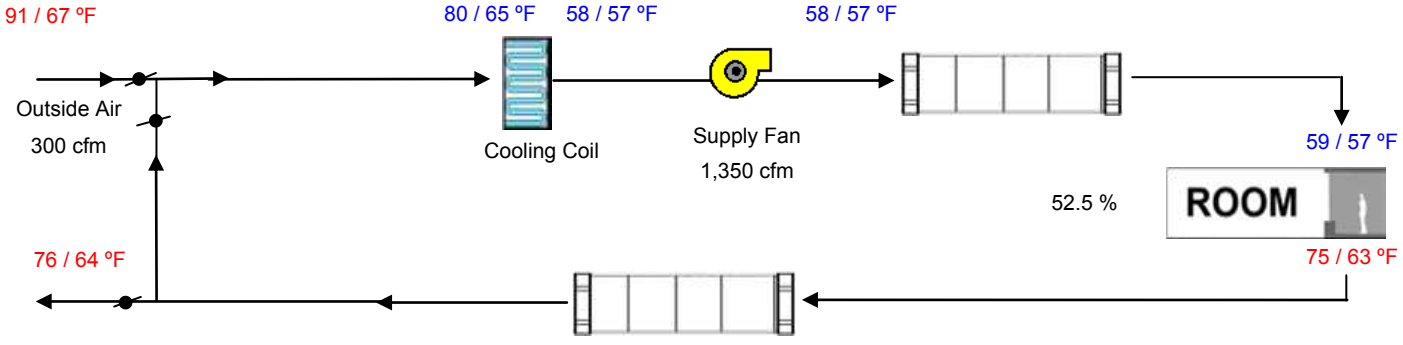
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A12NKA7/PEAD-A12AA7	29,934	5,683		30,630
Total Adjusted System Output (Adjusted for Peak Design conditions)	29,934	5,683		30,630
TIME OF SYSTEM PEAK		Jul 5 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 2 One Bed Units	6,835

ENGINEERING CHECKS

Number of Systems	10
Heating System	
Output per System	19,000
Total Output (Btuh)	190,000
Output (Btuh/sqft)	27.8
Cooling System	
Output per System	18,000
Total Output (Btuh)	180,000
Total Output (Tons)	15.0
Total Output (Btuh/sqft)	26.3
Total Output (sqft/Ton)	455.7
Air System	
CFM per System	560
Airflow (cfm)	5,600
Airflow (cfm/sqft)	0.82
Airflow (cfm/Ton)	373.3
Outside Air (%)	18.3 %
Outside Air (cfm/sqft)	0.15
Note: values above given at ARI conditions	

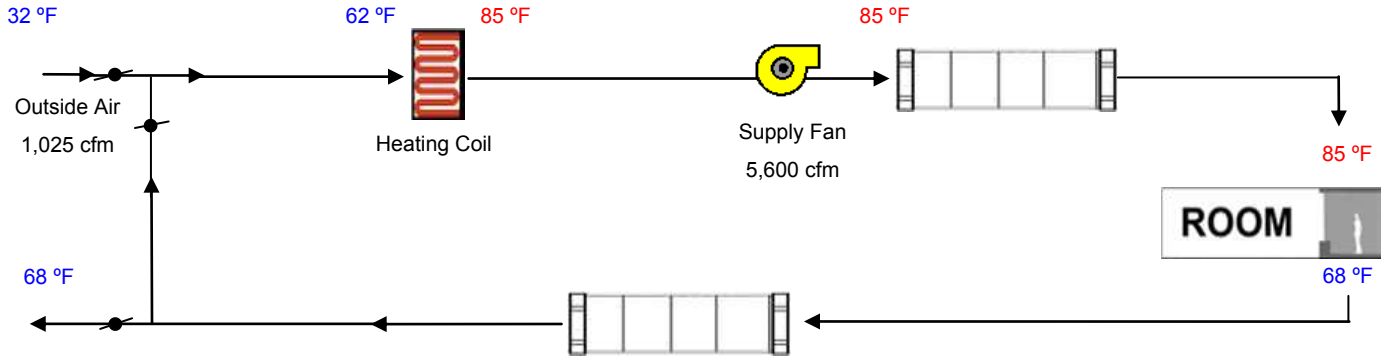
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	3,858	66,337	5,297	1,218	21,427
Return Vented Lighting		0			
Return Air Ducts		3,317			1,071
Return Fan		0			0
Ventilation	1,025	17,627	-2,996	1,025	38,418
Supply Fan		2,901			-2,901
Supply Air Ducts		3,317			1,071
TOTAL SYSTEM LOAD		93,499	2,301		59,087

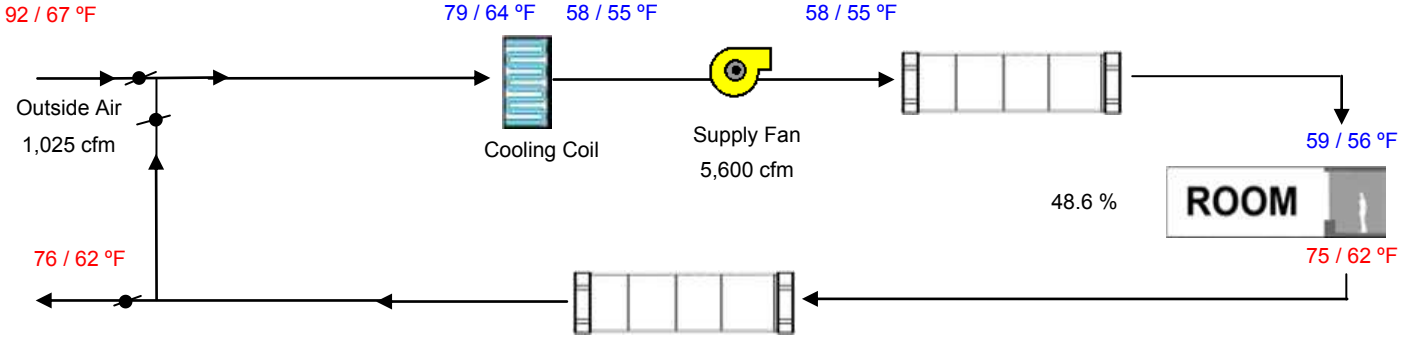
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A18NKA7/PEAD-A18AA7	156,329	16,824		138,566
Total Adjusted System Output (Adjusted for Peak Design conditions)	156,329	16,824		138,566
TIME OF SYSTEM PEAK		Sep 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 3 One Bed Units	4,840

ENGINEERING CHECKS

Number of Systems	7
Heating System	
Output per System	19,000
Total Output (Btuh)	133,000
Output (Btuh/sqft)	27.5
Cooling System	
Output per System	18,000
Total Output (Btuh)	126,000
Total Output (Tons)	10.5
Total Output (Btuh/sqft)	26.0
Total Output (sqft/Ton)	461.0
Air System	
CFM per System	560
Airflow (cfm)	3,920
Airflow (cfm/sqft)	0.81
Airflow (cfm/Ton)	373.3
Outside Air (%)	18.5 %
Outside Air (cfm/sqft)	0.15
Note: values above given at ARI conditions	

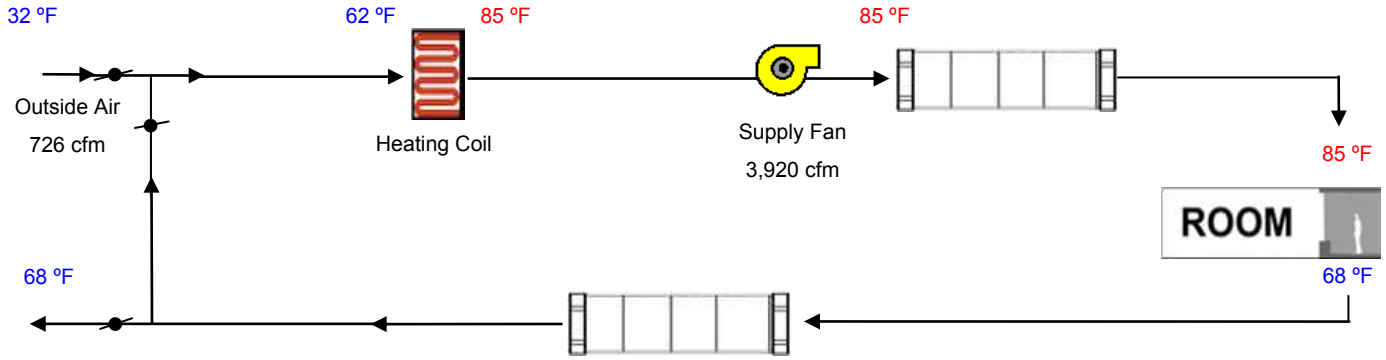
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	2,470	42,593	3,751	798	14,042
Return Vented Lighting		0			
Return Air Ducts		2,130			702
Return Fan		0			0
Ventilation	726	13,353	-2,185	726	27,213
Supply Fan		2,031			-2,031
Supply Air Ducts		2,130			702
TOTAL SYSTEM LOAD		62,237	1,566		40,629

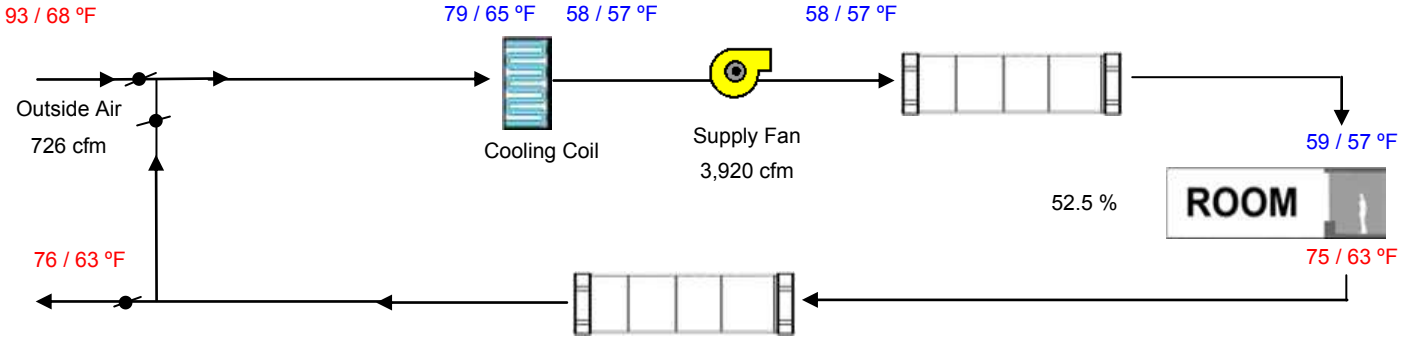
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A18NKA7/PEAD-A18AA7	104,641	18,146		96,996
Total Adjusted System Output (Adjusted for Peak Design conditions)	104,641	18,146		96,996
TIME OF SYSTEM PEAK		Jul 4 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 4 One Bed Units	4,840

ENGINEERING CHECKS

Number of Systems	7
Heating System	
Output per System	19,000
Total Output (Btuh)	133,000
Output (Btuh/sqft)	27.5
Cooling System	
Output per System	18,000
Total Output (Btuh)	126,000
Total Output (Tons)	10.5
Total Output (Btuh/sqft)	26.0
Total Output (sqft/Ton)	461.0
Air System	
CFM per System	560
Airflow (cfm)	3,920
Airflow (cfm/sqft)	0.81
Airflow (cfm/Ton)	373.3
Outside Air (%)	18.5 %
Outside Air (cfm/sqft)	0.15
Note: values above given at ARI conditions	

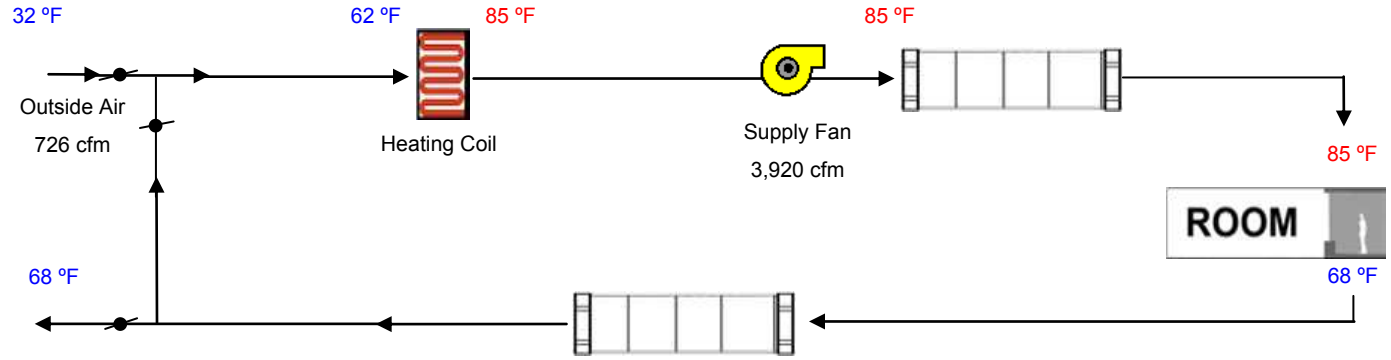
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	2,722	46,790	3,751	886	15,586
Return Vented Lighting		0			
Return Air Ducts		2,340			779
Return Fan		0			0
Ventilation	726	13,314	-2,185	726	27,199
Supply Fan		2,031			-2,031
Supply Air Ducts		2,340			779
TOTAL SYSTEM LOAD		66,814	1,566		42,313

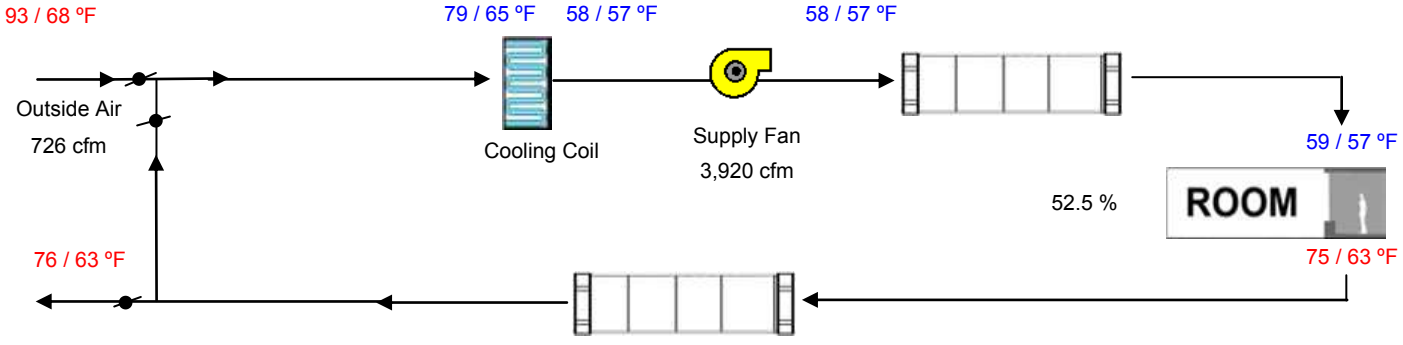
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A18NKA7/PEAD-A18AA7	104,736	18,078		96,996
Total Adjusted System Output (Adjusted for Peak Design conditions)	104,736	18,078		96,996
TIME OF SYSTEM PEAK		Jul 4 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 5 One Bed Units	4,840

ENGINEERING CHECKS

Number of Systems	7
Heating System	
Output per System	19,000
Total Output (Btuh)	133,000
Output (Btuh/sqft)	27.5
Cooling System	
Output per System	18,000
Total Output (Btuh)	126,000
Total Output (Tons)	10.5
Total Output (Btuh/sqft)	26.0
Total Output (sqft/Ton)	461.0
Air System	
CFM per System	560
Airflow (cfm)	3,920
Airflow (cfm/sqft)	0.81
Airflow (cfm/Ton)	373.3
Outside Air (%)	18.5 %
Outside Air (cfm/sqft)	0.15
Note: values above given at ARI conditions	

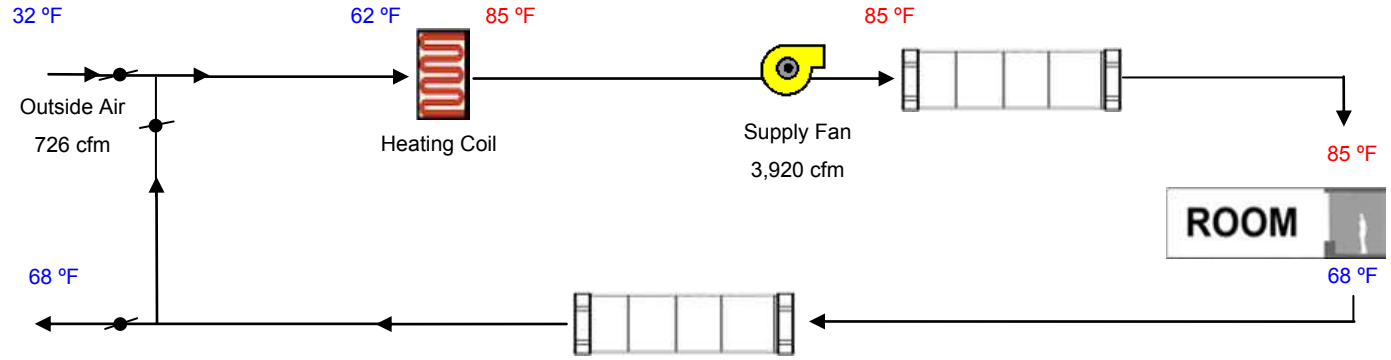
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	2,722	46,790	3,751	886	15,586
Return Vented Lighting		0			
Return Air Ducts		2,340			779
Return Fan		0			0
Ventilation	726	13,314	-2,185	726	27,199
Supply Fan		2,031			-2,031
Supply Air Ducts		2,340			779
TOTAL SYSTEM LOAD		66,814	1,566		42,313

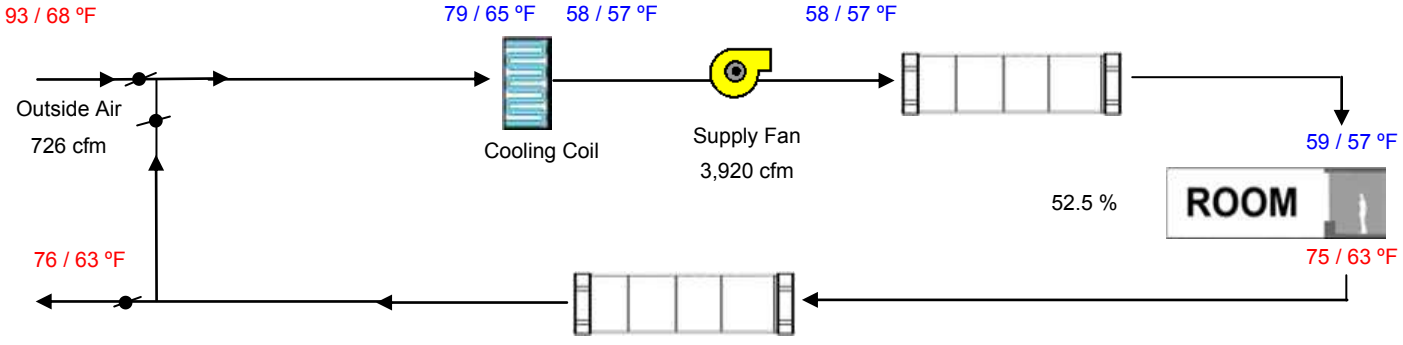
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A18NKA7/PEAD-A18AA7	104,736	18,078		96,996
Total Adjusted System Output (Adjusted for Peak Design conditions)	104,736	18,078		96,996
TIME OF SYSTEM PEAK		Jul 4 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 6 One Bed Units	3,990

ENGINEERING CHECKS

Number of Systems	6
Heating System	
Output per System	19,000
Total Output (Btuh)	114,000
Output (Btuh/sqft)	28.6
Cooling System	
Output per System	18,000
Total Output (Btuh)	108,000
Total Output (Tons)	9.0
Total Output (Btuh/sqft)	27.1
Total Output (sqft/Ton)	443.3
Air System	
CFM per System	560
Airflow (cfm)	3,360
Airflow (cfm/sqft)	0.84
Airflow (cfm/Ton)	373.3
Outside Air (%)	17.8 %
Outside Air (cfm/sqft)	0.15
Note: values above given at ARI conditions	

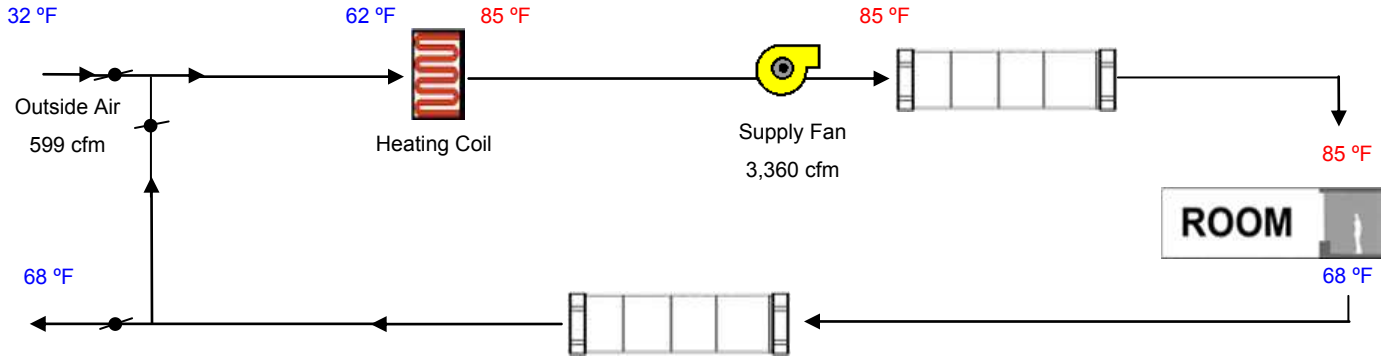
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	3,034	51,624	3,092	1,146	20,048
Return Vented Lighting		0			
Return Air Ducts		2,581			1,002
Return Fan		0			0
Ventilation	599	10,874	-1,764	599	22,363
Supply Fan		1,741			-1,741
Supply Air Ducts		2,581			1,002
TOTAL SYSTEM LOAD		69,401	1,328		42,675

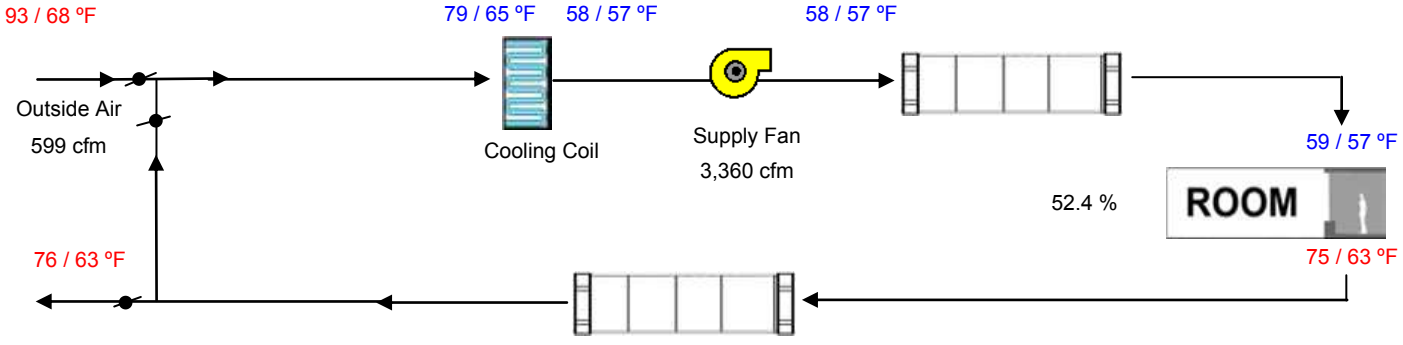
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A18NKA7/PEAD-A18AA7	89,838	15,416		83,140
Total Adjusted System Output (Adjusted for Peak Design conditions)	89,838	15,416		83,140
TIME OF SYSTEM PEAK		Jul 4 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 2 Two Bed Units	3,140

ENGINEERING CHECKS

Number of Systems	4
Heating System	
Output per System	26,000
Total Output (Btuh)	104,000
Output (Btuh/sqft)	33.1
Cooling System	
Output per System	24,000
Total Output (Btuh)	96,000
Total Output (Tons)	8.0
Total Output (Btuh/sqft)	30.6
Total Output (sqft/Ton)	392.5
Air System	
CFM per System	700
Airflow (cfm)	2,800
Airflow (cfm/sqft)	0.89
Airflow (cfm/Ton)	350.0
Outside Air (%)	16.8 %
Outside Air (cfm/sqft)	0.15
Note: values above given at ARI conditions	

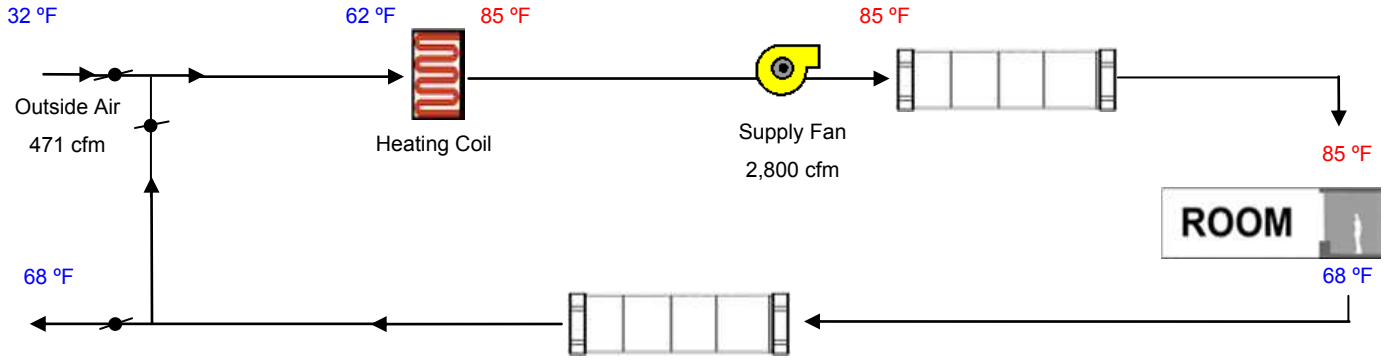
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	2,195	37,564	2,434	979	17,112
Return Vented Lighting		0			
Return Air Ducts		1,878			856
Return Fan		0			0
Ventilation	471	9,047	-1,348	471	17,595
Supply Fan		1,652			-1,652
Supply Air Ducts		1,878			856
TOTAL SYSTEM LOAD		52,019	1,086		34,767

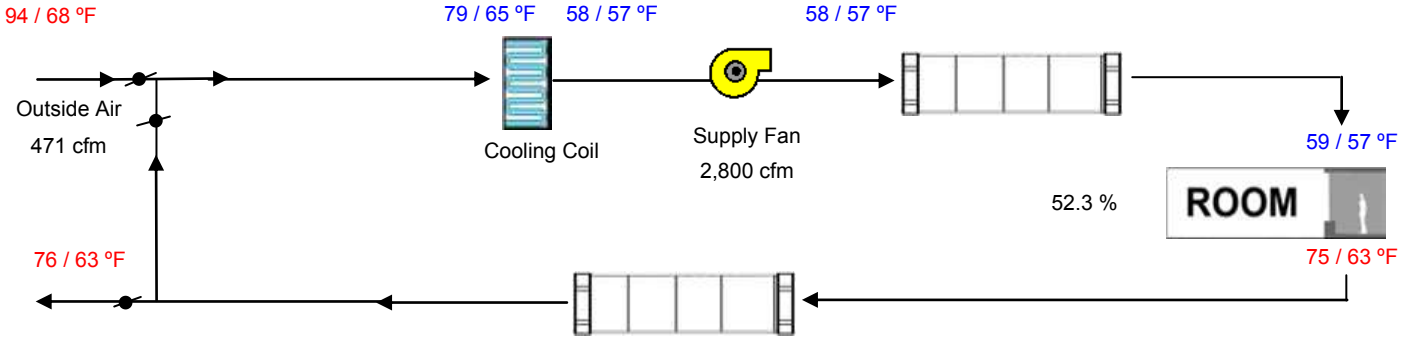
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A24NHA7/PEAD-A24AA7	73,293	19,799		75,847
Total Adjusted System Output (Adjusted for Peak Design conditions)	73,293	19,799		75,847
TIME OF SYSTEM PEAK		Jul 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 3 Two Bed Units	2,370

ENGINEERING CHECKS

Number of Systems	3
Heating System	
Output per System	26,000
Total Output (Btuh)	78,000
Output (Btuh/sqft)	32.9
Cooling System	
Output per System	24,000
Total Output (Btuh)	72,000
Total Output (Tons)	6.0
Total Output (Btuh/sqft)	30.4
Total Output (sqft/Ton)	395.0
Air System	
CFM per System	700
Airflow (cfm)	2,100
Airflow (cfm/sqft)	0.89
Airflow (cfm/Ton)	350.0
Outside Air (%)	16.9 %
Outside Air (cfm/sqft)	0.15
Note: values above given at ARI conditions	

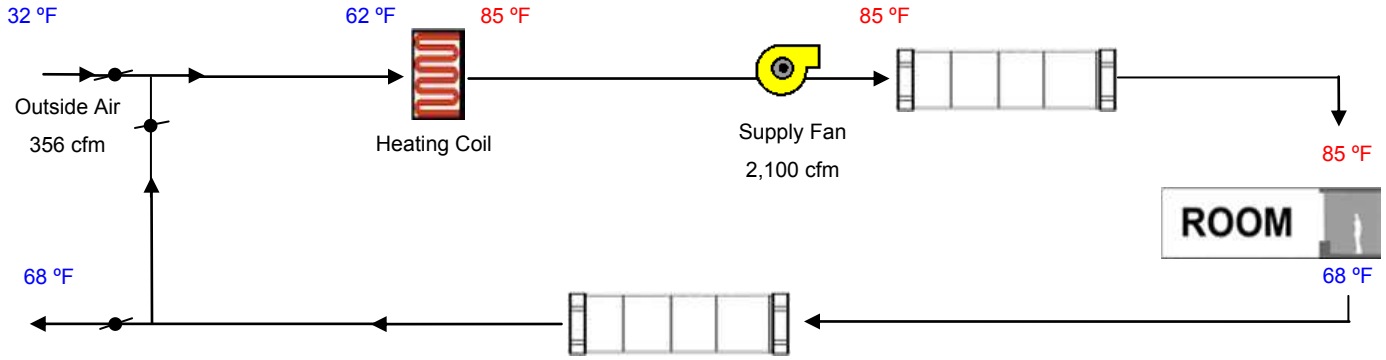
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	1,537	26,379	1,837	700	12,246
Return Vented Lighting		0			
Return Air Ducts		1,319			612
Return Fan		0			0
Ventilation	356	6,509	-1,021	356	13,286
Supply Fan		1,239			-1,239
Supply Air Ducts		1,319			612
TOTAL SYSTEM LOAD		36,764	816		25,518

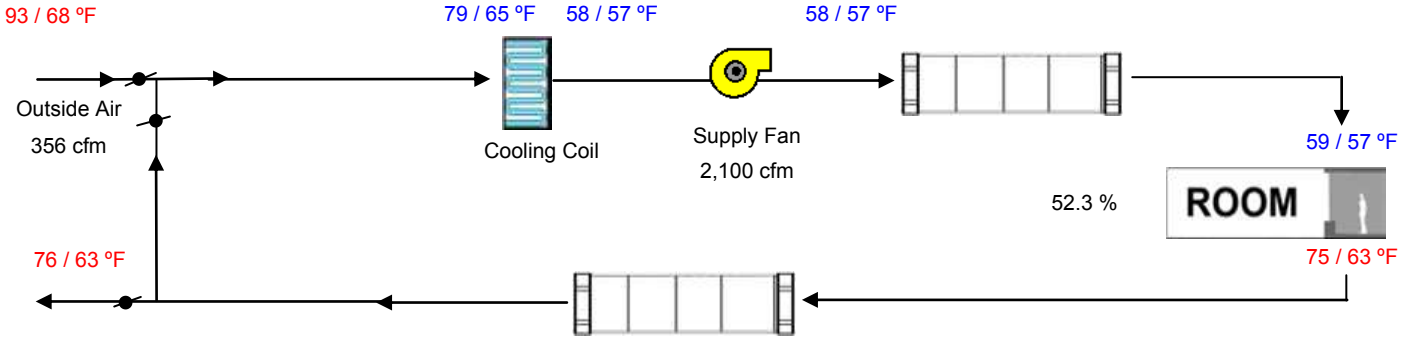
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A24NHA7/PEAD-A24AA7	54,865	15,218		56,885
Total Adjusted System Output (Adjusted for Peak Design conditions)	54,865	15,218		56,885
TIME OF SYSTEM PEAK		Jul 4 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 4 Two Bed Units	3,300

ENGINEERING CHECKS

Number of Systems	4
Heating System	
Output per System	26,000
Total Output (Btuh)	104,000
Output (Btuh/sqft)	31.5
Cooling System	
Output per System	24,000
Total Output (Btuh)	96,000
Total Output (Tons)	8.0
Total Output (Btuh/sqft)	29.1
Total Output (sqft/Ton)	412.5
Air System	
CFM per System	700
Airflow (cfm)	2,800
Airflow (cfm/sqft)	0.85
Airflow (cfm/Ton)	350.0
Outside Air (%)	17.7 %
Outside Air (cfm/sqft)	0.15

Note: values above given at ARI conditions

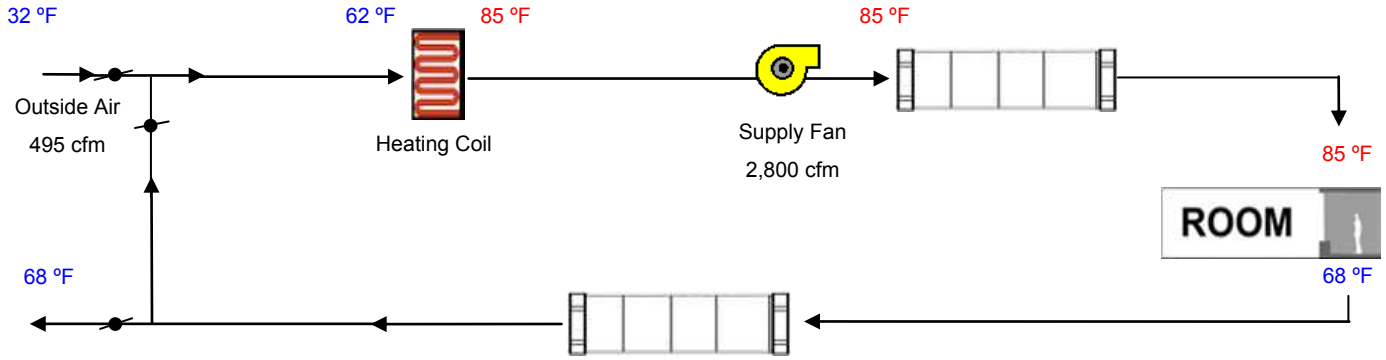
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	2,228	38,103	2,558	943	16,494
Return Vented Lighting		0			
Return Air Ducts		1,905			825
Return Fan		0			0
Ventilation	495	8,467	-1,419	495	18,498
Supply Fan		1,652			-1,652
Supply Air Ducts		1,905			825
TOTAL SYSTEM LOAD		52,032	1,138		34,989

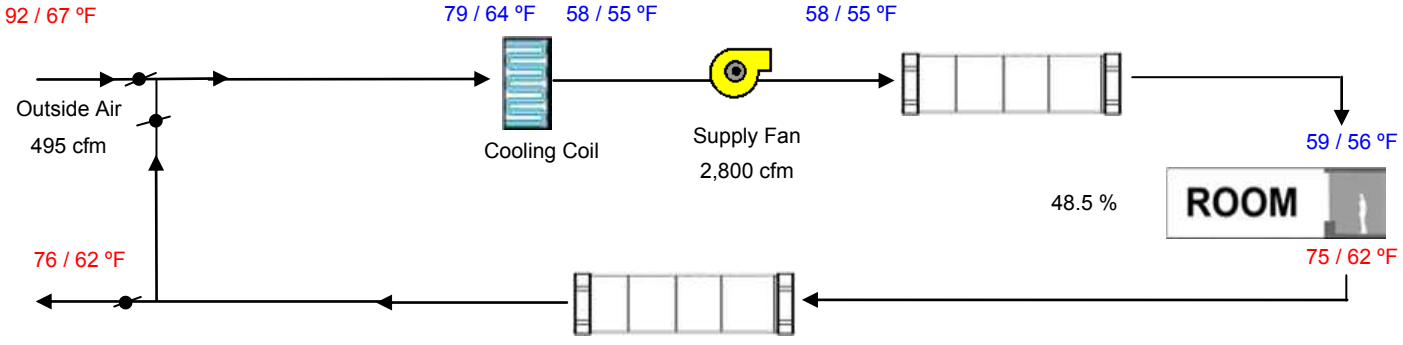
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A24NHA7/PEAD-A24AA7	76,741	15,609		75,847
Total Adjusted System Output (Adjusted for Peak Design conditions)	76,741	15,609		75,847
TIME OF SYSTEM PEAK		Sep 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 5 Two Bed Units	3,300

ENGINEERING CHECKS

Number of Systems	4
Heating System	
Output per System	26,000
Total Output (Btuh)	104,000
Output (Btuh/sqft)	31.5
Cooling System	
Output per System	24,000
Total Output (Btuh)	96,000
Total Output (Tons)	8.0
Total Output (Btuh/sqft)	29.1
Total Output (sqft/Ton)	412.5
Air System	
CFM per System	700
Airflow (cfm)	2,800
Airflow (cfm/sqft)	0.85
Airflow (cfm/Ton)	350.0
Outside Air (%)	17.7 %
Outside Air (cfm/sqft)	0.15

Note: values above given at ARI conditions

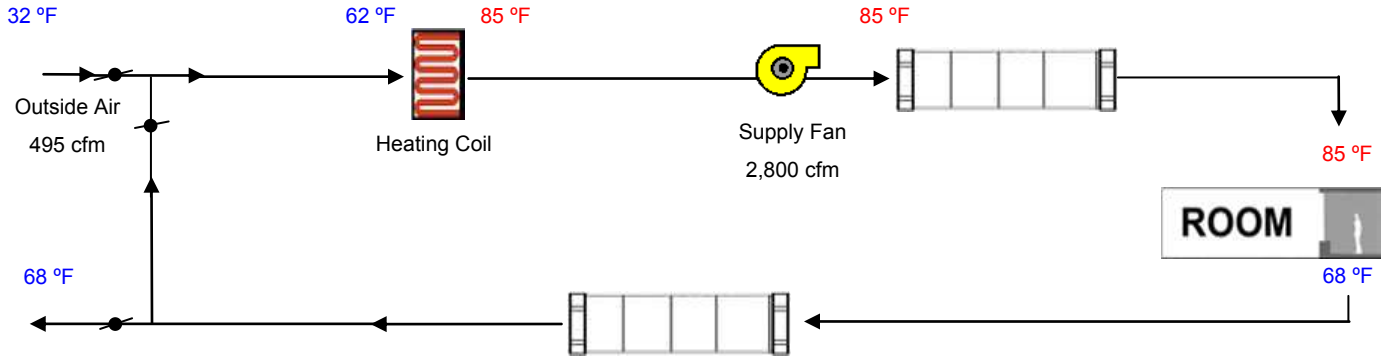
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	2,228	38,103	2,558	943	16,494
Return Vented Lighting		0			
Return Air Ducts		1,905			825
Return Fan		0			0
Ventilation	495	8,467	-1,419	495	18,498
Supply Fan		1,652			-1,652
Supply Air Ducts		1,905			825
TOTAL SYSTEM LOAD		52,032	1,138		34,989

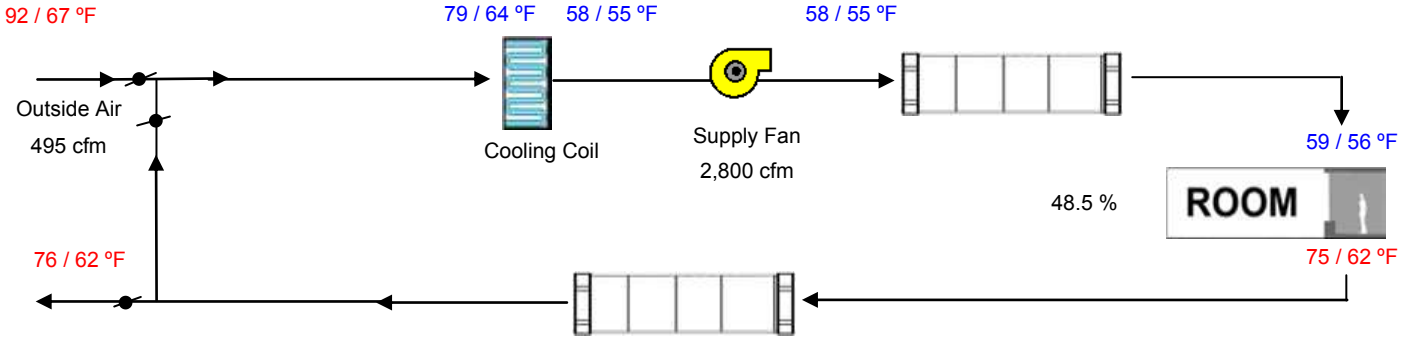
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A24NHA7/PEAD-A24AA7	76,741	15,609		75,847
Total Adjusted System Output (Adjusted for Peak Design conditions)	76,741	15,609		75,847
TIME OF SYSTEM PEAK		Sep 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 6 Two Bed Units	2,350

ENGINEERING CHECKS

Number of Systems	3
Heating System	
Output per System	26,000
Total Output (Btuh)	78,000
Output (Btuh/sqft)	33.2
Cooling System	
Output per System	24,000
Total Output (Btuh)	72,000
Total Output (Tons)	6.0
Total Output (Btuh/sqft)	30.6
Total Output (sqft/Ton)	391.7
Air System	
CFM per System	700
Airflow (cfm)	2,100
Airflow (cfm/sqft)	0.89
Airflow (cfm/Ton)	350.0
Outside Air (%)	19.0 %
Outside Air (cfm/sqft)	0.17
Note: values above given at ARI conditions	

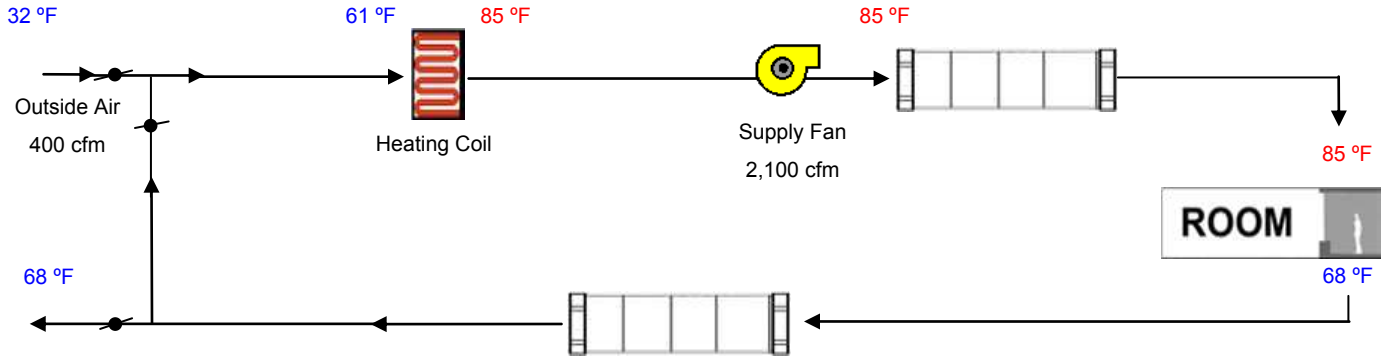
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	2,193	37,069	1,821	1,028	17,840
Return Vented Lighting		0			
Return Air Ducts		1,853			892
Return Fan		0			0
Ventilation	400	7,598	-1,135	400	14,895
Supply Fan		1,239			-1,239
Supply Air Ducts		1,853			892
TOTAL SYSTEM LOAD		49,612	686		33,281

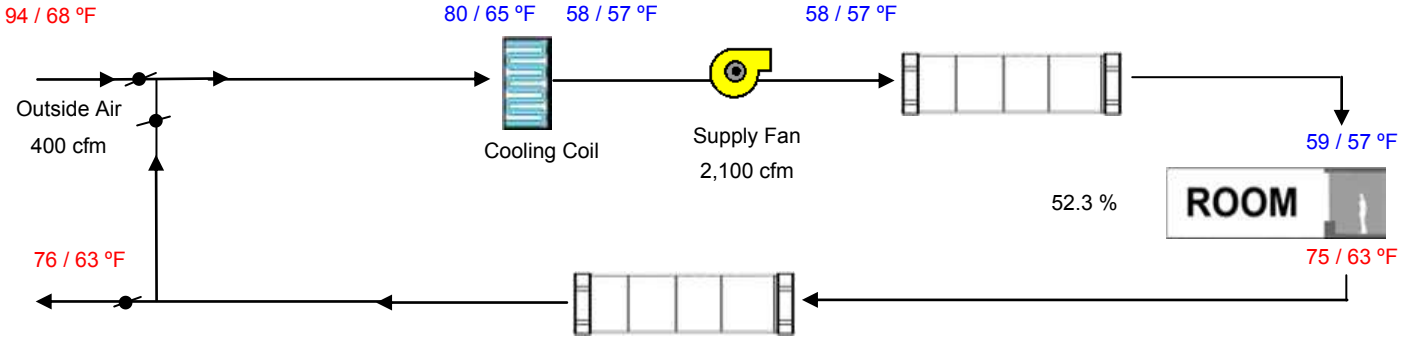
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A24NHA7/PEAD-A24AA7	55,712	14,291		56,885
Total Adjusted System Output (Adjusted for Peak Design conditions)	55,712	14,291		56,885
TIME OF SYSTEM PEAK		Aug 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 6 T/H Two Bed Units	1,850

ENGINEERING CHECKS

Number of Systems	2
Heating System	
Output per System	32,000
Total Output (Btuh)	64,000
Output (Btuh/sqft)	34.6
Cooling System	
Output per System	35,000
Total Output (Btuh)	70,000
Total Output (Tons)	5.8
Total Output (Btuh/sqft)	37.8
Total Output (sqft/Ton)	317.1
Air System	
CFM per System	1,200
Airflow (cfm)	2,400
Airflow (cfm/sqft)	1.30
Airflow (cfm/Ton)	411.4
Outside Air (%)	16.7 %
Outside Air (cfm/sqft)	0.22
Note: values above given at ARI conditions	

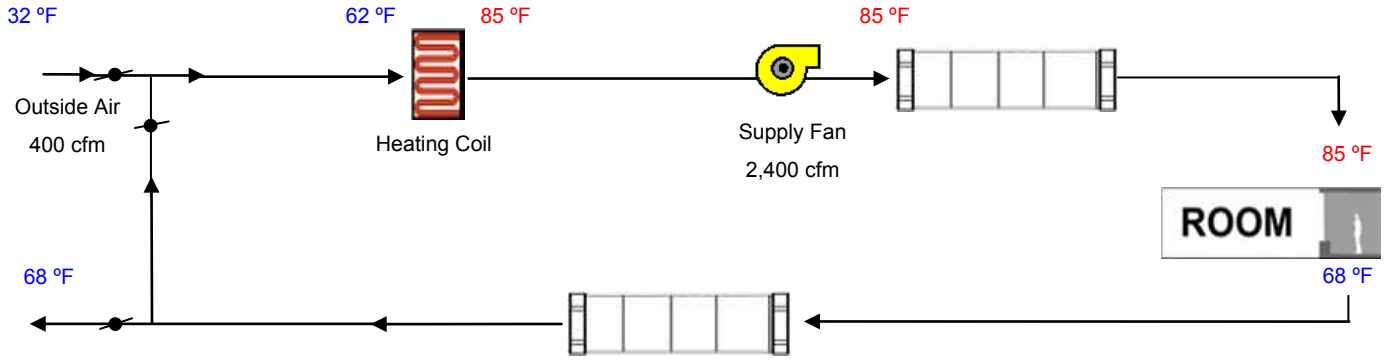
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	1,901	32,522	1,434	923	16,104
Return Vented Lighting		0			
Return Air Ducts		1,626			805
Return Fan		0			0
Ventilation	400	6,843	-915	400	14,931
Supply Fan		1,666			-1,666
Supply Air Ducts		1,626			805
TOTAL SYSTEM LOAD		44,283	519		30,980

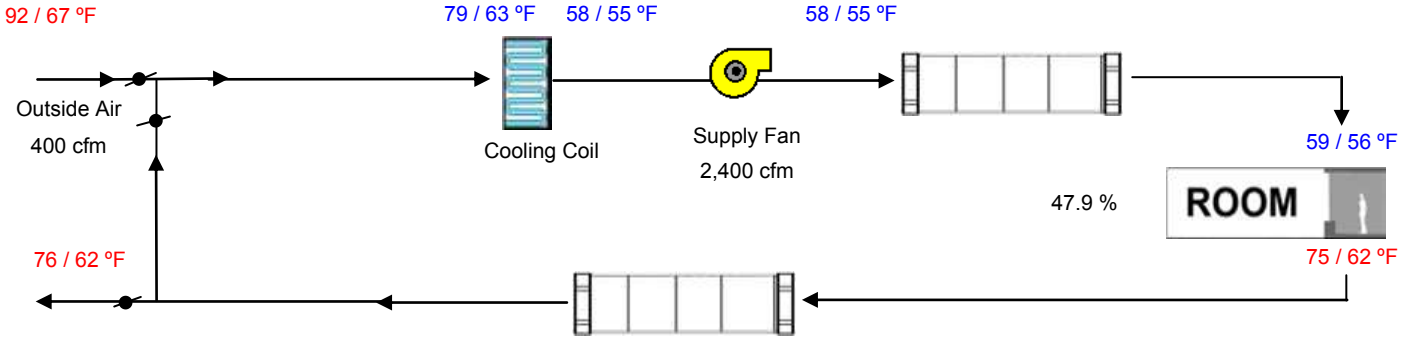
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A36NHA7/PEAD-A36AA7	59,307	7,851		46,675
Total Adjusted System Output (Adjusted for Peak Design conditions)	59,307	7,851		46,675
TIME OF SYSTEM PEAK		Sep 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 1 + Mezzanine Work/Live Units	5,242

ENGINEERING CHECKS

Number of Systems	4
Heating System	
Output per System	32,000
Total Output (Btuh)	128,000
Output (Btuh/sqft)	24.4
Cooling System	
Output per System	35,000
Total Output (Btuh)	140,000
Total Output (Tons)	11.7
Total Output (Btuh/sqft)	26.7
Total Output (sqft/Ton)	449.3
Air System	
CFM per System	1,200
Airflow (cfm)	4,800
Airflow (cfm/sqft)	0.92
Airflow (cfm/Ton)	411.4
Outside Air (%)	16.4 %
Outside Air (cfm/sqft)	0.15

Note: values above given at ARI conditions

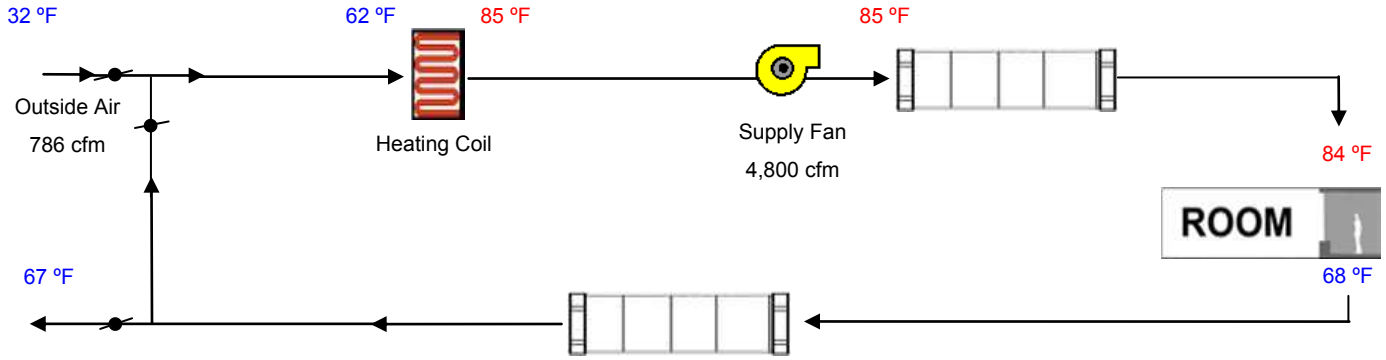
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	7,537	124,295	4,063	3,523	60,441
Return Vented Lighting		0			
Return Air Ducts		6,215			3,022
Return Fan		0			0
Ventilation	786	9,758	-2,072	786	29,120
Supply Fan		3,331			-3,331
Supply Air Ducts		6,215			3,022
TOTAL SYSTEM LOAD		149,814	1,990		92,273

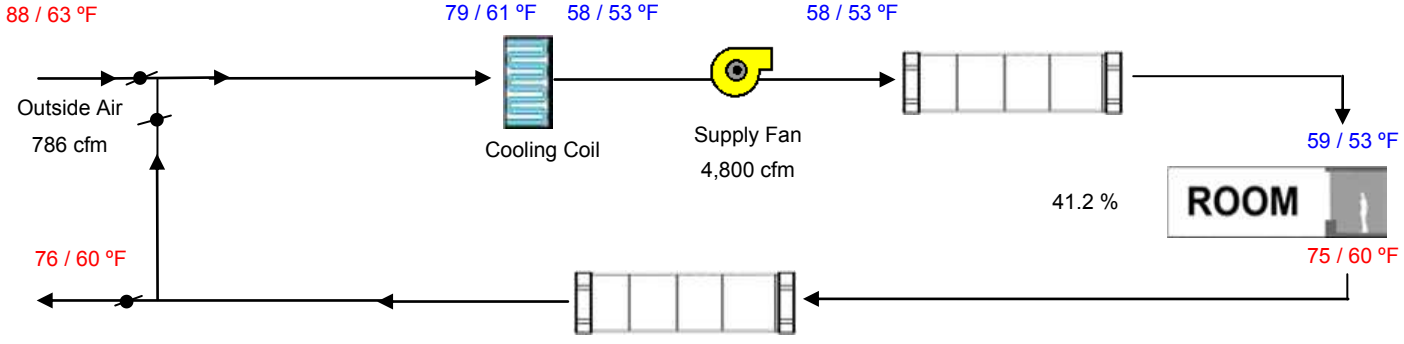
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A36NHA7/PEAD-A36AA7	128,873	3,802		93,350
Total Adjusted System Output (Adjusted for Peak Design conditions)	128,873	3,802		93,350
TIME OF SYSTEM PEAK		Oct 2 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Mezzanine Level_Amenity Lounge	1,530

ENGINEERING CHECKS

Number of Systems	1
Heating System	
Output per System	56,000
Total Output (Btuh)	56,000
Output (Btuh/sqft)	36.6
Cooling System	
Output per System	57,000
Total Output (Btuh)	57,000
Total Output (Tons)	4.8
Total Output (Btuh/sqft)	37.3
Total Output (sqft/Ton)	322.1
Air System	
CFM per System	1,750
Airflow (cfm)	1,750
Airflow (cfm/sqft)	1.14
Airflow (cfm/Ton)	368.4
Outside Air (%)	43.7 %
Outside Air (cfm/sqft)	0.50
Note: values above given at ARI conditions	

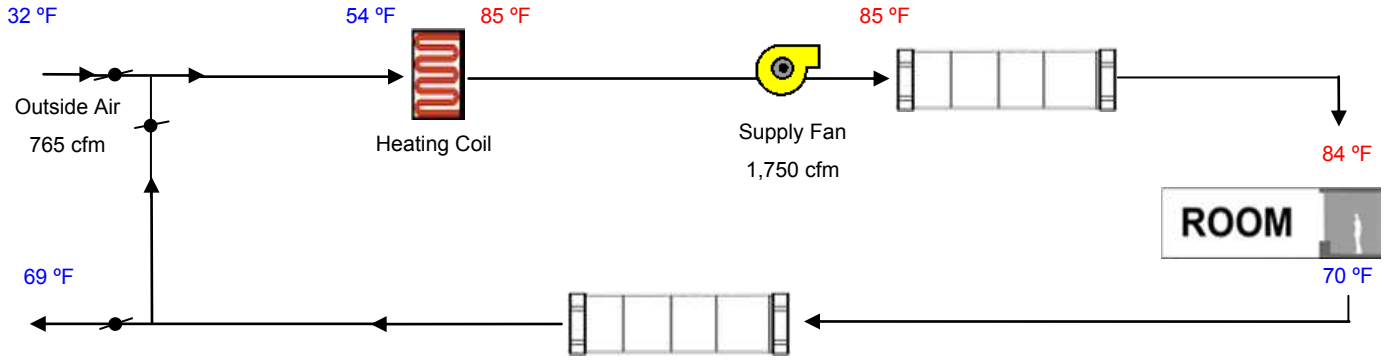
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	3,446	52,509	28,050	1,331	20,129
Return Vented Lighting		0			
Return Air Ducts		2,625			1,006
Return Fan		0			0
Ventilation	765	14,859	-14,750	765	29,973
Supply Fan		1,489			-1,489
Supply Air Ducts		2,625			1,006
TOTAL SYSTEM LOAD		74,108	13,300		50,626

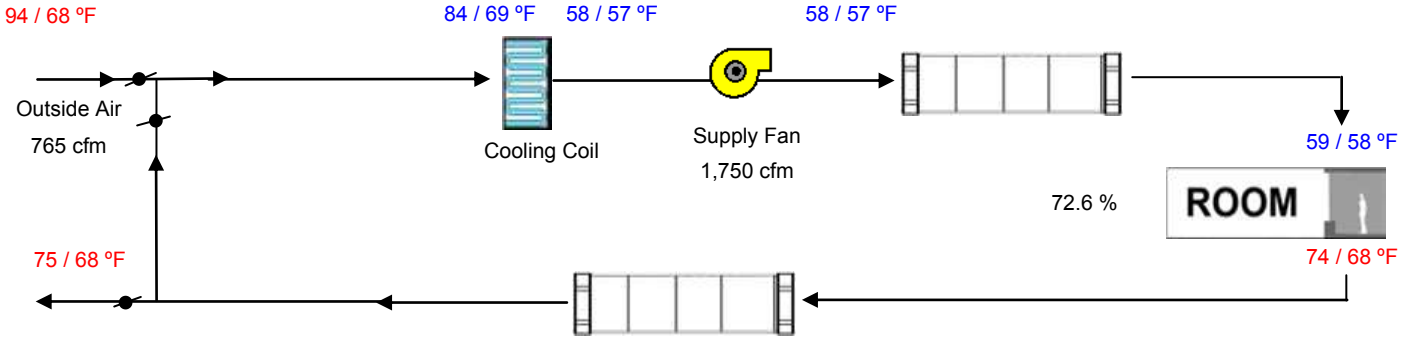
HVAC EQUIPMENT SELECTION

Carrier 25HBC560/FV4CNB006	46,309	12,765		40,841
Total Adjusted System Output (Adjusted for Peak Design conditions)	46,309	12,765		40,841
TIME OF SYSTEM PEAK		Jul 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments7	7/31/2019
System Name	**Floor Area**
Level 1 Retail Space	4,218

ENGINEERING CHECKS

Number of Systems	4
Heating System	
Output per System	56,000
Total Output (Btuh)	224,000
Output (Btuh/sqft)	53.1
Cooling System	
Output per System	57,000
Total Output (Btuh)	228,000
Total Output (Tons)	19.0
Total Output (Btuh/sqft)	54.1
Total Output (sqft/Ton)	222.0
Air System	
CFM per System	1,750
Airflow (cfm)	7,000
Airflow (cfm/sqft)	1.66
Airflow (cfm/Ton)	368.4
Outside Air (%)	12.1 %
Outside Air (cfm/sqft)	0.20
Note: values above given at ARI conditions	

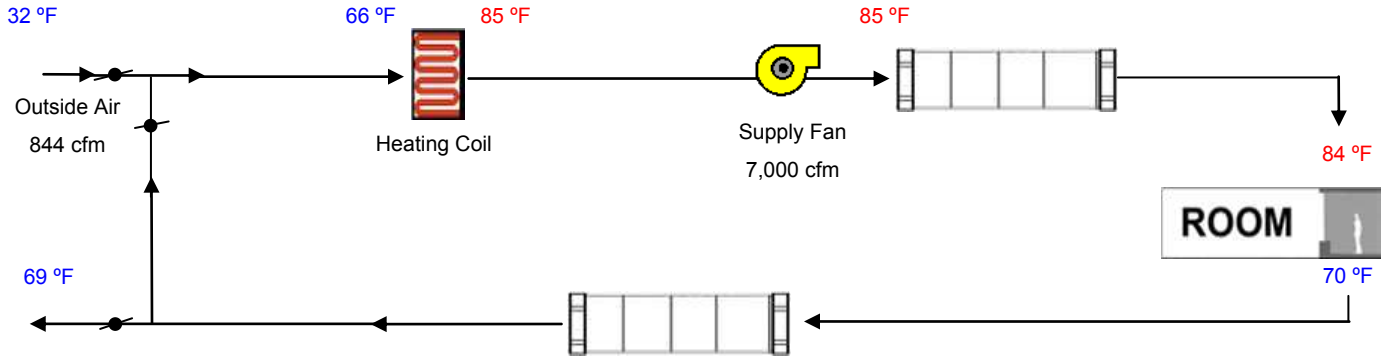
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	10,854	168,613	14,060	4,940	74,878
Return Vented Lighting		0			
Return Air Ducts		8,431			3,744
Return Fan		0			0
Ventilation	844	14,076	-4,243	844	33,087
Supply Fan		5,956			-5,956
Supply Air Ducts		8,431			3,744
TOTAL SYSTEM LOAD		205,506	9,817		109,496

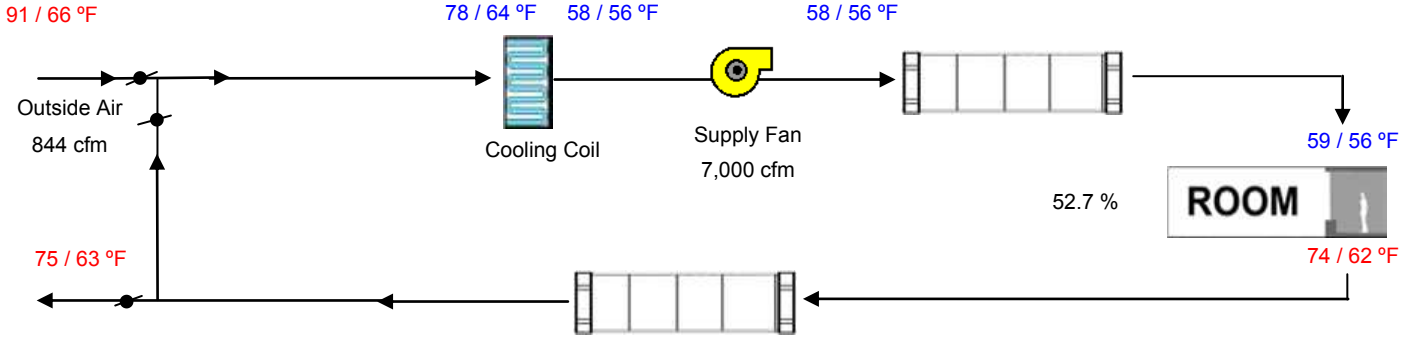
HVAC EQUIPMENT SELECTION

Carrier 25HBC560/FV4CNB006	183,465	37,697		163,362
Total Adjusted System Output (Adjusted for Peak Design conditions)	183,465	37,697		163,362
TIME OF SYSTEM PEAK		Sep 4 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 1 Restaurant	1,974

ENGINEERING CHECKS

Number of Systems	3
Heating System	
Output per System	56,000
Total Output (Btuh)	168,000
Output (Btuh/sqft)	85.1
Cooling System	
Output per System	57,000
Total Output (Btuh)	171,000
Total Output (Tons)	14.3
Total Output (Btuh/sqft)	86.6
Total Output (sqft/Ton)	138.5
Air System	
CFM per System	1,750
Airflow (cfm)	5,250
Airflow (cfm/sqft)	2.66
Airflow (cfm/Ton)	368.4
Outside Air (%)	18.8 %
Outside Air (cfm/sqft)	0.50
Note: values above given at ARI conditions	

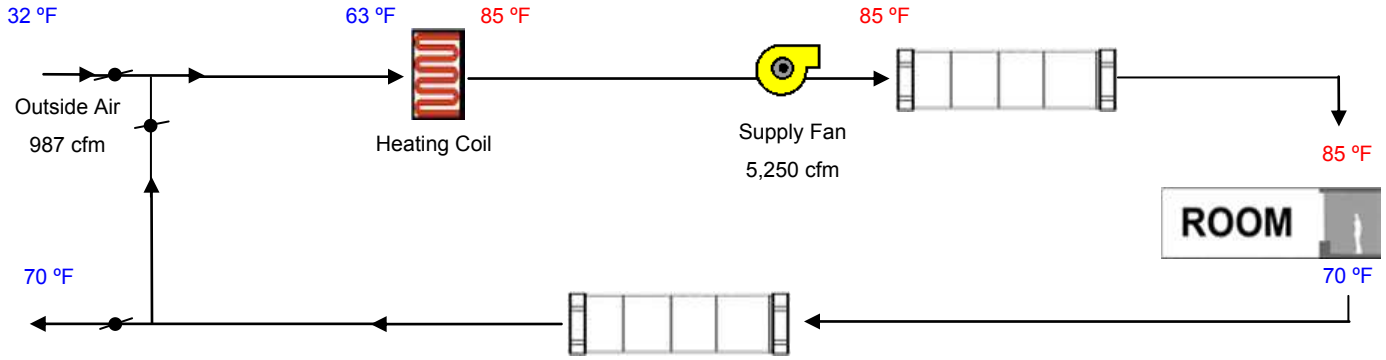
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	5,944	94,164	36,190	1,693	26,148
Return Vented Lighting		0			
Return Air Ducts		4,708			1,307
Return Fan		0			0
Ventilation	987	16,669	-10,461	987	38,993
Supply Fan		4,467			-4,467
Supply Air Ducts		4,708			1,307
TOTAL SYSTEM LOAD		124,716	25,729		63,289

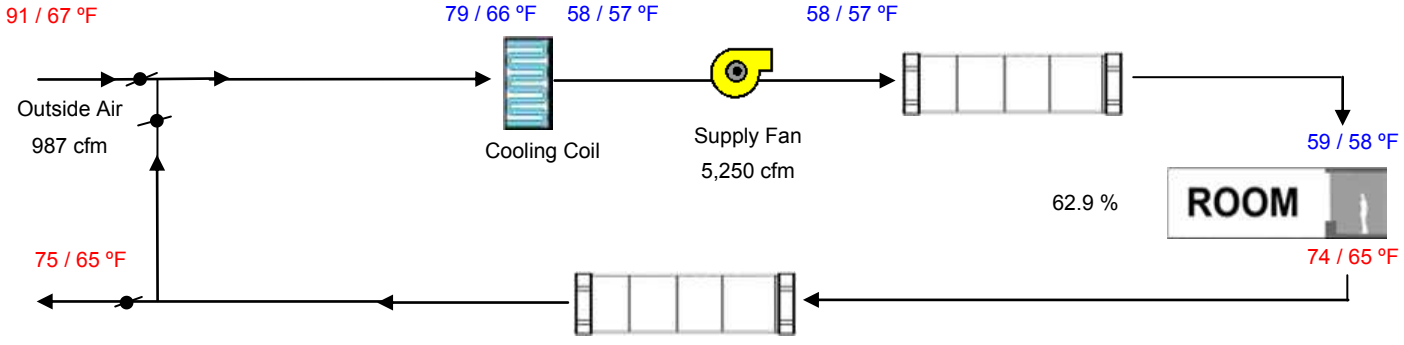
HVAC EQUIPMENT SELECTION

Carrier 25HBC560/FV4CNB006	126,123	46,880		122,522
Total Adjusted System Output (Adjusted for Peak Design conditions)	126,123	46,880		122,522
TIME OF SYSTEM PEAK		Jul 5 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 1 Lobby	2,369

ENGINEERING CHECKS

Number of Systems	2
Heating System	
Output per System	56,000
Total Output (Btuh)	112,000
Output (Btuh/sqft)	47.3
Cooling System	
Output per System	57,000
Total Output (Btuh)	114,000
Total Output (Tons)	9.5
Total Output (Btuh/sqft)	48.1
Total Output (sqft/Ton)	249.4
Air System	
CFM per System	1,750
Airflow (cfm)	3,500
Airflow (cfm/sqft)	1.48
Airflow (cfm/Ton)	368.4
Outside Air (%)	33.8 %
Outside Air (cfm/sqft)	0.50
Note: values above given at ARI conditions	

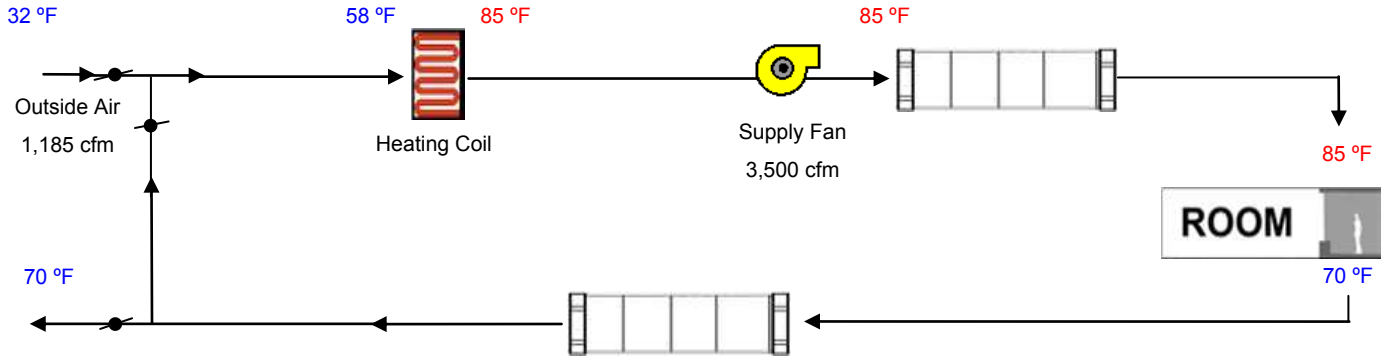
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	6,267	96,285	39,483	1,636	25,085
Return Vented Lighting		0			
Return Air Ducts		4,814			1,254
Return Fan		0			0
Ventilation	1,185	22,040	-17,358	1,185	46,666
Supply Fan		2,978			-2,978
Supply Air Ducts		4,814			1,254
TOTAL SYSTEM LOAD		130,931	22,126		71,282

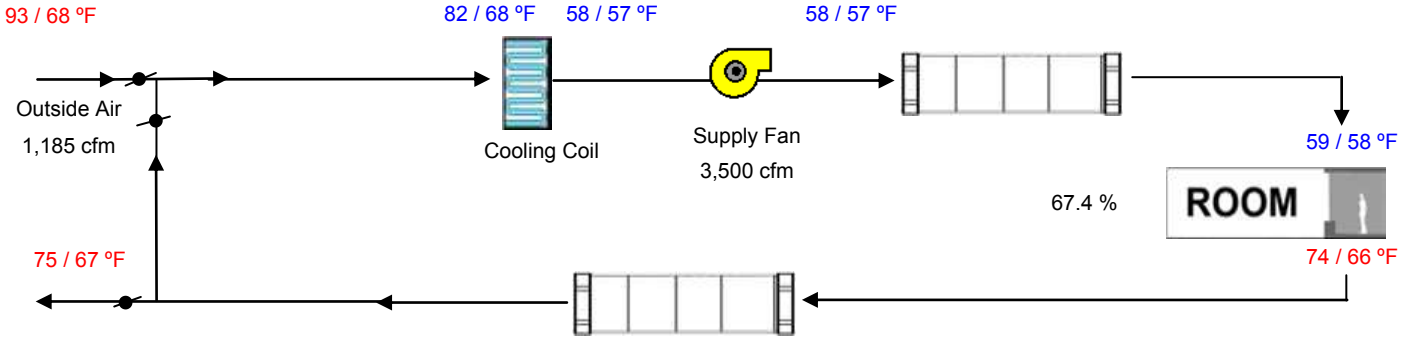
HVAC EQUIPMENT SELECTION

Carrier 25HBC560/FV4CNB006	89,462	27,282		81,681
Total Adjusted System Output (Adjusted for Peak Design conditions)	89,462	27,282		81,681
TIME OF SYSTEM PEAK		Jul 4 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 1 Leasing Office	590

ENGINEERING CHECKS

Number of Systems	1
Heating System	
Output per System	14,000
Total Output (Btuh)	14,000
Output (Btuh/sqft)	23.7
Cooling System	
Output per System	12,000
Total Output (Btuh)	12,000
Total Output (Tons)	1.0
Total Output (Btuh/sqft)	20.3
Total Output (sqft/Ton)	590.0
Air System	
CFM per System	450
Airflow (cfm)	450
Airflow (cfm/sqft)	0.76
Airflow (cfm/Ton)	450.0
Outside Air (%)	19.7 %
Outside Air (cfm/sqft)	0.15
Note: values above given at ARI conditions	

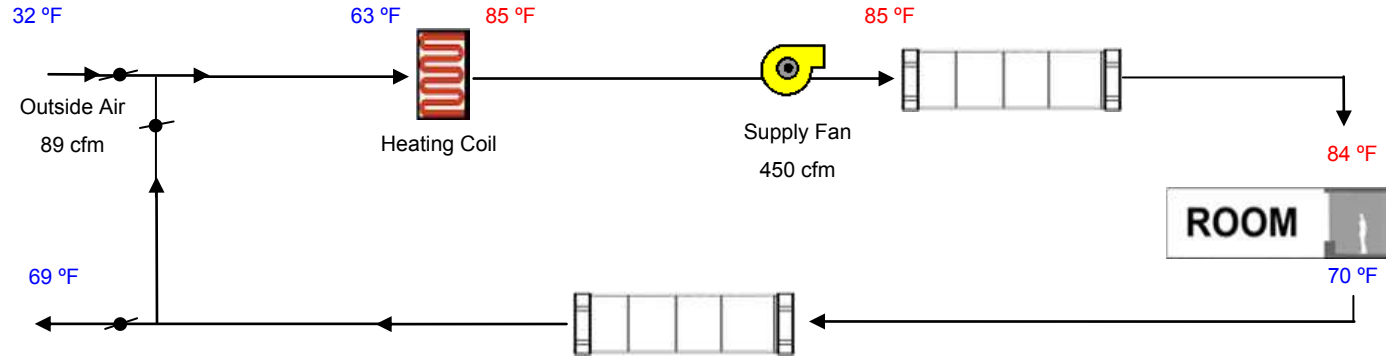
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	756	11,667	1,180	455	6,796
Return Vented Lighting		0			
Return Air Ducts		583			340
Return Fan		0			0
Ventilation	89	1,737	-507	89	3,452
Supply Fan		290			-290
Supply Air Ducts		583			340
TOTAL SYSTEM LOAD		14,861	673		10,637

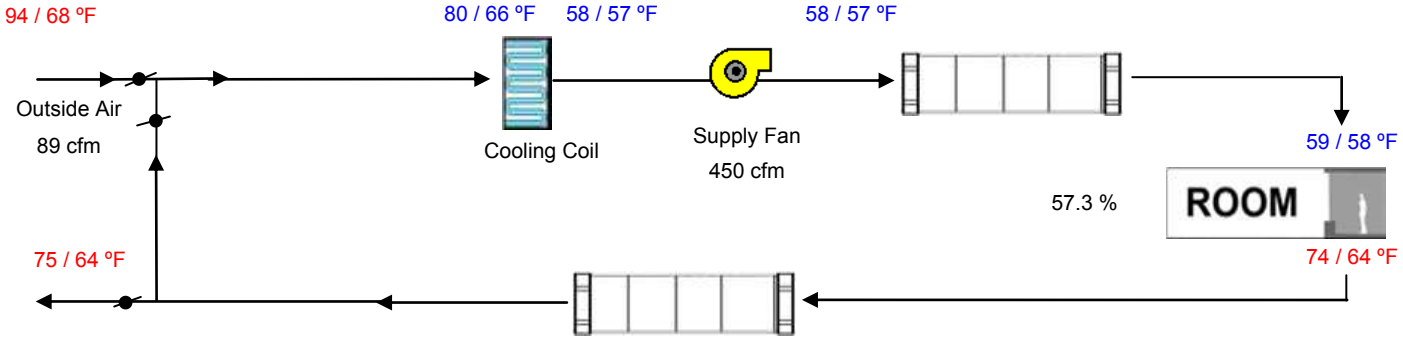
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A12NKA7/PEAD-A12AA7	9,435	2,345		10,210
Total Adjusted System Output (Adjusted for Peak Design conditions)	9,435	2,345		10,210
TIME OF SYSTEM PEAK		Jul 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Level 1 Amenity Space	788

ENGINEERING CHECKS

Number of Systems	1
Heating System	
Output per System	14,000
Total Output (Btuh)	14,000
Output (Btuh/sqft)	17.8
Cooling System	
Output per System	12,000
Total Output (Btuh)	12,000
Total Output (Tons)	1.0
Total Output (Btuh/sqft)	15.2
Total Output (sqft/Ton)	788.0
Air System	
CFM per System	450
Airflow (cfm)	450
Airflow (cfm/sqft)	0.57
Airflow (cfm/Ton)	450.0
Outside Air (%)	87.6 %
Outside Air (cfm/sqft)	0.50
Note: values above given at ARI conditions	

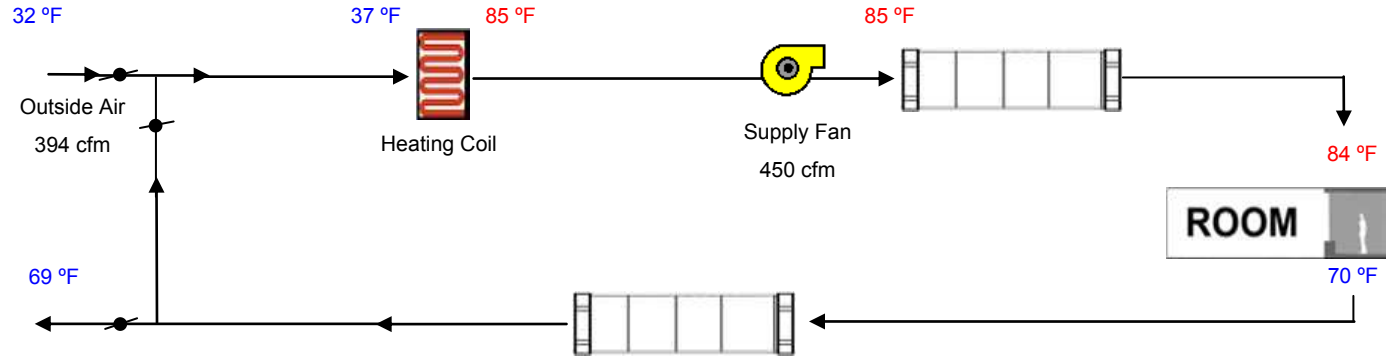
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	**Sensible**	**Latent**	**CFM**	**Sensible**
Total Room Loads	1,821	26,668	14,447	661	9,659
Return Vented Lighting		0			
Return Air Ducts		1,333			483
Return Fan		0			0
Ventilation	394	7,420	-13,332	394	15,241
Supply Fan		290			-290
Supply Air Ducts		1,333			483
TOTAL SYSTEM LOAD		37,045	1,115		25,575

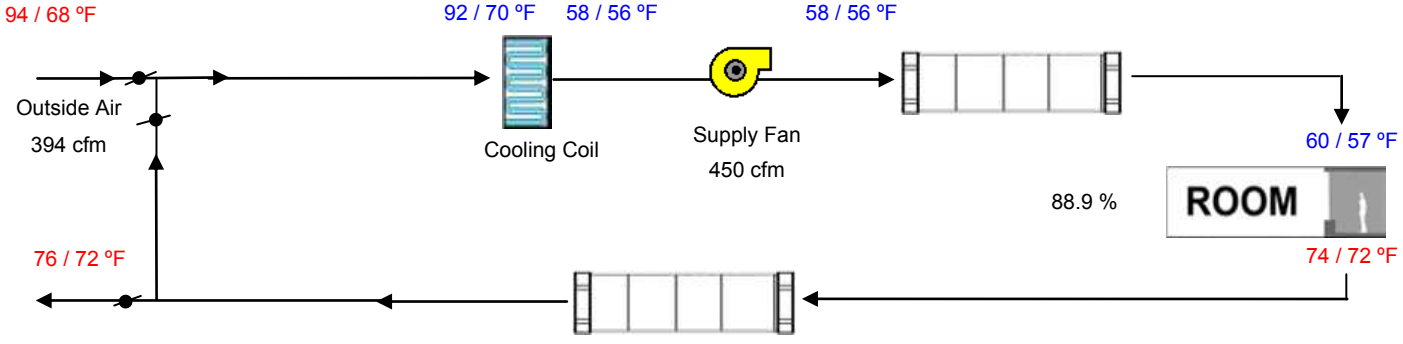
HVAC EQUIPMENT SELECTION

Mitsubishi PUZ-A12NKA7/PEAD-A12AA7	12,559	0		10,210
Total Adjusted System Output (Adjusted for Peak Design conditions)	12,559	0		10,210
TIME OF SYSTEM PEAK		Jul 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
Central Park Apartments	7/31/2019
System Name	**Floor Area**
Mezzanine Level_Gym	2,321

ENGINEERING CHECKS

Number of Systems	1
Heating System	
Output per System	56,000
Total Output (Btuh)	56,000
Output (Btuh/sqft)	24.1
Cooling System	
Output per System	57,000
Total Output (Btuh)	57,000
Total Output (Tons)	4.8
Total Output (Btuh/sqft)	24.6
Total Output (sqft/Ton)	488.6
Air System	
CFM per System	1,750
Airflow (cfm)	1,750
Airflow (cfm/sqft)	0.75
Airflow (cfm/Ton)	368.4
Outside Air (%)	19.9 %
Outside Air (cfm/sqft)	0.15
Note: values above given at ARI conditions	

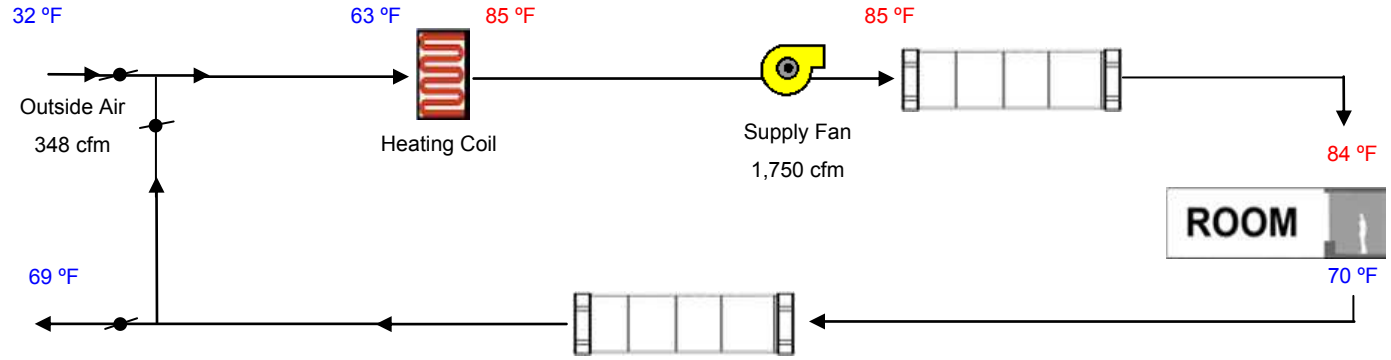
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	2,830	43,826	40,618	1,459	21,979
Return Vented Lighting		0			
Return Air Ducts		2,191			1,099
Return Fan		0			0
Ventilation	348	6,849	-9,963	348	13,622
Supply Fan		1,489			-1,489
Supply Air Ducts		2,191			1,099
TOTAL SYSTEM LOAD		56,547	30,654		36,310

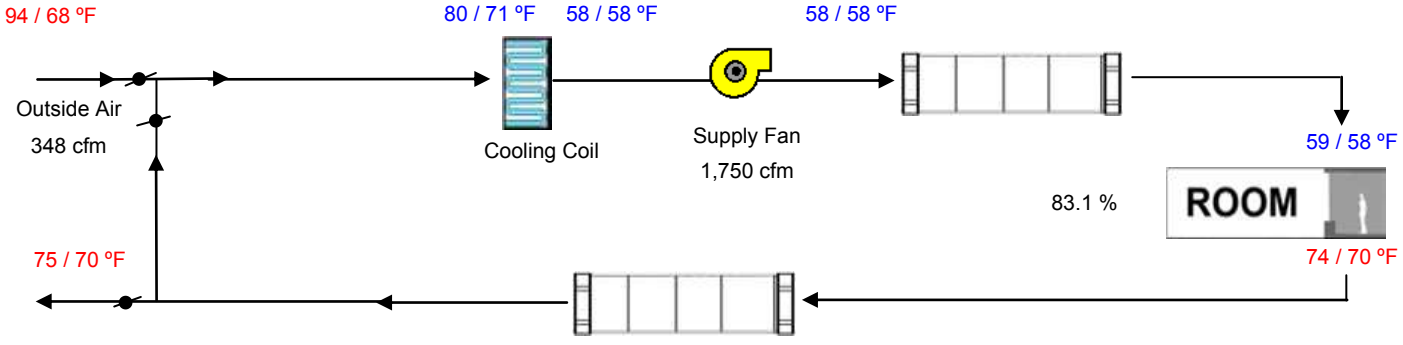
HVAC EQUIPMENT SELECTION

Carrier 25HBC560/FV4CNB006	34,959	25,994		40,841
Total Adjusted System Output (Adjusted for Peak Design conditions)	34,959	25,994		40,841
TIME OF SYSTEM PEAK		Jul 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



Architectural
Resources Group

Central Park Apartments
86 S. Fair Oaks, Pasadena, CA

Appendix C: Draft Transportation Demand Management Plan

Gibson transportation consulting, inc.

TRANSPORTATION DEMAND MANAGEMENT PLAN FOR THE CENTRAL PARK APARTMENTS MIXED-USE DEVELOPMENT PASADENA, CALIFORNIA

The City of Pasadena, California (City) requires large projects to meet the requirements of the City's Trip Reduction Ordinance and to prepare a project-level Transportation Demand Management (TDM) Plan to reduce the number of vehicle trips entering and leaving the project site.

PROJECT DESCRIPTION

The Central Park Apartments mixed-use project (Project) is located at 86 South Fair Oaks Avenue on the northeast corner of South Fair Oaks Avenue & East Dayton Street. The site currently contains a surface parking lot that serves the adjacent Green Hotel Apartments.

The Project includes the following land uses:

<u>Residential</u>	
Residential	84 dwelling units (DU)
Work/Live	4 DU within 5,245 square feet (sf)
<u>Commercial</u>	
Retail	4,218 sf
Restaurant	1,974 sf

The Project also includes amenities and ancillary space for the residential component, including fitness rooms, open space, and tenant leasing office space.

The Project will be contained in one building with an underground parking garage, as shown in Figure 1. The commercial space and work/live units will be located on the ground level.

A total of 195 parking spaces will be provided in the underground garage. In addition, the Project will also provide 20 bicycle spaces (16 long-term bicycle spaces and four short-term bicycle spaces).

SITE CONDITIONS AFFECTING COMMUTE TRAVEL

The Project site is located on the Fair Oaks Avenue corridor and approximately 800 feet to the northwest of the Del Mar Gold Line Station, so it is ideally located to take advantage of the

adjacent shopping, restaurant, and employment opportunities and the rail service connecting the Project to the region.

PARKING REQUIREMENTS

Per the City's Municipal Code (Code), the residential component requires one parking space per unit for units under 650 sf and a minimum of 1.5 spaces per unit over 650 sf, the retail space requires three spaces per 1,000 sf, and the restaurant space requires 10 spaces per 1,000 sf. With a 25% reduction in commercial parking because the Project is a transit-oriented development, the total Code requirement for parking is 142 parking spaces.

In addition to the Code-required spaces, the Project will provide 53 replacement parking spaces in a joint parking arrangement with the Green Hotel Apartments to replace the surface parking spaces that will be displaced as part of the Project. This results in a total parking requirement of 195 parking spaces.

TDM

As previously stated, the Project will be subject to the citywide Trip Reduction Ordinance and a Project-level TDM Plan. Both programs are described below.

Trip Reduction Ordinance

The Trip Reduction Ordinance requires that projects:

1. Hire a Transportation Coordinator

   A Project employee will be designated as the Transportation Coordinator for the site and that employee will be trained/certified by the Los Angeles County Metropolitan Transportation Authority (Metro) (or equivalent). The Transportation Coordinator will be responsible for implementing, coordinating and maintaining the elements of the Trip Reduction Ordinance and the TDM Plan. The identity of the Transportation Coordinator will be given to the City prior to the issuance of the Certificate of Occupancy (COO).

2. Install and maintain a Transportation Information Center in a prominent space on-site

   The Transportation Information Center will be placed in the residential mail room so that it is accessible to all of the residents of the Project. The information center will likely be an information board that will contain the name and phone number of the Transportation Coordinator plus the following information:
   - Maps, routes and schedules for transit service to the site
   - Telephone numbers and web site information for rideshare agencies and local transit operators
   - Ridesharing promotional materials

- Bicycle routes and facility information
- Listing of available facilities for bicyclists, carpoolers, pedestrians, transit riders, and vanpoolers at the site

3. Provide a commitment by the Owner to:

    - Agree to conduct an annual Project traffic count of the Project driveway in accordance with the procedures below to verify the level of Project vehicular trips (VT).
        - The count will be conducted over a three-day consecutive weekday time period (Tuesday-Thursday) during a week with no state holidays and when Pasadena Unified School District (PUSD) schools are in session.
        - The measure of the daily Project VT will be the average of the three days of counts.
        - The vehicle count shall be taken at the Project driveway, not in the right-of-way.

    - Agree to prepare the annual traffic count in perpetuity or until the Project VT target is met for a period of five consecutive years, at which time the City would release the obligation in writing.

4. Provide Class 2 bicycle parking spaces at the rate of one space per six DU plus four spaces for non-residential uses less than 15,000 sf.

5. The project is subject to the Traffic Reduction and Transportation Improvement Fee (Ordinance No. 7076). For FY 2020, fees are $8.63 per sf for new office use, $11.46 per new retail use, and $3,662.53 per new multi-family dwelling unit. Projects shall pay the impact fees in effect at the time when the first building permit is issued.

Project-Level TDM Plan

Program Elements. The Project-level TDM Plan would acknowledge the Project VT target, which, based on information provided by the City, is 866 trips per day at full occupancy.

The Project will conduct a driveway traffic count at the Project driveway and summarize the number of vehicle trips in and out of the Project site. The count will be conducted over a three-day consecutive weekday time period (Tuesday-Thursday) during a week with no state holidays and during a week when PUSD schools are in session. The measure of the daily Project VT will be the average of the three days of counts.

The driveway traffic count will continue in perpetuity or until the fully-occupied Project meets its VT target for a period of five consecutive years, at which time the Project would be released from further counts by the City in a written staff report.

The owner shall place a deposit with the Department of Transportation prior to the issuance of the first permit for construction. This deposit is subject to a partial refund if the full deposit is not

needed or additional billing in the event that the deposit amount is not sufficient to cover the cost of the review. The owner shall pay an annual TDM status report review fee in compliance with the requirements of the Trip Reduction Ordinance.

TDM Measures. The TDM Plan will include the following measures:

Tier 1 Strategies:

a. Shower and locker facilities for Project employees

   The Project will provide shower and locker facilities for Project employees, including retail and restaurant employees, to encourage walking and biking to/from the Project.

b. Unbundled parking for the residential uses

   Monthly parking fees will be separated from the monthly residential lease payments and paid separately. The parking fees could be paid on a monthly, quarterly, or annual basis. The unbundled parking will not apply to the replacement spaces provided for the Green Hotel Apartments.

c. Transportation information packet for new residents and employees

   Each new resident and employee in the Project will receive an information packet summarizing the transit and transportation alternatives available to Project tenants. The packet will emphasize the location of the Transportation Information Center and include the contact information of the Transportation Coordinator.

d. Electric vehicle (EV) charging stations

   The Project parking garage will include six spaces with EV charging stations as well as 49 spaces wired for future EV charging stations. The actual EV charging stations at each wired space will be implemented as the demand grows.

e. No overnight parking permits

   The Project will not issue any overnight parking permits to any future residents of the Project.

f. Carpool/Vanpool parking

   The Project will mark a minimum of 10% of the employee parking spaces as carpool/vanpool parking only. These spaces will be more conveniently located to the place of employment than parking spaces for single occupant vehicles and as close as possible to the employee entrances.

g. Subsidized transit passes for Project residents and employees

The Project will purchase 10 monthly (or annual) Metro EZ transit passes and offer them to residents at a 50% discount for five consecutive years from the issuance of the COO.

Alternatively and preferably, at the time of the issuance of the COO, if Metro has expanded its employee-based "whole building" transit passes to residential projects, the Project will purchase 44 annual passes and offer them to employees and residents at a 50% discount for five consecutive years from the issuance of the COO.

h. Bus stop improvements

The Project shall fund improvements at the bus stops serving the property in coordination with the City Transit Division.

Tier 2 Strategies (to be Implemented sequentially if the Tier 1 strategies do not achieve the target VT):

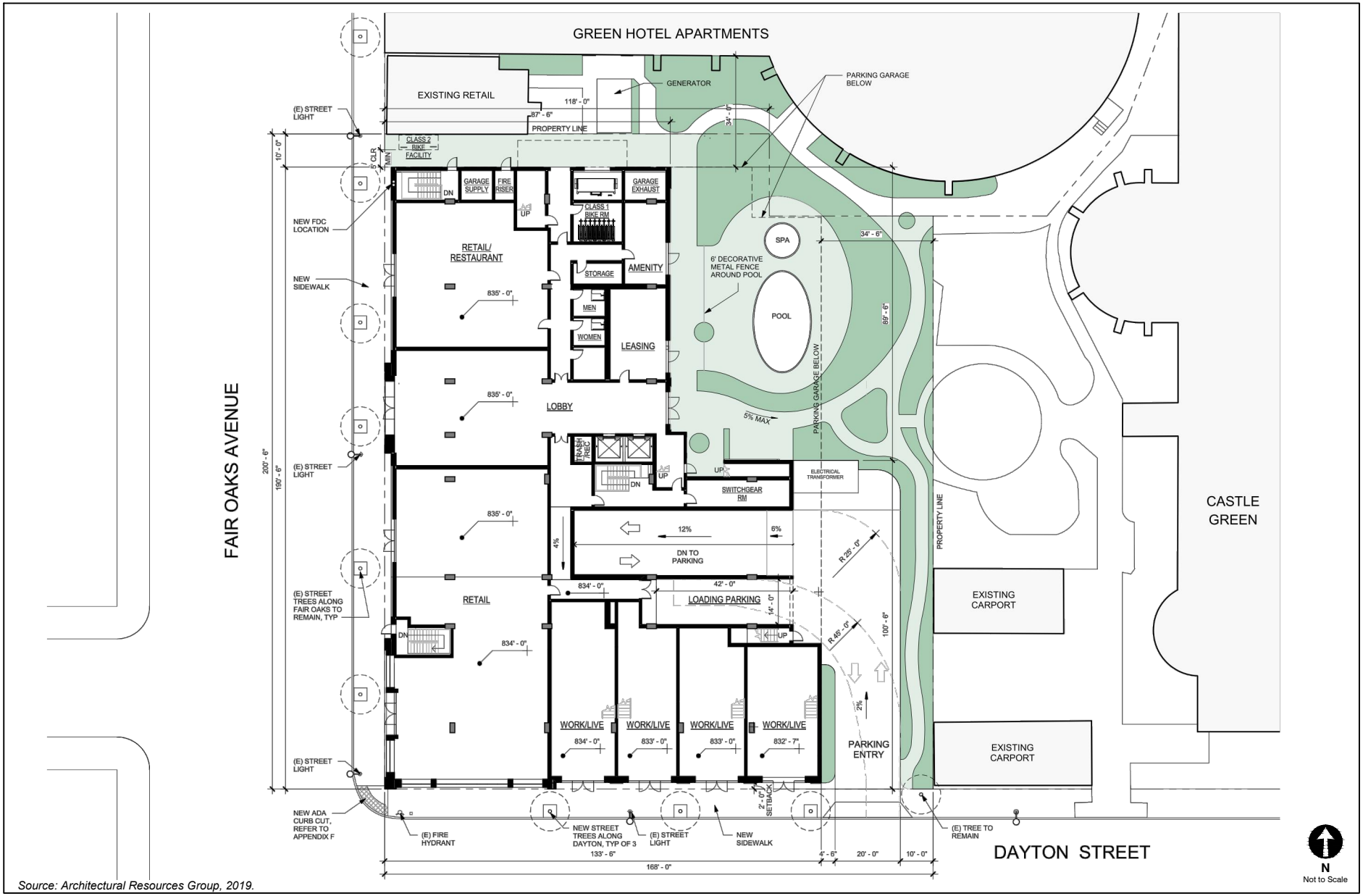
a. On-site Mobility Hub location/support

The Project will consolidate its bike share, car share, Transportation Information Center, and Transportation Coordinator into an on-site Mobility Hub in order to further promote non-auto modes of transportation. The Mobility Hub will work in concert with the City and with Metro to provide alternate transportation services to the Project and area residents and employees. The Project will be responsible for providing rent-free space for the Mobility Hub at a location and size mutually agreeable to the developer and the City or Metro.

Alternatively, given the Project's location near the Del Mar Gold Line Station, the Project will agree to contribute $2,500 per year for a period of five years to be used for Mobility Hub improvements at the Del Mar Station.

b. Financial support for an areawide Transportation Management Organization (TMO)

Should the Project fail to meet the VT target for five consecutive years and after two years of failure of the above measures to yield sufficient results to meet the target, the Project will agree to pay $20,000 toward the initial set-up costs for an areawide TMO that serves the Project site and the surrounding area. The TMO will be run by the City or by a separate Board of Directors and a Project representative will have a seat on the Board. The Project will pay annual dues of $5,000 per year for an additional nine years beyond the initial TMO founding.



Source: Architectural Resources Group, 2019.

PROJECT SITE PLAN

FIGURE 1

APPENDIX E

Historic Resources Technical Report



86 South Fair Oaks Avenue
Historic Resources Technical Report
October 2020

HISTORIC RESOURCES GROUP
12 S. Fair Oaks Avenue, Suite 200, Pasadena, CA 91105-3816
Telephone 626 793 2400, Facsimile 626 793 2401
www.historicresourcesgroup.com

TABLE OF CONTENTS

1 1.0 Introduction

3 2.0 Project Description

8 3.0 Existing Conditions

10 4.0 Regulatory Review

20 5.0 Identification of Potential Historic Resources

36 6.0 Analysis of Potential Impacts

52 Sources

54 Appendix A: Photographs of Project Site

57 Appendix B: Photographs of Surrounding Resources

59 Appendix C: Tree Aging Report

86 South Fair Oaks Avenue
Historic Resources Technical Report

HISTORIC RESOURCES GROUP

PREPARED FOR

Impact Sciences
28 N. Marengo Avenue
Pasadena, California 91101

86 South Fair Oaks Avenue
Historic Resources Technical Report

HISTORIC RESOURCES GROUP

A new development is proposed for an existing surface parking lot and landscaped area within in the City of Pasadena (the "Project"). The surface parking lot is located at 86 South Fair Oaks Avenue, which is within the Old Pasadena Historic District and is within the boundary of a National Register listed property (the "Project Site").

The purpose of this technical report is to determine if historical resources[1] as defined by the California Environmental Quality Act (CEQA)[2] are present on or adjacent to the Project Site and, if so, to identify potential impacts to historical resources by the proposed Project. This report is intended to inform environmental review of the proposed Project.

Under CEQA the potential impacts of a project on historical resources must be considered. The purpose of CEQA is to evaluate whether a proposed project may have a significant adverse effect on the environment and, if so, if that effect can be reduced or eliminated by pursuing an alternative course of action or through mitigation measures.

The impacts of a project on an historical resource may be considered an environmental impact. CEQA states that:

A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.[3]

Thus, an evaluation of project impacts under CEQA requires a two-part inquiry: (1) a determination of whether the project site contains or is adjacent to a historically significant resource or resources, and if so, (2) a determination of whether the proposed project will result in a "substantial adverse change" in the significance of the resource or resources. This report investigates the proposed Project Site to determine if historic resources exist either within or adjacent to its boundaries and analyzes project impacts for any adverse change in the significance of such resources.

This report contains:

[1] For the purposes of this report the term "historical" will be used in reference to CEQA. CEQA defines a historical resource as a resource listed in, or determined eligible for listing, in the California Register of Historical Resources. Otherwise, the term "historic" will be used.
[2] California PRC, Section 21084.1.
[3] Ibid.

- A review of the existing properties within, adjacent to, and in the near vicinity of the Project Site.
- A review of any previous evaluations of properties on or in the vicinity of the Project Site through historic survey or other official action.
- Analysis and evaluation of any potential historic resources.
- Review of the required consideration of historic resources under the California Environmental Quality Act (CEQA).
- Analysis of potential adverse effects of the proposed Project to historic resources and suggested mitigation measures.

This report was prepared using sources related to the Project Site's development. The following primary and secondary sources were consulted:

- Sanborn Fire Insurance maps
- Historic photographs, aerial photographs, and local histories
- National Register of Historic Places Inventory nomination forms
- Architectural and Historical Inventory, City of Pasadena
- List of Designated Historic Properties, City of Pasadena
- Archival sources from the Pasadena Museum of History
- Local History Collection, the *Pasadena Star-News* Archives, and the *Los Angeles Times* Archives.

Research, field inspection, and analysis were performed by Laura Janssen, Senior Architectural Historian; Paul Travis, Managing Principal; Christine Lazzaretto, Principal and Peyton Hall, Principal Architect; all qualified professionals who meet or exceed the Secretary of the Interior's Professional Qualification Standards.[4]

[4] Federal Register, Vol. 48, No. 190, pp. 44738-44739, September 29, 1983.

2.1 Project Location

The City of Pasadena is located approximately 10 miles northeast of the City of Los Angeles in the County of Los Angeles. Regional access to the City is provided by State Route 134 (SR 134), Interstate 210 (I-210 or Foothill Freeway), State Route 110 (SR 110), and Interstate 710 (I-710). The Project location is identified in Figure 1.

The Project site at 86 S. Fair Oaks Avenue contains 32,362 square feet bounded by S. Fair Oaks Avenue to the west, Dayton Street to the south, Castle Green to the east, and the Green Hotel Apartments to the north. The Project site is located within the boundaries of the Old Pasadena National Register Historic District and the Hotel Green National Register listing. The Project site, which currently houses a surface parking lot with landscaping, outdoor furniture for the adjacent Green Hotel Apartments and an advertising billboard, is zoned The project site is zoned CD-1 (Central District Specific Plan Sub-district 1, Old Pasadena Subdistrict) and has a General Plan Land Use designation of High Mixed Use . It is also located within 1,000 feet of the Metro Gold Line Del Mar Station, making the Project a transit-oriented development.

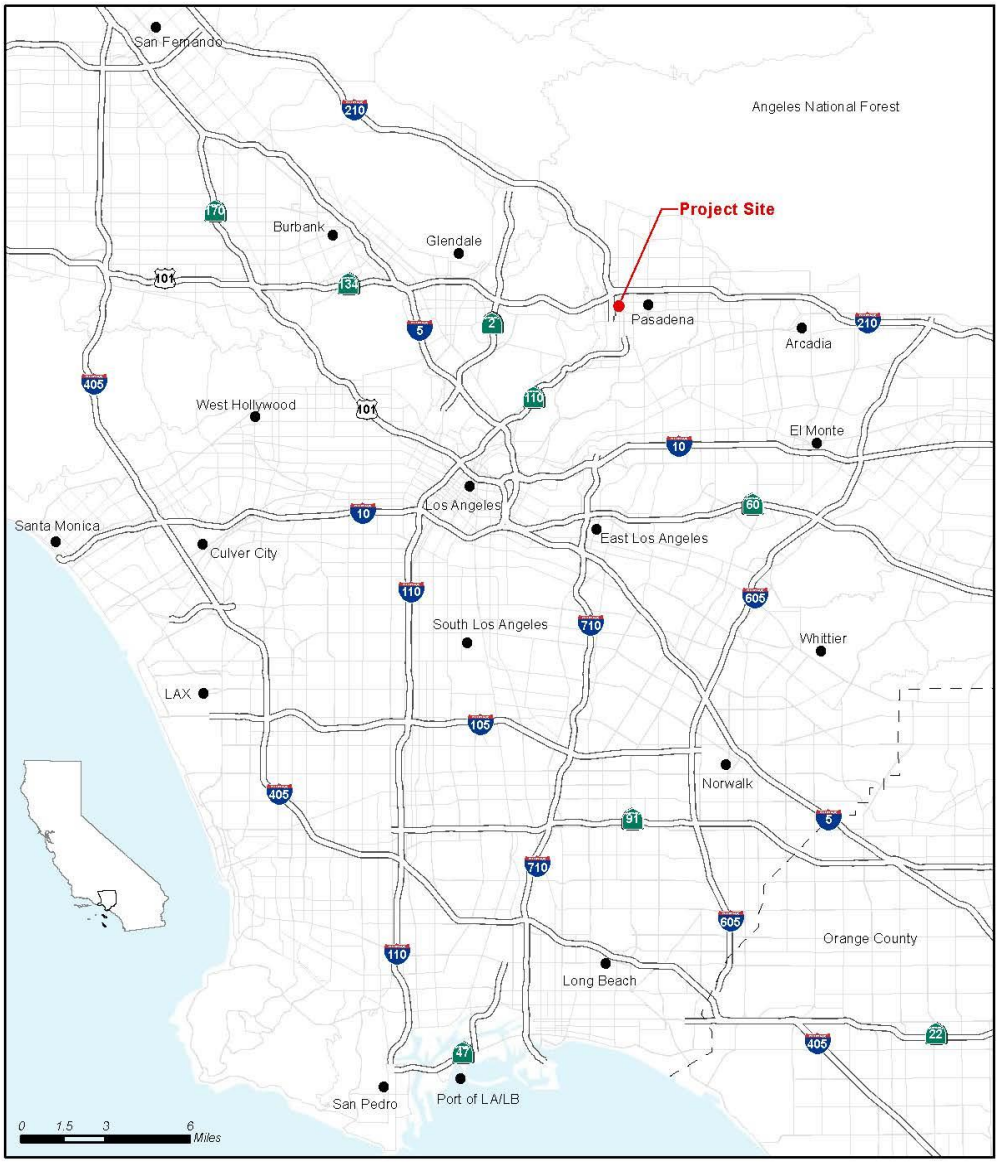
2.2 Project Overview

The proposed Project is a 6-story plus mezzanine transit-oriented mixed-use development that includes retail, restaurants, and work/live units at the ground level and mixed-rate apartment units on levels 2-6. Using height averaging, the building height would average 69 feet with a maximum roof height to 90 feet. Along Fair Oaks Avenue, the ground floor of the proposed building includes approximately 6,200 square feet of retail and food uses. Four work/live units, approximately 1,300 square feet each, are proposed in the ground floor along Dayton Street, facing Central Park. The proposed Project contains 84 apartment units (24 studios, 37 one-bedroom flats, three (3) one-bedroom townhouses, 18 two-bedroom flats, and two (2) two-bedroom townhouses), including eight (8) on-site residences for very low-income residents. All parking for the proposed project would be located in four (4) levels of underground parking that accommodate 195 parking spaces, including replacement of existing parking spaces for the adjacent Green Hotel Apartments, which currently utilizes the surface parking located on the project site. Access to and from the proposed Project site would be along Dayton Avenue on the southeast corner of the proposed Project site.

[5] Description of existing conditions and the proposed project as stated in the Project Environmental Impact Report. (add source, date)

The proposed Project would include amenity space for project residents, including a swimming pool and spa with cabana and changing rooms, gym, lounge and multiple roof decks/terraces.

The proposed project would provide 16,231 sf of open space, which would be divided between approximately 12,037 sf of hardscape and 4,194 sf of landscape (softscape). Landscaping for the proposed project would include native and adaptive species that are drought tolerant. The proposed project would include 38 new trees, including one 96″ box tree, 10 - 60″ box trees, 21 - 24″ box trees and 6 – 36″ box trees..



Basemap Source: U.S. Census Bureau, Geography Division, 2010

Figure 1
Regional Vicinity Map
Green Hotel Apartments

86 South Fair Oaks Avenue
Historic Resources Technical Report

HISTORIC RESOURCES GROUP

Figure 2: Project Vicinity

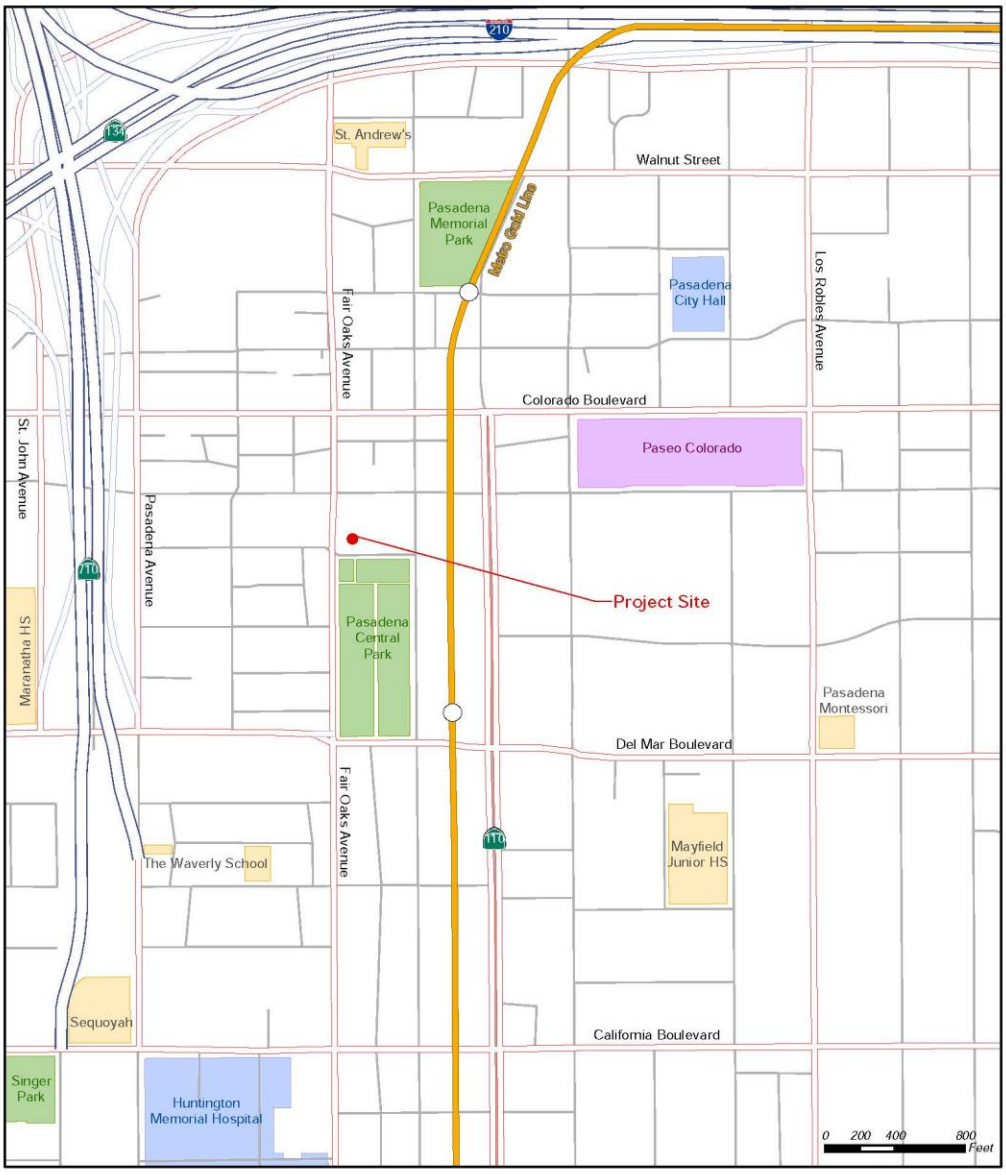


Figure 2
Local Vicinity Map
Green Hotel Apartments

86 South Fair Oaks Avenue
Historic Resources Technical Report

HISTORIC RESOURCES GROUP



Aerial Imagery Source: City of Pasadena, 2013

Figure 3
Aerial Overview
Green Hotel Apartments

3.1 Site Description

The project site is rectangular and approximately 32,362 square feet in area. The site is flat, and is currently utilized as a surface parking lot, which contains a billboard, and landscaped areas with twenty-seven trees. Nine of the trees onsite and all of the adjacent street trees are protected under the City Trees and Tree Protection Ordinance. The Project site is located within an urban area on one of the City's main commercial streets and is surrounded by residential, commercial, retail, and recreational land uses.

The Project site is located within the Old Pasadena Historic District which is listed in the National Register of Historic Places (1983; revised 2008). In addition, the Project site is located within the boundary of the Hotel Green/Castle Green property, which was listed individually in the National Register of Historic Places in 1982. By virtue of being listed in the National Register, both the Old Pasadena Historic District and the Hotel Green/Castle Green property are also listed in the California Register of Historical Resources. At the local level in the City of Pasadena, the Hotel Green/Castle Green was designated as a Historic Monument in 1997.[6]

The boundaries of the Hotel Green/Castle Green as defined in the original National Register registration form are: "The square block bounded by Raymond Avenue on the east, Green Street on the north, Fair Oaks [A]venue on the west and Dayton Street on the south."[7] Thus, the entire block, which includes the Project site, is listed as a historic property in the National Register and California Register.

Across Dayton Street to the south is Central Park, a 9.2-acre park which is also a contributing resource to the Old Pasadena Historic District. Across Fair Oaks Avenue to the west are three- to four-story mixed-use buildings and parking lots, and across Raymond Avenue to the east are one- and two-story commercial buildings. See a more detailed description of adjacent structures that are contributing and non-contributing to the Old Pasadena Historic District in Section 5.2 of this report.

The Los Angeles County Metropolitan Transportation Authority (Metro) Del Mar Gold Line Light Rail Station is located less than a quarter of a mile to the southeast of the Project site along Raymond Avenue just north of Del Mar Boulevard.

[6] When the Hotel Green/Castle Green was designated locally in 1997 it was as a Historic Treasure. The Pasadena Municipal Code was subsequently modified in 2005 and all Historic Treasure designations became Historic Monuments.

[7] "Hotel Green" National Register of Historic Places Inventory – Nomination Form, 1982.

The Project site is located within the Central District Specific Plan. The Specific Plan area encompasses 960 acres corresponding to the areas recognized by Pasadena residents as "downtown." Included within the boundaries of the Specific Plan area are activity centers known as Old Pasadena, the Civic Center, the Playhouse District, and South Lake Avenue. Significant uses and structures within the Central District Specific Plan include the Old Pasadena Historic District, which includes the existing historic Green Hotel Apartments and Castle Green; Pasadena Playhouse and Pasadena Playhouse Historic District; and the Pasadena Civic Center Historic District, among others.

Site photographs are included in Appendix A.

4.1 Historical Resources under CEQA

CEQA requires that environmental protection be given significant consideration in the decision-making process. Historical resources are included under environmental protection. Thus, any project or action which constitutes a substantial adverse change to a historical resource also has a significant effect on the environment pursuant to the State CEQA Guidelines.

When the California Register of Historical Resources was established in 1992, the Legislature amended CEQA to clarify which cultural resources are significant, as well as which project impacts are considered to be significantly adverse. A "substantial adverse change" means "demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

CEQA defines a historical resource as a resource listed in, or determined eligible for listing, in the California Register of Historical Resources. All properties on the California Register are to be considered historical under CEQA. However, because a property does not appear on the California Register does not mean it is not significant and therefore exempt from CEQA consideration. All resources determined eligible for the California Register are also to be considered under CEQA.

The courts have interpreted CEQA to create three categories of historical resources:

- *Mandatory historical resources* are resources "listed in, or determined to be eligible for listing in, the California Register of Historical Resources."
- *Presumptive historical resources* are resources "included in a local register of historical resources, as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1" of the Public Resources Code, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant.
- *Discretionary historical resources* are those resources that are not listed but determined to be eligible under the criteria for the California Register of Historical Resources.[8]

To simplify the first three definitions provided in the CEQA statute, an historical resource is a resource that is:

[8] *League for the Protection of Oakland's Architectural and Historic Resources vs. City of Oakland,* 52 Cal. App. 4th 896, 906-7 (1997).

- Listed in the California Register of Historical Resources (California Register);
- Determined eligible for the California Register by the State Historical Resources Commission; or
- Included in a local register of historical resources.

Section 15064.5 of the CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3) supplements the statute by providing two additional definitions of historical resources, which may be simplified in the following manner. An historical resource is a resource that is:

- Identified as significant in an historical resource survey meeting the requirements of Public Resources Code 5024.1(g);
- Determined by a Lead Agency to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the Lead Agency's determination is supported by substantial evidence. Generally, this category includes resources that meet the criteria for listing on the California Register (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852).

The fact that a resource is not listed in, or determined eligible for listing in, the California Register, not included in a local register of historical resources, or not deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, does not preclude a lead agency from determining that the resource may be an "historical resource" for purposes of CEQA.

Properties formally determined eligible for listing in the National Register of Historic Places are automatically listed in the California Register. Properties designated by local municipalities can also be considered historical resources. A review of properties that are potentially affected by a project for historic eligibility is also required under CEQA.

4.2 Historic Designations

A property may be designated as historic by National, State, and local authorities. In order for a building to qualify for listing in the National Register or the California Register, it must meet one or more identified criteria of significance. The property must also retain sufficient architectural integrity to continue to evoke the sense of place and time with which it is historically associated.

National Register of Historic Places

The National Register of Historic Places is an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment.[9] The National Park Service administers the National Register program. Listing in the National Register assists in preservation of historic properties in several ways including: recognition that a property is of significance to the nation, the state, or the community; consideration in the planning for federal or federally assisted projects; eligibility for federal tax benefits; and qualification for Federal assistance for historic preservation, when funds are available.

To be eligible for listing and/or listed in the National Register, a resource must possess significance in American history and culture, architecture, or archaeology. Listing in the National Register is primarily honorary and does not in and of itself provide protection of an historic resource. The primary effect of listing in the National Register on private owners of historic buildings is the availability of financial and tax incentives. In addition, for projects that receive Federal funding, a clearance process must be completed in accordance with Section 106 of the National Historic Preservation Act. Furthermore, state and local regulations may apply to properties listed in the National Register.

The criteria for listing in the National Register follow established guidelines for determining the significance of properties. The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, information important in prehistory or history.[10]

[9] 36CFR60, Section 60.2.
[10] 36CFR60, Section 60.3.

In addition to meeting any or all of the criteria listed above, properties nominated must also possess integrity of *location, design, setting, materials, workmanship, feeling,* and *association.*

Historic Districts

Standard preservation practice evaluates collections of buildings from similar time periods and historic contexts as historic *districts.* The National Park Service defines a historic district as "a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development."[11] A historic district derives its significance as a single unified entity.

According to the National Park Service, "a district can comprise both features that lack individual distinction and individually distinctive features that serve as focal points. It may even be considered eligible if all of the components lack individual distinction, provided that the grouping achieves significance as a whole within its historic context. In either case, the majority of the components that add to the district's historic character, even if they are individually undistinguished, must possess integrity, as must the district as a whole." Some examples of districts include business districts, college campuses, large estates, farms, industrial complexes, residential areas and rural villages.[12]

Resources that have been found to contribute to the historic identity of a district are referred to as *district contributors.* Properties located within the district boundaries that do not contribute to its significance are identified as *non-contributors.*

California Register of Historical Resources

The California Register is an authoritative guide in California used by State and local agencies, private groups, and citizens to identify the State's historic resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change.[13]

The criteria for eligibility for listing in the California Register are based upon National Register criteria. These criteria are:

1. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.

[11] *National Register Bulletin 15.* How to Apply the National Register Criteria for Evaluation. Washington D.C.: National Park Service, U. S. Department of the Interior, 1997.
[12] Ibid.
[13] California PRC, Section 5023.1(a).

2. Associated with the lives of persons important to local, California or national history.
3. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register includes the following:

- California properties formally determined eligible for (Category 2 in the State Inventory of Historical Resources), or listed in (Category 1 in the State Inventory), the National Register of Historic Places.
- State Historical Landmarks No. 770 and all consecutively numbered state historical landmarks following No. 770. For state historical landmarks preceding No. 770, the Office of Historic Preservation (OHP) shall review their eligibility for the California Register in accordance with procedures to be adopted by the State Historical Resources Commission (commission).
- Points of historical interest which have been reviewed by the OHP and recommended for listing by the commission for inclusion in the California Register in accordance with criteria adopted by the commission.[14]

Other resources which may be nominated for listing in the California Register include:

- Individual historical resources.
- Historic resources contributing to the significance of an historic district.
- Historic resources identified as significant in historic resources surveys, if the survey meets the criteria listed in subdivision (g).
- Historic resources and historic districts designated or listed as city or county landmarks or historic properties or districts pursuant to any city or county ordinance, if the criteria for designation or listing under the ordinance have been determined by the office to be consistent with California Register criteria.

[14] California PRC, Section 5023.1(d).

- Local landmarks or historic properties designated under any municipal or county ordinance.[15]

Local Designation Programs

The City of Pasadena has established an historic preservation program in order to promote "the identification, evaluation, rehabilitation, adaptive use, and restoration of historic structures." The criteria for the designation of historic monuments, landmarks, historic signs, landmark trees, or landmark districts are applied "according to applicable National Register of Historic Places Bulletins for evaluating historic properties." These criteria are excerpted below from Section 17.62.40 of the Pasadena Zoning Code.[16]

Historic Monuments

A historic monument shall include all historic resources previously designated as historic treasures… historic resources that are listed in the National Register at the State-wide or Federal level of significance (including National Historic Landmarks) and any historic resource that is significant at a regional, State, or Federal level, and is an exemplary representation of a particular type of historic resource and meets one or more of the following criteria:

a) It is associated with events that have made a significant contribution to the broad patterns of the history of the region, State, or nation.

b) It is associated with the lives of persons who are significant in the history of the region, State, or nation.

c) It is exceptional in the embodiment of the distinctive characteristics of a historic resource property type, period, architectural style, or method of construction, or that is an exceptional representation of the work of an architect, designer, engineer, or

[15] California PRC, Section 5023.1(e).
[16] City of Pasadena Online Zoning Code Title 17. http://ww2.cityofpasadena.net/zoning/

builder whose work is significant to the region, State, or nation, or that possesses high artistic values that are of regional, State-wide or national significance.

d) It has yielded, or may be likely to yield, information important in prehistory or history of the region, State, or nation.

A historic monument designation may include significant public or semi-public interior spaces and features.

Landmarks

A landmark shall include all properties previously designated a landmark… and any historic resource that is of a local level of significance and meets one or more of the criteria listed below.

A landmark may be the best representation in the City of a type of historic resource or it may be one of several historic resources in the City that have common architectural attributes that represent a particular type of historic resource. A landmark shall meet one or more of the following criteria:

a) It is associated with events that have made a significant contribution to the broad patterns of the history of the City, region, or State.

b) It is associated with the lives of persons who are significant in the history of the City, region, or State.

c) It embodies the distinctive characteristics of a type, architectural style, period, or method of construction, or represents the work of an architect, designer, engineer, or builder whose work is of significance to the City or, to the region or possesses artistic values of significance to the City or to the region.

d) It has yielded, or may be likely to yield, information important locally in prehistory or history.

Historic Signs

A historic sign shall include all signs in the sign inventory as of the date of adoption of this Zoning Code and any sign subsequently designated historically significant by the Historic Preservation Commission that possesses high artistic values. A historic sign shall meet one or more or the following criteria:

a) The sign is exemplary of technology, craftsmanship or design of the period when it was constructed, uses historic sign materials and means of illumination, and is not significantly altered from its historic period. Historic sign materials shall include metal or wood facings, or paint directly on the façade of a building. Historic means of illumination shall include incandescent light fixtures or neon tubing on the exterior of

the sign. If the sign has been altered, it must be restorable to its historic function and appearance.

b) The sign is integrated with the architecture of the building.

c) A sign not meeting criteria a or b above may be considered for inclusion in the inventory if it demonstrates extraordinary aesthetic quality, creativity, or innovation.

All other regulations relating to signs shall comply with Chapter 17.48 (Signs).

Landmark Trees

A tree shall qualify to be of historic or cultural significance and of importance to the community if it meets any one of the following criteria:

1. It is one of the largest or oldest trees of the species located in the City;

2. It has historical significance due to an association with a historic event, person, site, street, or structure; or

3. It is a defining landmark or significant outstanding feature of a neighborhood.

Landmark Districts

A landmark district shall include all landmark districts previously designated… and any grouping of contiguous properties that also meet the following criteria:

a) Within its boundaries, a minimum of 60 percent of the properties qualify as contributing; and

b) The grouping represents a significant and distinguishable entity of Citywide importance and one or more of a defined historic, cultural, development and/or architectural context(s) (e.g., 1991 Citywide historic context, as amended, historic context prepared in an intensive-level survey or historic context prepared specifically for the nominated landmark district).

When considering applications to designate a landmark district, the Historic Preservation Commission shall use the National Register of Historic Places Bulletin #21: "Defining Boundaries for National Register Properties".

4.3 Central District Specific Plan

Development in central Pasadena is governed by the Central District Specific Plan which contains detailed development standards, distribution of land uses, infrastructure requirements, and implementation measures. Area Specific Plans are designed to implement the goals and policies of the City's General Plan.

The Central District Specific Plan divides the area into several sub-districts. The Project site is located within the Old Pasadena Sub-district. The objective of the Old Pasadena Sub-district is to protect the numerous historic resources in the area, and to support the long term viability of its core as a regional retail and entertainment destination through the development of nearby complementary uses, including urban housing near light rail stations and parks.[17]

4.4 Historic Significance and Integrity

Significance

The definition of historic significance used by the California Office of Historic Preservation (OHP) in its administration of the California Register is based upon the definition used by the National Park Service for the National Register:

Historic significance is defined as the importance of a property to the history, architecture, archaeology, engineering, or culture of a community, state, or the nation.[18] *It is achieved in several ways:*

- *Association with important events, activities or patterns*
- *Association with important persons*
- *Distinctive physical characteristics of design, construction, or form*
- *Potential to yield important information*

A property may be significant individually or as part of a grouping of properties.

Historic Integrity

Historic integrity is the ability of a property to convey its significance and is defined as the "authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic period."[19] The National Park Service defines seven aspects of integrity: *location, design, setting, materials, workmanship, feeling,* and *association*. These qualities are defined as follows:

- *Location* is the place where the historic property was constructed or the place where the historic event took place.

[17] Central District Specific Plan, Section 7.
[18] *National Register Bulletin 16A. How to Complete the National Register Registration Form.* Washington D.C.: National Park Service, U.S. Department of the Interior, 1997, p. 3.
[19] Ibid., p. 3.

- *Design* is the combination of elements that create the form, plan, space, structure, and style of a property.
- *Setting* is the physical environment of a historic property.
- *Materials* are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- *Workmanship* is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- *Feeling* is a property's expression of the aesthetic or historic sense of a particular period of time.
- *Association* is the direct link between an important historic event or person and a historic property.[20]

[20] *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation.* Washington D.C.: National Park Service, U.S. Department of Interior, 1995.

Resources located both within and immediately outside the Project site are examined in the following analysis for the purposes of identifying potential historical resources. The context of their previous evaluations, criteria for significance and integrity issues are explored.

The Project site is located within the boundary of the Old Pasadena Historic District and on the site of one individual resource, the Hotel Green/Castle Green, as identified in the nomination form for individual listing in the National Register of Historic Places.[21]

No additional historical resources, besides those listed as contributors to the Old Pasadena Historic District, were identified in the Project site vicinity.

5.1 Site Development History

The Project site is within the boundary of the Hotel Green/Castle Green property, as identified in the nomination form for individual listing in the National Register of Historic Places.[22] The Project site occupies the southwest parcel of the block that contained the western annex of the Hotel Green. The Project site was never developed with the typical commercial blocks that were constructed in Old Pasadena at the turn of the twentieth century, and it has been surface parking and/or recreation space for much of its history.

The 1887 Sanborn map shows a one-story retail grocery store on the site facing Fair Oaks Avenue. By 1888, it was no longer on the site and the site appears vacant until 1903 when a one-story bungalow appears on the parcel facing Vineyard Street (later Dayton Street). This house was built by Colonel George G. Green (owner of the Hotel Green) for his daughter Lotta.[23]

The Hotel Green/Castle Green was originally developed as a luxury resort hotel. By the late 19th century, Pasadena had become a popular destination for well-to-do patrons escaping the severe winter weather of the mid-west and eastern seaboard; the Hotel Green/Castle Green was one of several major resort hotels constructed in the area. Located just north of The Atchison, Topeka, and Santa Fe railroad station on South

[21] The Hotel Green/Castle Green are also identified as contributors to the Old Pasadena Historic District; the District is discussed in further detail in the next section.
[22] The Hotel Green/Castle Green are also identified as contributors to the Old Pasadena Historic District; the District is discussed in further detail in the next section.
[23] "Hotel Green Bungalow" drawing archived at Pasadena Museum of History Research Library and Archives.

Raymond Avenue, the Hotel Green/Castle Green occupied a prime location in central Pasadena.

The Hotel Green/Castle Green complex was built in four phases with each phase represented by a separate building or wing. A fifth wing, intended to be constructed on the current Project site was never constructed. The first building of the Hotel Green was constructed in 1887 by developer Edward C. Webster and originally referred to as the "Hotel Webster." It was located on the east side of Raymond Avenue at the southeast corner of Raymond Avenue and Green Street. Webster overextended himself financially and was forced into insolvency before his hotel was completed. Colonel Gorge G. Green purchased the property in 1891. In 1894 he constructed an addition on the north end of the former "Hotel Webster" that continued along the remaining length of Raymond Avenue to Green Street. The hotel was re-named "Hotel Green."

The hotel was successful, and plans were soon developed for an expansion of the hotel on the west side of Raymond Avenue. The expansion of the Hotel Green onto the block west of Raymond Avenue began in the late 1890s. From accounts in the *Los Angeles Times* in 1901, it appears Colonel Green had purchased the remaining parcels of the block, including a building at the southeast corner of Fair Oaks Avenue and Green Street which was built in 1887 and was known as the Wooster Block, with plans for expansion onto the western portion.

> *"Now that Col. G.G. Green has acquired the Wooster Block and other property on Fair Oaks avenue, making him the owner of the entire frontage on that avenue from Green to Vineyard street, he will begin at once the long-contemplated additions to Hotel Green. Manager Holmes says the plan is to add another story to the Wooster Block, to be used as the main dining room of the hotel, and south of this building to erect another structure which shall be in conformity with the present west annex of the large hotel. The main entrance is to be on Green street. Parts of the lot not occupied by buildings will be laid out in parks and flower beds. It is hoped to have the work done on the opening of next season."*[24]

The expansion of the Hotel Green onto the block west of Raymond Avenue began in the late 1890s. The "West Annex" (today's Castle Green) was designed by architect Frederick Louis Roehrig and opened in January of 1899. Construction of the West Annex represented the third phase of development for the complex. The West Annex was connected to the original Hotel Green building by way of an enclosed bridge over

[24] "Hotel Green Additions," *Los Angeles Times*, May 8, 1901.

Raymond Avenue, which remained until 1929; a portion of it survives today from the east facade of the Castle Green to the Raymond Avenue sidewalk.

In the early 1900's, further expansion plans were developed to extend the hotel along Green Street to connect to the existing Wooster Block building and along Fair Oaks Avenue. The Fair Oaks Avenue façade of the planned expansion was described by the *Pasadena Evening Star* in 1902 as having ground floor shops with a long balcony above.

> *"The ground floors on South Fair Oaks avenue, with the exception of the Fair Oaks entrance, which will be in and about the center of the block, will be divided into stores and rented to persons who conduct businesses that would in their nature attract tourists and the class of persons who patronize a hotel of the character of the Green.*
>
> *For the width of sixteen feet, more or less, as the working out of the plans may determine, there will be a long balcony ranging along the tops of the portions of these stores to Vineyard street and overlooking South Fair Oaks avenue. The designs for this balcony will be exquisite, and it is intended that it shall be one of the most beautiful as well as one of the longest balconies of solid masonry in the world. Above this will rise the other five stories of the great west wing of the new hotel."* [25]

The *Pasadena Daily News* added further detail in January of 1903.

> *"For weeks Col. Green and Architect F.L.O. Roehrig have been working out plans and designs for the addition which is to cost more than a half million dollars. …*
>
> *The new building will face north on Green street and west on Fair Oaks avenue. It will be of the Moorish and Colonial style mingled. The building will be six stories high. …*
>
> *The Wooster Block so substantially built will be wholly remodeled to conform with the new structure and will be the corner section of the two mighty wings. The lower floor facing Fair Oaks avenue from Green street to Vineyard street across the whole block as owned by Col Green will be divided into store rooms fitted up with modern style for rent. These store rooms will be very deep and light.*
>
> *From Green street the guests will enter an elaborate lobby just north of the present Annex. …*

[25] "A Greater Hotel Green," *Pasadena Evening Star,* February 11, 1902.

The open space between the Annex and the new addition will contain a great court, where guests will promenade and while away the evenings amid a semi-tropic foliage covered with glass and brilliantly lighted. South of this the two wings open out on Central Park, of 9 ½ acres, recently acquired by Pasadena, and which is to be immediately planted in accordance with the most advanced ideas of the landscape gardener."[26]

The proposed design would have created a U-shaped building with a landscaped central courtyard with greenhouse and connecting arcade along Dayton Street. A portion of the announced expansion was completed in 1903 with construction of the "North Annex" along Green Street, incorporating the existing Wooster Block. Construction of the North Annex represents the fourth phase of development for complex. The proposed additional wing fronting Fair Oaks Avenue, the arcade and greenhouse, all of which would have occupied the site of the currently proposed project, were never built.

It appears the southwest parcel (the Project site) was then landscaped and used for recreation by hotel guests.[27] The landscaping, which consisted of trees, shrubs and winding paths, complemented the Hotel Green Park (1894) which was on the eastern portion of the block prior to the Hotel Green expansion west of Raymond Avenue. The park became the front yard of the hotel in 1898 and is still evident today in front of the Castle Green. Central Park, just south of the hotel, was similarly designed in 1903 and became a seamless continuum of landscaping and a recreation ground for the tourists staying at the neighboring Hotel Green. The front yard of the Castle Green is now fenced with a locked gate, whereas Central Park is open to the public.

The decline of the Hotel Green led to the break-up of the hotel property beginning in 1920. The eastern portion (east side of Raymond Avenue) was sold in 1920 and became the Hotel Pasadena. The L-shaped western portion was split, and the West Annex became the Castle Green Apartments in 1924. The North Annex remained the last vestige of the Hotel Green until the early 1970s when the Hotel was converted into low-income senior apartments.

Circa 1914, a tennis court was added to the southwest parcel. The previously described bungalow was removed at some point between 1931 and 1951.[28] The 1951 Sanborn map shows the parcel as being used for auto parking. A swimming pool was added in

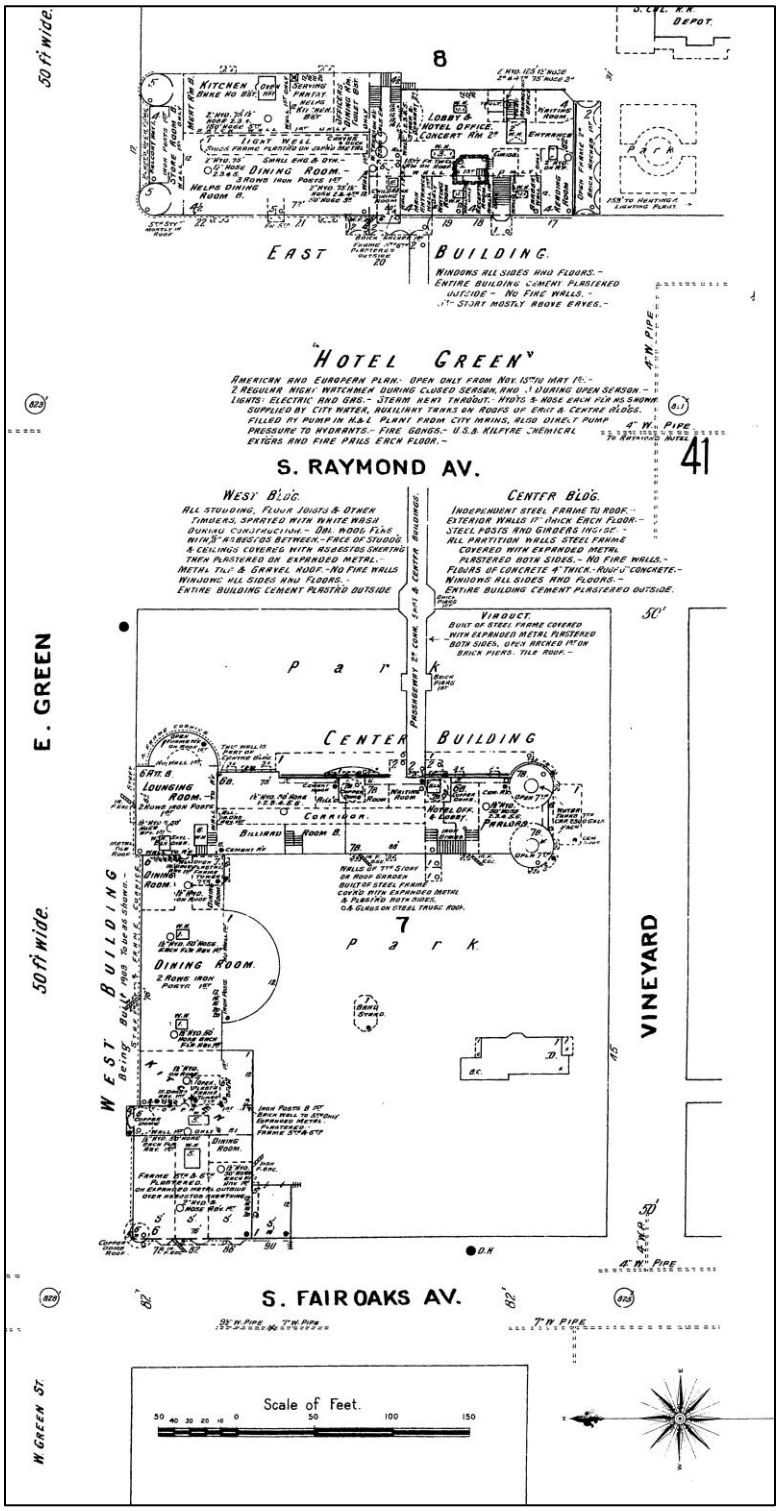
[26] "Greater Hotel Green," *Pasadena Daily News*, January 1, 1903.
[27] The parcel was labeled as "park" on the 1903 Sanborn Map.
[28] Sanborn maps for Pasadena. The bungalow appears on the 1903, 1910 and the 1931 maps, but not on the 1951 map.

the south gardens near the outdoor dining terrace of the Hotel Green in 1953.[29] It was infilled and paved over in the early 1970s when the Hotel was converted into low-income senior apartments. The oval shape is still present on the site and is currently covered with grass and a shuffleboard court. The 1982 National Register nomination form characterized the area created by the junction of the two buildings as having "…parking lots, garages, and other service facilities."[30]

Currently, there are 27 mature trees on the Project site and it appears a few of the trees may date to the early Hotel era when it was initially landscaped as they match locations identified in a photograph from ca. 1903. (See photos below.) Additionally, according to the arborist's Tree Aging report completed by Jan C. Scow Consulting Arborists, LLC, on July 3, 2013, two trees are 100 years old or older and are conceivably remnants from the early landscape scheme. The next oldest trees identified, four from the late 1920s and early 1930s, post-date the planned landscape of the early Hotel era.[31]

The site is still in use as a surface parking lot with asphaltic concrete paving. The paving creates a U-shape in plan around a landscaped area with picnic tables, benches and a shuffleboard court marked by a hedge. This recreational area appears to have been developed in the 1950s when the pool was installed. The recreational uses associated with the period of the Hotel Green are no longer extant on the Project site.

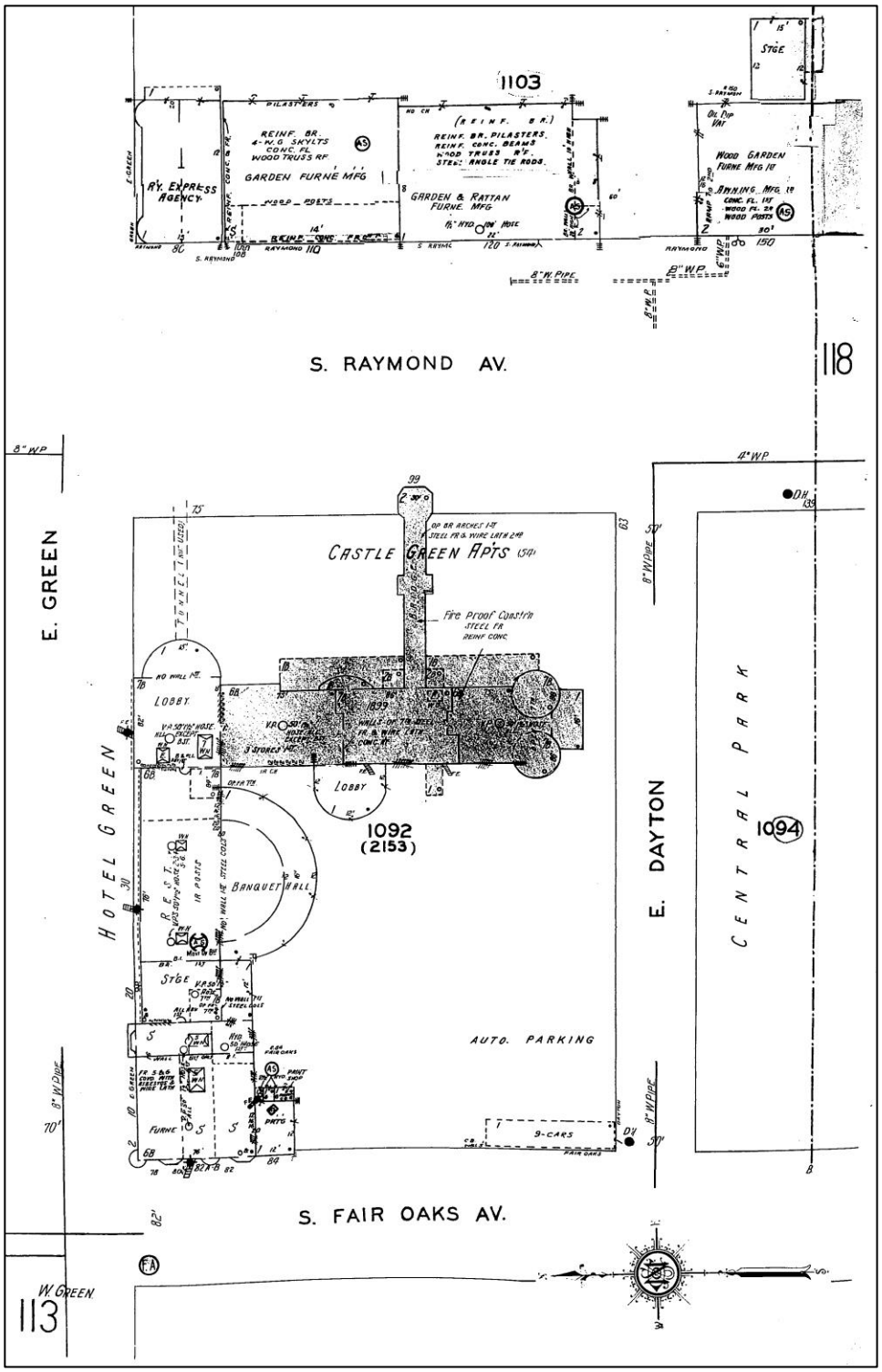
[29] William W. Ellinger III, AIA "Chronology for the Hotel Green (1887-1973), the Castle Green Apartments (1924-), the Hotel Green Apartments (1973-), and Related Events of Interest," August 1993.
[30] "Hotel Green" National Register of Historic Places Inventory – Nomination Form, 1982.
[31] "Tree Aging for 86 S. Fair Oaks," Jan C. Scow Consulting Arborists, LLC, June 3, 2013. The two trees include a Canary Island Date Palm (~1908, Tree #13) and a Camphor tree (~1913, Tree #5). See Appendix C.



Sanborn Map showing completed expansion of Hotel Green, 1903. The southwest parcel shows the one-story bungalow and is labeled as "park".

86 South Fair Oaks Avenue
Historic Resources Technical Report

HISTORIC RESOURCES GROUP



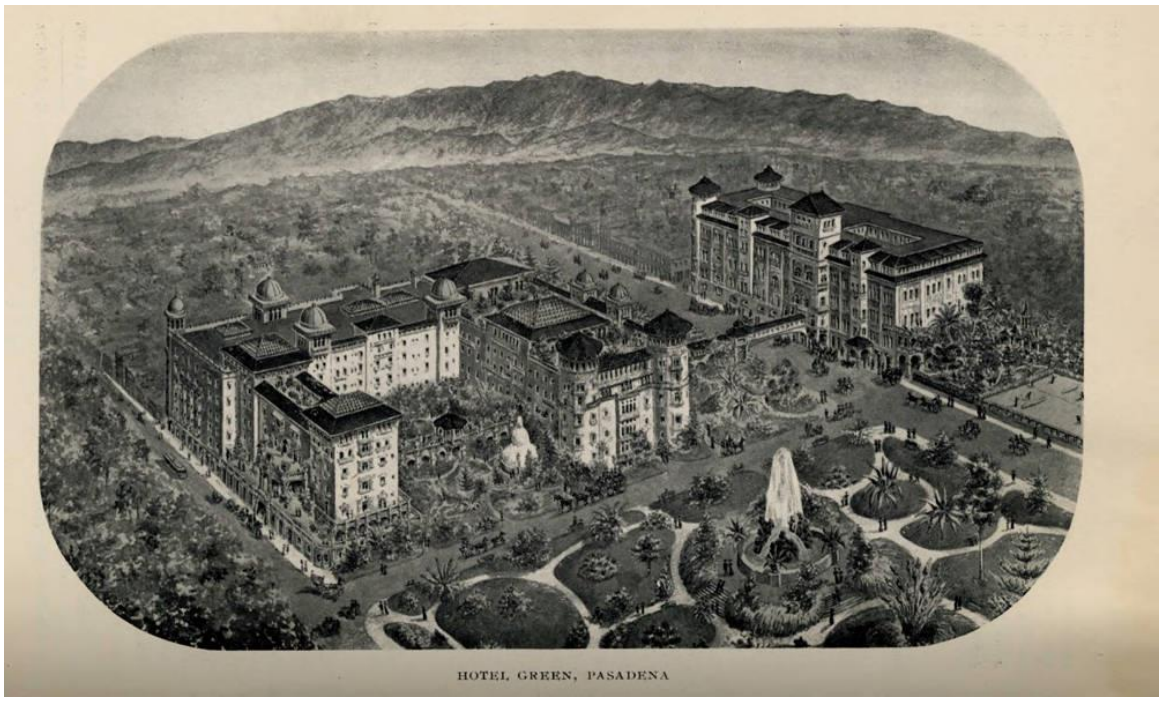
Sanborn Map showing conversion to Hotel Green/Castle Green, 1951. The bungalow has been removed from the southwest parcel and is labeled as "auto parking".

86 South Fair Oaks Avenue
Historic Resources Technical Report

HISTORIC RESOURCES GROUP



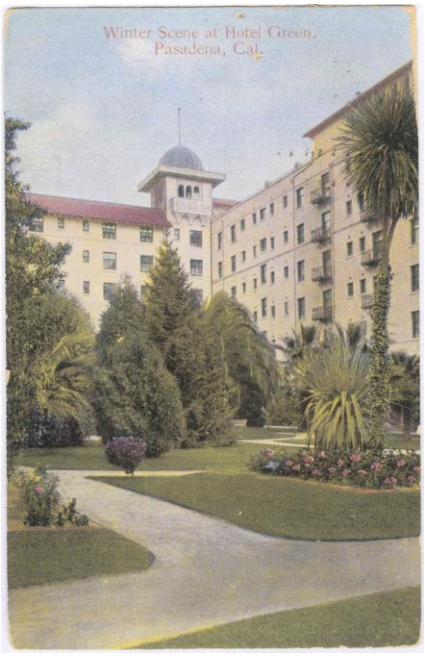
Hotel Green rendering with planned west wing, 1903. (Pasadena Museum of History)



Hotel Green rendering with planned west wing, 1903. (Pasadena Public Library)



Hotel Green southwest parcel with bungalow and Central Park to the south, ca. 1904. (Pasadena Museum of History)



Hotel Green landscaped southwest parcel, ca. 1910. (Pasadena Museum of History)



Hotel Green southwest parcel with tennis courts, ca. 1914. (Pasadena Museum of History)

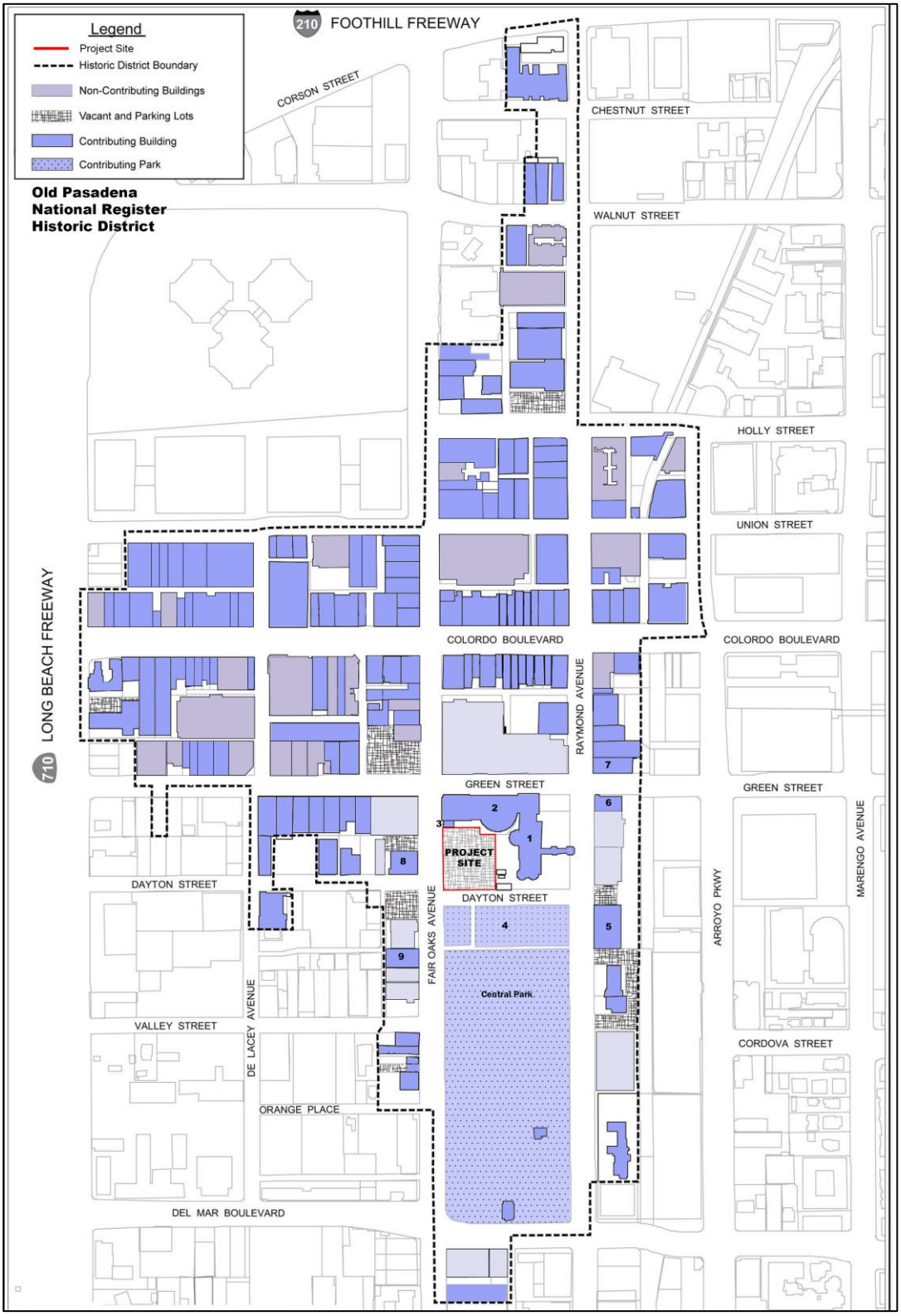
5.2 Old Pasadena National Register Historic District[32]

The Old Pasadena Historic District (the "District") was listed in the National Register of Historic Places in 1983 and amended in 2008. The nomination form for the District specifies that it is significant in local history under National Register Criteria A and C. As the historic commercial center of Pasadena, the District documents the economic development of the city and its various phases of growth between 1886 and 1936. The District also contains an important record of the evolution of architectural design in southern California as well as the work of many prominent regional architects.

The District boundaries are irregular and incorporate Fair Oaks and Raymond Avenues, the main north-south streets, and Colorado Boulevard, the main east-west street. It is generally bound on the north by Chestnut Street, on the west by Pasadena Avenue, on the south by Del Mar Boulevard and on the east by the MTA Gold Line tracks. The District contains 154 contributing and 40 noncontributing resources, which form the historic downtown of the City of Pasadena. Dating from 1886 through 1936, the buildings visually document the District's economic and social booms. Predominantly commercial in nature, the District also includes a few residential buildings, a train station, some light industrial concerns, several churches, and a park. The strong stylistic eras of Old Pasadena can be discussed using three streets within the District as examples: Fair Oaks Avenue (1880s), Raymond Avenue (1890-1915), and Colorado Boulevard (1929-30). Surrounding streets, especially Union Street and Green Street, offer small-scale buildings, which reflect their industrial and service support to businesses along the major commercial streets. Since the District was originally listed in 1983, many of the contributing buildings have been extensively rehabilitated in a manner consistent with the Secretary of the Interior's Standards. A few contributing buildings have been demolished, and several new noncontributing buildings have been constructed. Most of the new construction occurred on vacant and surface parking lots and is generally compatible with the historic architecture of the District. Overall, the District retains a high-level of integrity and continues to convey its historic significance.

Due to the changes that occurred within the District since it was first designated in 1983, it was re-evaluated in 2008. At that time, the boundaries were expanded, and individual buildings within the District were re-classified as necessary.

[32] United States Department of the Interior, National Park Service, "Old Pasadena Historic District (Additional Documentation/Boundary Change)" National Register of Historic Places Registration Form, 2008.



Old Pasadena Historic District boundary map, 2008.

86 South Fair Oaks Avenue
Historic Resources Technical Report

HISTORIC RESOURCES GROUP

The District is formally listed in the National Register and is listed in the California Register. Because it is listed in the National and California Registers, the District is considered a mandatory historical resource under CEQA.

There are several contributors to the District adjacent to the Project site. These include (building numbers below are keyed to their locations on the map on the preceding page and the close-up map in Figure 4):

1-2. 99 South Raymond Avenue,
50 East Green Street
(Hotel Green/Castle Green)

Adjacent to the Project site on the same block is the Hotel Green/Castle Green. In addition to being a contributor to the Old Pasadena Historic District, the Hotel Green/Castle Green is individually listed in the National Register along with the Project site. The nomination form for the property indicates that it is significant in local history under National Register Criteria A and C as one of the few grand nineteenth century hotel buildings in California to survive to the present day. Instrumental in the settlement of Pasadena in the 1890s and early 1900s, the hotel also fostered the social, cultural and economic development of the city. It is architecturally significant as a work of historic eclecticism, by architect Frederick L. Roehrig, popular in the late nineteenth century.

Although not directly stated in the National Register nomination, the period of significance can be established for the Hotel Green/Castle Green as beginning in 1898 when the hotel expanded across Raymond Avenue and the West Annex (Castle Green) was constructed, and ends in 1924 when the West Annex was sold and converted into cooperative apartments and renamed the Castle Green thus ending the resort era of the hotel.

The Hotel Green/Castle Green occupies the block between Fair Oaks and Raymond Avenues on the west and east and Green and Dayton Streets on the north and south, which is the same block as the Project site. The entire block is included as the boundary in the individual nomination for the Hotel Green/Castle Green.

The Castle Green, was constructed in 1898 as the West Annex and was connected to the original portion of the Hotel Green at the second story by a pedestrian bridge over Raymond Avenue. In 1903, an addition, then called the North Annex was constructed along the length of Green Street and connected to the Wooster Block, which was constructed in 1887. This portion of the building is now referred to as the Hotel Green.

The Castle Green (1898, Frederick L. Roehrig, architect) has a north-south orientation and sits approximately 100 feet from Raymond Avenue and 30 feet from Dayton Street, which provides space for a large garden along Raymond Avenue. It is a six- and seven-story building that is eclectic in design with references to Spanish Colonial Revival and Islamic architecture. The steel-framed and brick building has a dash coat cement-plaster finish. The large scale of the building is relieved by a variety of treatments to its massing, roofline, fenestration, and exterior ornamentation.

The Hotel Green (1887, C.L. Strange, architect; 1903, Frederick L. Roehrig, architect), originally the Wooster Block and the North Annex, extends along Green Street from Raymond to Fair Oaks Avenues. Although they were constructed at different times by different architects, they were joined internally and are both steel-framed structures sheathed in cement plaster.

The seven-story North Annex is covered by a low-pitched hipped roof with corbelled supporting brackets, while the six-story middle section has a shed roof carried on overhanging eaves. The window and door openings have little detailing. There is a large buttressed brick chimney on the most eastern point. The south facade has a prominent one-story semicircular projection of what was originally the hotel's dining room with square towers at both ends.

The six-story Wooster Block is distinct from the North Annex. The building's wealth of detail recalls Romanesque characteristics. It has a low-pitched shed roof with overhanging eaves, exposed rafters, and clay tiles. The street-facing elevations are articulated by numerous bays and arches.

3. 84 South Fair Oaks Avenue

This one-story commercial brick vernacular building was constructed circa 1925. It is immediately south of the Wooster Block of the Hotel Green. The building is finished with roughly textured cement plaster. The west facade on Fair Oaks Avenue has a single storefront with vertically proportioned openings and a decorative cornice.

5.3 Resources Located in the Immediate Vicinity of the Project Site

Resources located in the immediate vicinity of the Project site include contributors to the Old Pasadena Historic District. The contributors within the immediate vicinity of the Project site are identified in this section.

Contributing resources in the immediate vicinity include:

4. Central Park

Central Park is located south of the Project site. It is a 10.73-acre site and is bounded by South Raymond Avenue on the east, Dayton Street on the north, South Fair Oaks Avenue on the west, and East Del Mar Boulevard on the south. The Castle Green and Project site are to the north and the Santa Fe Train Station is to the east. Central Park and Memorial Park (in the Civic Center National Register District) are the oldest parks in the city, the land for both parks having been purchased in 1902. Many mature trees, broad lawns, and a few small buildings connected by winding paths form the general plan of the park. The park became a recreation ground for the tourists staying at the neighboring Hotel Green.

The park was originally designed by Thomas Chisholm, but mainly reflects a redesign by Cook, Hall and Ralph Cornell in 1927. Most of the 1927 footpath configuration of intersecting circles and oval still exists, notably the large oval in the center.

5. 150 South Raymond Avenue

Constructed in 1920, this two-story industrial brick building located on the east side of Raymond Avenue across from Central Park was originally designed as a factory. The utilitarian design features large window openings stacked vertically and spaced evenly on all four sides. The arched openings have divided-light wood sash windows.

6. 80-82 South Raymond Avenue (remnant of Hotel Green)

This one-story building at the southeast corner of Raymond Avenue and Green Street is all that remains of the original portion of the Hotel Green on the east side of Raymond Avenue. Ed Webster sold his hotel to Colonel Green in 1891, who proceeded to build the annex across the street. In 1935, the original four-story hotel was demolished except for this remnant.

7. 62-70 South Raymond Avenue

Constructed in 1902, this three-story, plaster-over-brick building, located at the northeast corner of Raymond Avenue and Green Street, was originally constructed as a hotel, perhaps as a residence for employees of the Hotel Green. The widening of Green Street in 1926 caused the 20 feet of the south end of the building to be demolished. The ensuing remodeling included the South Raymond Avenue facade.

8. 103-115 South Fair Oaks Avenue (Doty Block)

This large three-story red brick building, constructed in 1887, is located to the west of the Project site. The principal facade (along Fair Oaks Avenue) has eight bays defined by brick pilasters, accented at each story by massive blocks of grey rusticated stone tied

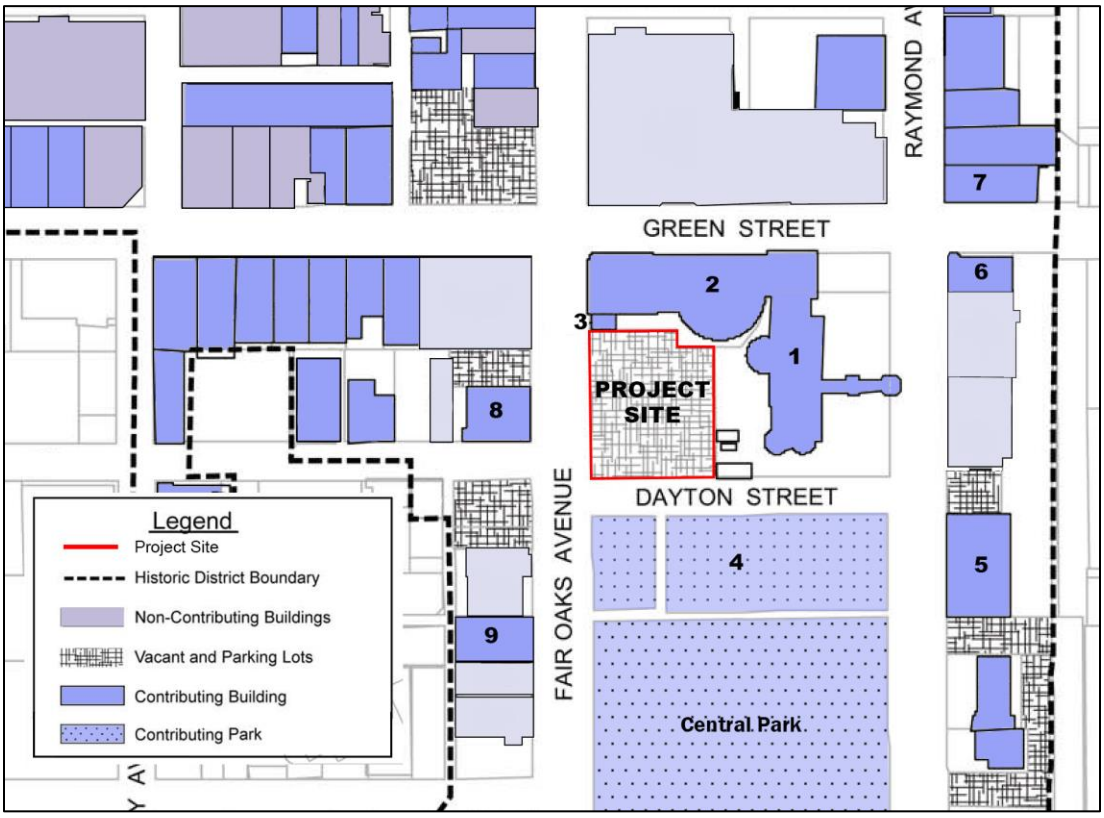
together by narrow projecting bands of molding above the first and second stories. Built during the boom of the late 1880s for James E. Doty, the Doty Block was one of the earliest substantial brick buildings in the city. Doty's carriage business was one of the largest in the San Gabriel Valley during the 1890s. The building originally had a corner tower and projecting bays, which were removed in 1924. In 1998 the building was rehabilitated. The work included the replacement of brickwork that had been damage by abrasive cleaning and the replacement of the storefronts, except for the original cast-iron columns.

9. 155 South Fair Oaks Avenue
   (Star Saddle Livery)

Constructed in 1906 to the design of Hunt & Grey, this two-story cement plaster-over-brick building is in the Mission Revival style. This building is located on the west side of Fair Oaks Avenue across from Central Park. A three-story tower on the north side and a two-story bay with a wide garage entrance on the south dominates the building. This southern bay, a 1910 addition was built on the site of a former corral. Built for Charles N. Post, a local banker, the livery served guests of the Hotel Green who were interested in pleasure riding. Similar to many liveries, the building became an auto repair shop in the 1930s. Original architectural elements include the pitched roofs finished with red clay tile, arched window headers, divided-light wood sash casement windows, and original hayloft doors on the rear. The storefronts replaced what were originally barn-style doors. The building was rehabilitated in 1991 and again in 1999.

Historic resources located adjacent to, and within the immediate vicinity of the Project site are shown in Figure 4. Site and building photographs are included in Appendices A and B.

Figure 4: Historic Resources Adjacent to and in the Vicinity of the Project Site



1/2. 50 East Green Street/99 South Raymond Avenue (Hotel Green/Castle Green)
3. 84 South Fair Oaks Avenue
4. Central Park
5. 150 South Raymond Avenue
6. 80-82 South Raymond Avenue (remnant of Hotel Green)
7. 62-70 South Raymond Avenue
8. 103-115 South Fair Oaks Avenue (Doty Block)
9. 155 South Fair Oaks Avenue (Star Saddle Livery)

Portion of Old Pasadena Historic District indicating Project Site and surrounding contributing resources. Numbers correspond to building descriptions in Sections 5.2 and 5.3.

6.1 Framework for Analysis

The following analysis is informed by National, State and local guidelines.

CEQA Thresholds

The CEQA Guidelines as amended in 2019 indicate that a project would have a significant impact on historical resources if it would result in a substantial adverse change in the significance of a historical resource. A substantial adverse change in the significance of a historic resource means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.[33]

The Guidelines go on to state that "[t]he significance of an historic resource is materially impaired when a project… [d]emolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources… local register of historic resources… or its identification in a historic resources survey."[34]

Additional Guidance

Secretary of the Interior's Standards

The *Secretary of the Interior's Standards for the Treatment of Historic Properties* (the *"Standards"*) provide guidance for reviewing proposed projects that may affect historic resources.

The intent of the *Standards* is to assist the long-term preservation of a property's significance through the preservation, rehabilitation, and maintenance of historic materials and features. The *Standards* pertain to historic buildings of all materials, construction types, sizes, and occupancy and encompass the exterior and interior of the buildings. The *Standards* also encompass related landscape features and the building's site and environment, as well as attached, adjacent, or related new construction.

From a practical perspective, the *Standards* have guided agencies in carrying out their historic preservation responsibilities including State and local officials when reviewing projects that may impact historic resources. The *Standards* have also been adopted by State and local jurisdictions across the country including the City of Pasadena.

[33] *CEQA Guidelines*, section 15064.5(b)(1).
[34] *CEQA Guidelines*, section 15064.5(b)(2).

In addition, the *Standards* are a useful analytic tool for understanding and describing the potential impacts of substantial changes to historic resources. However, under California environmental law, compliance with the *Standards* does not necessarily determine whether a project would cause a substantial adverse change in the significance of an historic resource. Rather, projects that comply with the *Standards* benefit from a regulatory presumption that they would have a less than significant adverse impact on a historic resource.[35]

Specifically, Section 15064.5(b)(3) of the CEQA Guidelines states:

"Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource."

The statutory language above references the Secretary of the Interior's standards and guidelines for four distinct historic "treatments," including: (1) preservation; (2) rehabilitation; (3) restoration; and (4) reconstruction. The specific standards and guidelines associated with each of these possible treatments are provided on the National Park Service's website regarding the treatment of historic resources.[36]

For analytical purposes, a decision must be made regarding which "treatment" standards should be used to analyze a project's potential effect on historic resources.

The use of the Secretary of the Interior's "rehabilitation" standards (the Rehabilitation Standards) provide a more conservative impact analysis for this project and account for the fact that the adjacent properties will likely require some form of protection during construction activities and ongoing maintenance over the term of the construction.

Secretary of the Interior's Standards & Guidelines for Rehabilitation[37]

The National Park Service encourages maintaining the integrity of a district through the appropriate design of infill buildings at vacant sites or sites where new buildings replace non-contributing buildings. The Standards are intended as general guidance for work on

[35] *CEQA Guidelines*, section 15064(b)(3).
[36] http://www.nps.gov/hps/tps/standguide/
[37] Kay D. Weeks and Anne E. Grimmer, *The Secretary of the Interior's Standards for the Treatment of Historic Properties: with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*, (Washington D.C.: National Park Service, U.S. Department of the Interior) 1995, pp. 63-115.

any historic building. The Guidelines for Rehabilitation expand the discussion to sites and neighborhoods.

Rehabilitation Standards #9 and #10 address related new construction. Standard 9 in part states: "New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment."[38] Standard 10 states: "New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired."[39]

As written in the Guidelines for Rehabilitation, there is a distinction, but not a fundamental difference, between the concerns for additions to historic buildings and new construction, or "infill" adjacent to historic buildings on a property or within a district. As with most matters of design and planning, the differences are defined by the scale, site, setting, and project.

Following are quotations from the National Park Service guidance that relate to the proposed Project.

"…a modern addition should be readily distinguishable from the older work; however, the new work should be harmonious with the old in scale, proportion, materials, and color."

"Plan the new addition in a manner that provides some differentiation in material, color, and detailing so that the new work does not appear to be part of the historic building. The character of the historic resource should be identifiable after the addition is constructed."[40]

National Park Service: Preservation Briefs 14

In addition to the Standards and Guidelines for Rehabilitation, the National Park Service publishes a series of briefs that includes "Preservation Briefs 14, New Exterior Additions to Historic Buildings: Preservation Concerns," as revised and republished in 2010.[41]

[38] http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm
[39] Ibid.
[40] Anne E. Grimmer and Kay D. Weeks, "Preservation Briefs 14, New Exterior Additions to Historic Buildings: Preservation Concerns," (Washington D.C.: National Park Service, U.S. Department of the Interior) 2010.
[41] Anne E. Grimmer and Kay D. Weeks, "Preservation Briefs 14, New Exterior Additions to Historic Buildings: Preservation Concerns," (Washington D.C.: National Park Service, U.S. Department of the Interior) 2010.

Among the concepts presented are a balance between differentiation and compatibility, and subordination of the new to the old.

Preservation Briefs 14 states:

1. There is no formula or prescription for designing a new addition that meets the Standards. A new addition to a historic building that meets the Standards can be any architectural style -- traditional, contemporary or a simplified version of the historic building. However, there must be a balance between differentiation and compatibility in order to maintain the historic character and the identity of the building being enlarged. New additions that too closely resemble the historic building or are in extreme contrast to it fall short of this balance. Inherent in all of the guidance is the concept that an addition needs to be subordinate to the historic building.

2. The intent of the Preservation Briefs is to provide guidance to owners, architects and developers on how to design a compatible new addition…. A new addition to a historic building should preserve the building's historic character. To accomplish this and meet the Secretary of the Interior's Standards for Rehabilitation, a new addition should:

    - Preserve significant historic materials, features and form;
    - Be compatible; and
    - Be differentiated from the historic building.

6.2 Potential Impacts from Demolition

The Project proposes new construction that will occupy a parcel currently used primarily as a surface parking lot. The Project proposes to demolish the existing surface parking lot, landscaped recreation area, and shuffleboard court. It also proposes to remove one billboard and 20 mature trees (11 of which are protected under the City Trees and Tree Protection Ordinance – 9 on-site and 2 in the public right-of-way).

The Project site is located within the boundary identified in the Hotel Green/Castle Green National Register nomination. The existing condition of the Project site was established after the period of significance for the Hotel Green/Castle Green (1898-1924). Because they were developed after the period of significance, the surface parking lot with landscaping, outdoor furniture, shuffleboard court and advertising billboard located on the site are not considered character-defining features of the Hotel Green/Castle Green.

The mature trees scheduled for removal, two of which date closest to the early landscape design (1903) for the Hotel Green era, are remnants of an earlier landscape design that no longer exists on the site,[42] and the context of the original landscape in which the trees were meaningful is no longer extant. Therefore, the trees are also not considered character-defining features of the Hotel Green/Castle Green. As applicable, replacement or relocation of any protected trees scheduled for removal would otherwise occur consistent with the requirements of the City's Trees and Tree Protection Ordinance.

Because the existing condition of the site no longer reflects the landscape and recreational uses associated with the Hotel's period of significance, demolition of the surface parking lot with landscaping and an advertising billboard, and removal of the mature trees will not alter the property's integrity. The historic character of the property as a whole will be retained after demolition, and the site will retain its National Register eligibility. The proposed demolition will not result in a significant direct impact to historic resources on the Project site.

The Project does not propose to demolish or alter the existing adjacent resources including the Hotel Green/Castle Green or the building at 84 South Fair Oaks Avenue or alter any existing resources in the immediate vicinity. Therefore, the proposed demolition will not result in a significant direct impact on the existing adjacent resources or the existing resources in the immediate vicinity.

6.3 Potential Impacts from New Construction

Proposed New Construction

The proposed new construction will replace an existing surface parking lot and landscaped area. New construction will be located within the Old Pasadena Historic District and immediately adjacent to District contributors Hotel Green/Castle Green and the commercial building at 84 South Fair Oaks Avenue. The proposed new construction will also be located within the boundaries of the Hotel Green/Castle Green, an individually listed historic resource. The proposed Project will be located directly north of District contributor Central Park and in the immediate vicinity of contributing buildings at 150 South Raymond Avenue, 80-82 South Raymond Avenue, 62-70 South Raymond Avenue, 103-115 South Fair Oaks Avenue, and 155 South Fair Oaks Avenue.

[42] The two trees which date to the Hotel Green era are the Canary Island Date Palm (~1908, Tree #13) and the Camphor (~1913, Tree #5). "Tree Aging for 86 S. Fair Oaks," Jan C. Scow Consulting Arborists, LLC, June 3, 2013.

The Project proposes new construction of a six-story building plus penthouse that will reach a maximum roof height of 90 feet, which is slightly shorter than the 93-foot and 6-inch maximum roof height of tallest portions of the adjacent Hotel Green/Castle Green. The new building will be situated at the far southwest portion of the parcel and will maintain grade-level open space between the existing historic buildings and the new building. Approximately 38 feet of open space will separate the south façade of the Hotel Green building and the new construction. Approximately 76 feet of open space will be maintained between the east façade of the new building and the west façade of the Castle Green building. The new building will be located approximately 13 feet from the existing one-story building at 84 South Fair Oaks Avenue.

Impacts to Surroundings of Historic Resources

The Project will not demolish or alter any historic building on the Project site or in the near vicinity of the Project site. However, because the Project will construct a six-story plus penthouse building on a parcel largely used as surface parking under current conditions, the immediate surroundings of the adjacent historic resources discussed above will be altered. For this alteration to be considered a substantial adverse change, however, it must be shown that the integrity and/or significance of the historic resources would be materially impaired by the proposed alteration.

The additional guidance provided by the National Park Service for reviewing proposed new construction that may affect an historic resource, as stated above, be it an addition to an existing building or an infill building within an historic district, strive for the same outcome: a balance between compatibility and differentiation, and the retention of integrity.

An analysis of the alteration to the immediate surroundings of each of the potentially affected historic resources follows below.

Potential Impacts to the Hotel Green/Castle Green from New Construction

The Hotel Green/Castle Green is significant as one of the few 19th century resort hotel buildings in California to survive to the present day. Instrumental in the settlement of Pasadena in the 1890s and early 1900s, the hotel also helped foster the social, cultural and economic development of the city. Designed by noted regional architect Frederick L. Roehrig, the Hotel Green/Castle Green is also architecturally significant as an outstanding example of historic eclecticism popular in the late nineteenth century.

The historic significance of the Hotel Green/Castle Green is largely conveyed by the public-facing primary facades oriented towards the adjoining public streets. The primary (east) façade of the Castle Green portion of the building faces east towards Raymond

Avenue. This façade was historically, and remains today, the primary entrance to the Castle Green. The building was set back approximately 100 feet from the street to create a landscaped park area fronting the main entrance. This garden was the only park in Pasadena at the time. Extending from the center of this façade to the curb of Raymond Avenue is the remaining section of an enclosed pedestrian bridge that once spanned the street and linked to the original Hotel Green building (no longer extant) across the street. The design articulation of east façade, the remnant pedestrian bridge and the front garden all combine to create the primary public face of the building.

The primary (north) façade of the Hotel Green portion of the building faces north along Green Street. This section was an addition to the Castle Green building at the northeast corner, spanned Green Street and adjoined the existing Wooster Block at the northwest corner. Articulated with numerous bays and arched openings at street level, the north façade is oriented to the public with street-facing shops and entrances.

Development of the Project site will be confined to the southwest parcel of the block, and therefore important street views from the north and south along Raymond Avenue and from the east along Green Street to the Hotel Green/Castle Green will remain unaltered. The building's primary east- and north-facing façades will not be obscured by the proposed Project.

The Project has the potential to block views and obscure currently available public sight lines to the secondary west façade of the Castle Green and the south façade of the Hotel Green. Both are rear, secondary facades oriented toward the interior of the block. As such, they display less of the distinctive design articulation characteristic of the primary facades which were designed to directly engage the public right-of-way. The proposed building will obscure the west façade of the Castle Green building, particularly from the west along Fair Oaks Avenue and from the southwest along Dayton Street. The west façade will remain visible when viewed northeast from the central portions of Dayton Street and Central Park, where landscaped open space will remain between the two buildings. The proposed new building will also partially block the Hotel Green's south façade from public view when viewed from the west and southwest. Both facades have historically been unobstructed.

The Project conforms to Standard 9 because maintaining the Project site as an open space is not critical to conveying the historic significance of the Hotel Green/Castle Green. Instead, it is the location, massing and architectural detailing of the Hotel Green/Castle Green buildings which convey its historic significance. After implementation of the Project, the L-shaped configuration and orientation of the Hotel Green/Castle Green will remain discernible after construction and the primary east- and west-facing facades will remain unobstructed. The Project includes grade-level open

space to provide a spatial buffer between the existing buildings and the new construction so that the west façade of the Castle Green and south façade of the Hotel Green will remain discernable despite visual obstruction from the street. Although spatial relationships will be altered by the proposed new construction, the historic buildings will remain in their original locations and will not be physically altered by the new construction. The Castle Green/Hotel Green will continue to convey its historic significance after Project construction.

As noted in Section 4.4 of this report, *historic integrity* is the ability of a historic resource to convey its significance. The National Park Service defines seven aspects of integrity: *location, design, setting, materials, workmanship, feeling,* and *association*. The Project would not affect the integrity of *location, design, materials, or workmanship* of the Castle Green/Hotel Green. The building will remain intact in its current location and would not be materially altered by new construction to the south and west. Therefore, integrity of *feeling* would also remain unaffected because all the existing physical elements that characterize the Castle Green/Hotel Green would continue to convey the property's historic significance. Because the Castle Green/Hotel Green would retain integrity of *location, design, materials, workmanship*, and *feeling*, it would continue to reflect its historic significance as a late-19th and early 20th century resort hotel in Pasadena, therefore integrity of *association* would also remain unaffected by the Project.

The only aspect of integrity that will be affected by the Project is *setting.* The Project will alter the setting of the Castle Green/Hotel Green by constructing a new building in an area that has historically been devoid of buildings. As noted earlier, this area has been substantially altered since the period of significance and today contains a surface parking lot with landscaping, outdoor furniture and an advertising billboard. Setting features important to the historic significance of the Castle Green/Hotel Green include the configuration of street and sidewalk fronting the building's north- and east-facing façades, and the spatial relationships with buildings to the north, east and west that are also included within the District boundary. All of these will remain unchanged by the Project. The Castle Green/Hotel Green will retain integrity of *location, design, materials, workmanship, feeling,* and *association.* Integrity of *setting* will be compromised by the new construction associated with the Project but the setting features most important to conveying the historic significance of the property will remain unchanged. All but one of the seven aspects of integrity will be entirely retained after implementation of the Project (and the one aspect affected, *setting,* will be partially retained) and the Castle Green/Hotel Green will retain sufficient integrity to convey its historic significance.

The proposed new construction will also include substantial foundation work and the construction of subterranean parking. The required excavation, general construction

procedures and associated vibration has the potential to de-stabilize the Castle Green/Hotel Green property. Vibration issues are examined in the Noise section of the CEQA document to address potential impacts from vibration to adjacent buildings and ensure that the historic buildings are protected. The Noise analysis determined that with mitigation to reduce potential vibration impacts associated with construction activities to a less than significant level, the Project will avoid significant impacts to the Castle Green/Hotel Green.

In summary, the integrity and significance of the Hotel Green/Castle Green will not be materially impaired by alterations to its surroundings caused by new construction associated with the Project, and it will maintain its eligibility for listing in the National Register and California Register. The proposed new construction will not result in significant impacts to the Hotel Green/Castle Green.

Alteration to the Old Pasadena Historic District

The Project site is located within the Old Pasadena Historic District. New construction will be within the District boundaries and within the vicinity of several buildings that are district contributors. In addition to the Hotel Green/Castle Green, the closest District contributor is the single-story commercial building at 84 South Fair Oaks Avenue, a small-scale commercial storefront from the mid-1920s located immediately north of the Project site. Other contributing buildings are located on the opposite side of South Fair Oaks Avenue.

The Old Pasadena Historic District is significant as the historic commercial center of Pasadena. The District documents the economic development of the city and its various phases of growth between 1886 and 1936. The District is composed of a variety of property types and architectural styles that are largely commercial in nature. Characteristic of pre-World War II commercial areas, the District is scaled to the pedestrian. Contributing properties to the District are oriented toward the street with architectural articulation largely confined to street-facing façades. The side- and rear-facing facades were constructed with minimal articulation in reaction to and in anticipation of the construction of neighboring buildings. The District's historic significance is experienced primarily from the street either by pedestrians or passing vehicles. The significance of the District contributors in the immediate vicinity is largely conveyed by their street-facing facades along Fair Oaks and Raymond Avenues These facades will not be obscured by the new construction.

The Old Pasadena Historic District is characterized by a diverse collection of buildings of varying heights and densities, with heights ranging from one story up to eight stories. The majority of buildings are built to the sidewalk with little or no setback. The

proposed new construction will maintain the prevailing setback and will have a similar street orientation to the contributing buildings in the District, including ground-floor retail. At six stories plus penthouse, the proposed new building will be taller than many of the nearby contributing buildings, including the one-story commercial brick vernacular building at 84 South Fair Oaks Avenue immediately north of the Project site, and the three-story red brick building (Doty Block) located across the street at 103-115 South Fair Oaks Avenue. This contrast in scale, however, is in keeping with the overall character of the District which contains contributing buildings ranging from one to seven stories in height.

Central Park, a contributor to the Old Pasadena Historic District, is significant as one of Pasadena's oldest parks. Many mature trees, broad lawns, and a few small buildings connected by winding paths form the general plan of the park. The park became a recreation ground for the tourists staying at the neighboring Hotel Green.

As noted earlier in this report, when the planned Fair Oaks Avenue wing of the Hotel Green was not built, the southwest parcel was landscaped to complement Central Park. By 1951, the parcel was no longer used strictly for recreation and partially became a surface parking lot. A pool was added to the site in 1953 to service the Hotel Green and removed in the early 1970s when the building became low-income residential apartments. Even though two remnant trees remain on the parcel from the period of the hotel, the historic landscape is no longer discernible, and the Project parcel no longer conveys its past use as a designed landscaped area or its visual association with Central Park. Additionally, the Project will not significantly impact views or obscure public sight lines of Central Park.

Overall, the proposed new construction is compatible with the overall character of the Old Pasadena Historic District, and the integrity of the District will not be materially impaired by alterations to its setting caused by the Project. The proposed new construction will not diminish the ability of any District contributor, including the adjacent building at 84 South Fair Oaks Avenue, to convey its significance as a contributor to the District. All contributors' primary facades will remain intact and fully visible from the street.

The Project will include substantial foundation work and the construction of subterranean parking. The required excavation, general construction procedures and associated vibration has the potential to de-stabilize nearby contributing buildings including the 84 South Fair Oaks property. Vibration issues are examined in the Noise sections of the CEQA document to address potential impacts from vibration to adjacent buildings. The Noise analysis determined that with mitigation to reduce potential

vibration impacts associated with construction activities to a less than significant level, the Project will avoid significant impacts to adjacent historic buildings.

Although the Project will construct a new building within the Old Pasadena Historic District boundaries, all but one of the seven aspects of integrity would be unaffected by the Project. The Project would not affect the integrity of *location, design, materials, or workmanship* for the District or any of its component contributing buildings. All contributing buildings would remain intact in their current locations and would not be materially altered by new construction associated with the Project. Therefore, integrity of *feeling* would also remain unaffected because all the existing physical elements that characterize the District and contributing buildings would remain and continue to convey their historic significance. Because all the important physical characteristics of the District will remain, they would continue to reflect their important associations with the commercial development of Pasadena during the late 19th- and early 20th centuries, therefore integrity of *association* would also remain unaffected by the Project. The only aspect of integrity that could possibly be affected by the Project is *setting*.

Setting features important to the Old Pasadena Historic District include the configuration of streets and sidewalks fronting District buildings, the pattern of tightly spaced buildings defining a central business district, and the public circulation space delineated by uniform building street walls. Adding a new building of compatible size and scale that maintains the prevailing building and set-back pattern characteristic of the District will not adversely alter the setting of the District such that its listing on the National Register would be threatened.

Despite the construction of a new building within the Old Pasadena Historic District boundaries and on land currently developed with surface parking and landscaping, the District will continue to convey its historic significance after implementation of the Project. .

Compatibility

As stated previously, Section 15064.5(b)(3) of the CEQA Guidelines states:

"Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource."

These Standards and additional guidance provided by the National Park Service for reviewing proposed new construction that may affect an historic resource, as stated above, be it an addition to an existing building or an infill building within an historic district, strive for the same outcome: a balance between compatibility and differentiation, and the retention of integrity.

Standard 9 in part states: "The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment."[43]

The proposed new construction will be differentiated from adjacent historic resources. It will be a contemporary design with balanced symmetrical proportions and will recall historic features that complement the eclectic design of the Hotel Green/Castle Green. The Project is compatible with the adjacent historic resources and the historic character of the District in terms of materials, features, size, scale and proportion. The new building is rectangular in plan and has massing similar to the Hotel Green/Castle Green. It also recalls traditional historic architectural design details including an emphasized base level, tower feature, arched windows, similarly proportioned fenestration, punched windows, cement plaster finishes, and a low-pitched roof with supporting brackets. The new building will also maintain the prevailing setback of the adjacent and nearby District contributors, continuing the street wall that defines and contains the immediate blocks of Fair Oaks Avenue.

The Project conforms to Standard 9 because it will be differentiated from the historic resources adjacent to the site and will be compatible with the size, scale, proportion, and massing to protect the integrity of the site and its surroundings.

Standard 10 states: "New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired."[44]

The Project will not be an addition to the adjacent historic resources. It will be a new building separate and apart from the existing buildings. As such, if the new construction is removed in the future the form and integrity of the adjacent historic resources, and the historic district, will be preserved. The Project conforms to Standard 10.

In summary, the design of the proposed new construction will be differentiated from the immediately surrounding buildings, will be compatible in size, scale and massing, and

[43] http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm
[44] Ibid.

will be a new building separate and apart from the adjacent existing buildings. The new construction will not result in a substantial adverse impact on the site or on existing adjacent resources and is consistent with the Secretary of the Interior's Standards.

6.4 Analytical Summary using CEQA Thresholds

Analysis of potential impacts to historical resources reveals that the Project will alter the setting and surroundings of historical resources but that the alteration will not substantially reduce the integrity or significance of those resources.

As noted above, the CEQA Guidelines as amended in 2019 indicate that a project would have a significant impact on historical resources if it would result in a substantial adverse change in the significance of a historical resource. A substantial adverse change in the significance of a historic resource means *demolition, destruction, relocation,* or *alteration* of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.[45]

The following discussion reiterates the findings of the above analysis using the definition of "substantial adverse change" as provided in the CEQA Guidelines.

1. Would the Project involve the demolition or destruction of a significant resource?

The Project would not demolish a significant historical resource. The Project site is considered an historical resource because it is within the boundary identified in the Hotel Green/Castle Green National Register nomination and within the boundary of the Old Pasadena Historic District. The Project would replace the existing surface parking lot on the Project site. This area, originally a landscaped park space, has been substantially altered since the Hotel Green/Castle Green period of significance and is not considered a character-defining feature of the historic resource. Therefore, there are no historical resources on the Project site that would be demolished as part of the proposed Project.

As noted in Section 5 of this report, the Project site is situated in a National Register Historic District and adjacent to two contributing resources to the District. These are the Hotel Green/Castle Green at 99 South Raymond Avenue and 50 East Green Street, and the building at 84 South Fair Oaks Avenue. These buildings are located on the same block as the Project site. The Project does not propose or anticipate demolition of these buildings.

The Project will include excavation, general construction procedures and associated vibration which has the potential to de-stabilize adjacent historic buildings. Settlement

[45] *CEQA Guidelines,* section 15064.5(b)(1).

and vibration issues are examined in the Geotechnical and Noise/Vibration sections of the CEQA document to address potential impacts from settlement and vibration and ensure protection of adjacent buildings.

Therefore, the Project does not involve demolition or destruction of a significant resource.

2. Would the Project involve relocation that does not maintain the integrity of a significant resource?

The Project would not relocate any significant historical resource on or in the vicinity of the Project site. The Project will not relocate any part of Hotel Green/Castle Green at 99 South Raymond Avenue and 50 East Green Street, or the building at 84 South Fair Oaks Avenue. Therefore, the Project does not include the relocation of any adjacent buildings.

3. Would the Project involve alteration which does not maintain the integrity of a significant resource?

The Project site is within the boundary of the National Register listed Hotel Green/Castle Green. As such, the Project site is located within a historical resource. The Project site was originally a landscaped park space and has been substantially altered since its original construction. The Project would alter the historic resource by the addition of this new six-story plus penthouse building which will change the setting of the Hotel Green/Castle Green buildings.

Maintaining the Project site as an open space, however, is not critical to conveying the historic significance of the Hotel Green/Castle Green. The L-shaped configuration and orientation of the historic buildings will remain discernible after construction and the primary east- and west-facing facades will remain unobstructed. In addition, the Project does not propose conversion, rehabilitation, or alteration of identified historical buildings adjacent to the Project site, including the building at 84 South Fair Oaks Avenue.

In addition, the Project will not physically alter any contributing building to the Old Pasadena Historic District. The proposed new construction will not diminish the ability of any District contributor, including the building the Castle Green/Hotel Green and the commercial building at 84 South Fair Oaks Avenue, to convey its significance as a contributor to the District. All contributors' primary facades will remain intact and fully visible from the street. The Project does not involve alteration that does not maintain the integrity of a significant historic resource.

4. Would the Project involve construction that reduces the integrity or significance of important resources on the site or in the vicinity?

The Project does not propose the demolition, destruction, relocation or alteration of any historical building either on the Project site or in the vicinity of the Project site. As discussed above, the Project would not physically alter the Hotel Green/Castle Green buildings or the building at 84 South Fair Oaks Avenue.

The Project will, however, alter the immediate surroundings of historical resources both on the Project site and in the vicinity by constructing a new building. As stated previously, the Project will infill an open space that is historically associated with a historical resource, although the character-defining features of the open space are no longer extant. The Project will also partially obscure secondary facades of a historical resource that were previously open to public view. These impacts, however, will not substantially reduce the integrity or significance of important resources on the site or in the vicinity. As stated previously, the Project conforms to Standard 9 and 10 of the Secretary of the Interior's Standards for Rehabilitation.

The Project would not affect the integrity of *location, design, materials*, or *workmanship* of the Castle Green/Hotel Green. The building will remain intact in its current location and would not be materially altered by new construction. Therefore, integrity of *feeling* would also remain unaffected because all the existing physical elements that characterize the Castle Green/Hotel Green would continue to convey the property's historic significance. Because the Castle Green/Hotel Green would retain integrity of *location, design, materials, workmanship*, and *feeling*, it would continue to reflect its historic significance as a late-19th and early 20th century resort hotel in Pasadena, therefore integrity of *association* would also remain unaffected by the Project. Integrity of *setting* will be compromised by the new construction on an area historically used as open space but the setting features most important to conveying the historic significance of the property will remain unchanged. All but one of the seven aspects of integrity will be entirely retained after implementation of the Project (and the one aspect affected, *setting*, will be partially retained) and the Castle Green/Hotel Green will retain sufficient integrity to convey its historic significance.

Similarly, the Project would not affect the integrity of *location, design, materials*, or *workmanship* for the Old Pasadena Historic District. All contributing buildings would remain intact in their current locations and would not be materially altered by new construction associated with the Project. Therefore, integrity of *feeling* would also remain unaffected because all the physical elements that characterize the District would remain and continue to convey their historic significance. Contributors to the District would also continue to reflect their important associations with the commercial

development of Pasadena during the late 19th- and early 20th centuries, leaving integrity of *association* unaffected by the Project. Integrity of *setting* for the District would also remain intact because important setting features, including the configuration of streets and sidewalks, the pattern of tightly spaced buildings, and the public circulation space will remain unchanged by the Project.

6.5 Summary of Potential Impacts on Historical Resources

Analysis of the potential impacts to historical resources has found that the Project will not result in significant adverse impacts on the identified historical resources located within and adjacent to the Project site. The Project will not result in a substantial adverse change in the significance of the Old Pasadena Historic District, the Hotel Green/Castle Green, or the Old Pasadena Historic District.

2020California Environmental Quality Act (CEQA) Statute and Guidelines; California Association of Environmental Professionals, www.califaep.org

Architectural Resources Group. Memorandum to Goldrich and Kest Industries, LLC regarding Tree Aging Study by Jan C. Scow Consulting Arborists, LLC dated June 7, 2013.

California Public Resources Code (Sections 21000-21177).

California Code of Regulations, (Title 14, Division 6, Chapter 3, Sections 15000-15387).

"Central District Specific Plan." City of Pasadena Planning and Development Department. Adopted November 8, 2004.

City of Pasadena Design and Historic Preservation Services; architecture and address files.

City of Pasadena Environmental Administrative Procedures. August 2008.

City of Pasadena Planning and Community Development website, http://www.ci.pasadena.ca.us/planning/

Grimmer, Anne E. and Kay D. Weeks. "Preservation Briefs 14, New Exterior Additions to Historic Buildings: Preservation Concerns." Washington D.C.: National Park Service, U.S. Department of the Interior, 2010.

Historic Resources Group; postcard collection.

"Hotel Green/Castle Green." National Register of Historic Places Nomination Form. Washington D.C.: National Park Service, U.S. Department of the Interior, 1982.

Los Angeles Times, ProQuest Historical Newspapers; 1897-1924.

"National Register Bulletin 16A: How to Complete the National Register Registration Form." Washington D.C.: National Park Service, U.S. Department of the Interior, 1997.

"Old Pasadena Historic District." National Register of Historic Places Nomination Form. Washington D.C.: National Park Service, U.S. Department of the Interior, 1983.

"Old Pasadena Historic District (Boundary Increase/Decrease/Additional Documentation)." National Register of Historic Places Registration Form. Washington D.C.: National Park Service, U.S. Department of the Interior, 2008.

Pasadena Museum of History Research Library and Archives; www.pasadenahistory.org

Pasadena Public Library; Pasadena News Index to *Pasadena Evening Star* and *Pasadena Daily News*.

Sanborn Fire Insurance Maps for Pasadena; 1887-1951.

Secretary of the Interior's Standards for Rehabilitation; http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm

Weeks, Kay D. and Anne E. Grimmer. *The Secretary of the Interior's Standards for the Treatment of Historic Properties: with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*. Washington D.C.: National Park Service, U.S. Department of the Interior, 1995.

Views of the Project Site.



86 South Fair Oaks Avenue (Project Site); looking east



86 South Fair Oaks Avenue (Project Site); looking north



86 South Fair Oaks Avenue (Project Site); looking northeast



86 South Fair Oaks Avenue (Project Site); looking northeast



86 South Fair Oaks Avenue (Project Site); looking northeast



86 South Fair Oaks Avenue (Project Site); looking west



86 South Fair Oaks Avenue (Project Site); looking southwest



86 South Fair Oaks Avenue (Project Site); looking west



86 South Fair Oaks Avenue (Project Site); looking north



Street View from Fair Oaks Avenue; looking north



Street View from Fair Oaks Avenue; looking south



Street View from Dayton Street; looking east



Street View from Dayton Street; looking west



Street View from Central Park; looking north



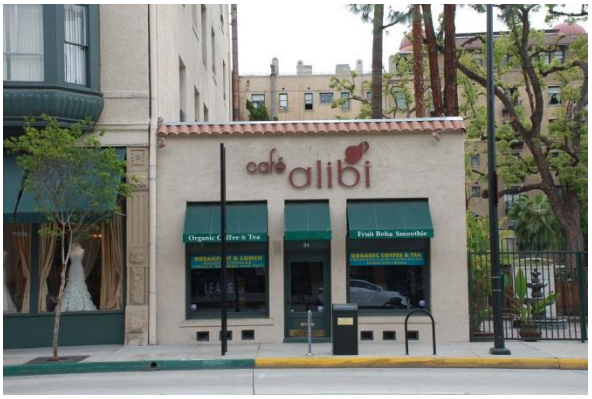
Street View from Raymond Avenue; looking north



1. 99 South Raymond Avenue (Castle Green)



2. 50 East Green Street (Green Hotel)



3. 84 South Fair Oaks Avenue



4. Central Park



5. 150 South Raymond Avenue



6. 80-82 South Raymond Avenue



7. 62-70 South Raymond Avenue



8. 103-115 South Fair Oaks Avenue (Doty Block)

Jan C. Scow Consulting Arborists, LLC
Disease and Pest Diagnosis, Hazard Evaluation, Restorative Pruning Advice, Value Assessment

3887 Woodcliff Rd.
Sherman Oaks, CA 91403
(818) 789-9127

Date: 6/3/13 rev 6/7/13
To: Kristopher Forsythe
From: Jan Scow
Subject: Tree aging: 86 S. Fair Oaks

DRAFT

Tree #	Species	Status[1]	Cohort	Est. Age	~ Year	Range (years)	Reliability
1	Camphor	Protected specimen	C	70	1943	65-75 (10)	2b
2	Camphor	Protected specimen	C	70	1943	65-75 (10)	2b
3	Canary Island pine	Protected mature	E	50	1963	47-53 (6)	2a
4	Canary Island pine	Protected mature	E	50	1963	47-53 (6)	2a
5	Camphor	Protected specimen	A	100	1913	90-110 (20)	2b
6	California fan palm	Protected specimen	C	80	1933	75-85 (10)	1
7	Camphor	Protected specimen	E	45	1968	40-50 (10)	2b
9	Magnolia	Non-protected	E	40	1963	35-45 (10)	2b
10	Elm	Non-protected	E	40	1963	35-45 (10)	2b
11	California fan palm	Protected specimen	C	80	1933	75-85 (10)	1
12	Indian laurel fig	Protected specimen	D	65	1948	58-72 (14)	2b
13	Canary Isl date palm	Protected specimen	A	105	1908	100-110 (10)	1
14	Canary Isl date palm	Protected mature	F	20	1993	17-23 (6)	3
22	Queen palm	Protected street tree	F	11	2002	9-13 (4)	3
Tree #	Species	Status[2]	Cohort	age	~ Year	Range (years)	Reliability
23	Queen palm	Protected street tree	F	11	2002	9-13 (4)	3
28	Mexican fan palm	Non-protected	C	75	1938	70-80 (10)	1

[1] As per sheet A1.16 "Protected Tree & Non-Protected Tree Mitigation Analysis
[2] As per sheet A1.16 "Protected Tree & Non-Protected Tree Mitigation Analysis

29	Mexican fan palm	Non-protected	C	75	1938	70-80 (10)	1
30	Mexican fan palm	Non-protected	C	75	1938	70-80 (10)	1
31	Mexican fan palm	Non-protected	C	75	1938	70-80 (10)	1
35	X Mexican fan palm	Protected mature	B	85	1928	75-95 (10)	4
36	X Mexican fan palm	Protected mature	E	45	1968	40-50 (10)	4
37	Mexican fan palm	Non-protected	B	85	1928	80-90 (10)	1
38	Mexican fan palm	Non-protected	D	65	1948	61-68 (7)	1

Age classes (years)
A = 100+
B = 80-89
C = 70-79
D = 60-69
E = 40-59
F = < 20

Reliability	
1	plus or minus 5%
2a	plus or minus 5%
2b	plus or minus 10%
3	plus or minus 3 years
4	plus or minus 10%

Reliability
1 Believed to be very reliable, based on palm growth rates. Within plus or minus 5%.
2a Believed to be very reliable, based on ring count vs. trunk diameter of same species from previous locations. Within plus or minus 5%.
2b Believed to be reliable, based on known approximate growth rates of woody trees. Within plus or minus 10%.
3 Believed to be reliable, based on palm growth rates, but some variables make dating less certain, including uncertain growth rates and very rapid growth rates of young palms. Within plus or minus 2-3 years.
4 Believed to be fairly reliable, based on palm growth rates, but some variables make dating less certain, including uncertainty about growth rates for hybridized Washingtonia palms. Within plus or minus 10%.

APPENDIX F

Noise

1.0 INTRODUCTION

This study describes the existing noise and vibration environment of the proposed mixed-use development at 86 S. Fair Oaks Avenue, and evaluates potential noise and vibration impacts of the proposed project. This report has been prepared by Impact Sciences, Inc., under contract to the City of Pasadena, in support of the environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA). This analysis considers both the temporary noise impacts that would result from project construction and the long-term impacts associated with the operation of the project.

1.1 Project Description

The project site at 86 S. Fair Oaks Avenue contains 32,362 square feet bounded by S. Fair Oaks Avenue to the west, Dayton Street to the south, Castle Green historic event center to the east, and the Green Hotel Apartments to the north. The Project site is located within the boundaries of the Old Pasadena National Register Historic District and the Hotel Green National Register listing.

The proposed project is a 6-story plus mezzanine transit-oriented mixed-use development that includes retail, restaurant, and work/live units at the ground level and mixed-rate units on levels 2-6. Along Fair Oaks Avenue, the ground floor of the proposed building includes approximately 6,200 square feet of retail and food uses. Four work/live units, approximately 1,300 square feet each, are proposed in the ground floor along Dayton Street, facing Central Park. The proposed project contains 84 apartment units of varying types and sizes, including eight on-site residences for very low-income residents. All parking for the Project is located on 4 levels of underground parking that accommodate 195 parking spaces, including replacement of existing parking spaces for the Green Hotel Apartments, which currently utilizes the surface parking located on the project site. Access to and from the project site would be along Dayton Avenue on the southeast corner of the proposed project site. To enhance the relationship with the nearby network of rail and bus transit and reflect the principles of transit-oriented development, the project also incorporates bicycle parking. The project also includes common landscaped features at the ground floor and upper level terraces.

2.0 ENVIRONMENTAL SETTING

2.1 Fundamentals of Noise and Vibration

Noise

Noise is usually defined as unwanted sound that is an undesirable byproduct of society's normal day-to-day activities. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, and/or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). The human ear does not respond uniformly to sounds at all frequencies. For example, the human ear is less sensitive to low and high frequencies than medium frequencies, which more closely correspond with human speech. In response to the sensitivity of the human ear to different frequencies, the A-weighted noise level (or scale), which corresponds better with people's subjective judgment of sound levels, has been developed. This A-weighted sound level, referenced in units of dB(A), is measured on a logarithmic scale such that a doubling of sound energy results in a 3 dB(A) increase in noise level. Typically, changes in a community noise level of less than 3 dB(A) are not noticed by the human ear.[1] Changes from 3 to 5 dB(A) may be noticed by some individuals who are sensitive to changes in noise. A greater than 5 dB(A) increase is readily noticeable, while the human ear perceives a 10 dB(A) increase in sound level to be a doubling of sound.

On the A-weighted scale, the range of human hearing extends from approximately 3 to 140 dB(A). **Table 1, A-Weighted Decibel Scale**, provides examples of A-weighted noise levels from common sources. Noise sources occur in two forms: (1) point sources, such as stationary equipment or individual motor vehicles; and (2) line sources, such as a roadway with a large number of point sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6 dB(A) for each doubling of distance from the source to the receptor at acoustically "hard" sites and 7.5 dB(A) at acoustically "soft" sites.[2] For example, if a noise source produces a noise level of 89 dB(A) at a reference distance of 50 feet, the noise level would be 83 dB(A) at a distance of 100 feet from the noise source, 77 dB(A) at a distance of 200 feet, and so on. Noise generated by a mobile source will decrease by approximately 3 dB(A) over hard surfaces and 4.5 dB(A) over soft surfaces for each doubling of distance.

---

1 California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, 2013.

2 Federal Highway Administration, *Highway Noise Fundamentals*, (1980) 97. Examples of "hard" or reflective sites include asphalt, concrete, and hard and sparsely vegetated soils. Examples of acoustically "soft" or absorptive sites include soft, sand, plowed farmland, grass, crops, heavy ground cover, etc.

Table 1
A-Weighted Decibel Scale

Typical A-Weighted Sound Levels	Sound Level (dB(A), Leq)
Threshold of Pain	140
Jet Takeoff at 100 Meters	125
Jackhammer at 15 Meters	95
Heavy Diesel Truck at 15 Meters	85
Conversation at 1 Meter	60
Soft Whisper at 2 Meters	35

Source: United States Occupational Safety & Health Administration, Noise and Hearing Conservation Technical Manual, 1999.

Sound levels also can be attenuated by man-made or natural barriers (e.g., sound walls, berms, ridges), as well as elevational differences. Noise is most audible when traveling by direct line-of-sight, an interrupted visual path between the noise source and noise receptor. Barriers, such as walls or buildings that break the line-of-sight between the source and the receiver, can greatly reduce noise levels from the source since sound can only reach the receiver by diffraction. Sound barriers can reduce sound levels by up to 20 dB(A) or more. However, if a barrier is not high or long enough to break the line-of-sight from the source to the receiver, its effectiveness is greatly reduced.

Solid walls and berms may reduce noise levels by 5 to 10 dB(A) depending on their height and distance relative to the noise source and the noise receptor.[3] Sound levels may also be attenuated 3 dB(A) by a first row of houses and 1.5 dB(A) for each additional row of houses.[4] The minimum noise attenuation provided by typical structures in California is provided in **Table 2, Building Noise Reduction Factors**.

Table 2
Building Noise Reduction Factors

Building Type	Window Condition	Noise Reduction Due to Exterior of the Structure (dB(A))
All	Open	10
Light Frame	Ordinary Sash (closed)	20
	Storm Windows	25
Masonry	Single Glazed	25

3 Federal Highway Administration, *Highway Noise Mitigation*, (1980) 18.

4 California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, 2013.

	Double Glazed	35

Source: Federal Highway Administration, Highway Traffic Noise: Analysis and Abatement Guidance. December 2011.

Sound Rating Scales

Various rating scales approximate the human subjective assessment to the "loudness" or "noisiness" of a sound. Noise metrics have been developed to account for additional parameters, such as duration and cumulative effect of multiple events. Noise metrics are categorized as single event metrics and cumulative metrics, as summarized below.

In order to simplify the measurement and computation of sound loudness levels, frequency weighted networks have obtained wide acceptance. The A-weighted scale, discussed above, has become the most prominent of these scales and is widely used in community noise analysis. Its advantages are that it has shown good correlation with community response and is easily measured. The metrics used in this analysis are all based upon the dB(A) scale.

Equivalent Noise Level

Equivalent Noise Level (Leq) is the sound level corresponding to a steady-state A-weighted sound level containing the same total energy as several single event noise exposure level events during a given sample period. Leq is the "acoustic energy" average noise level during the period of the sample. It is based on the observation that the potential for noise annoyance is dependent on the total acoustical energy content of the noise. The equivalent noise level is expressed in units of dB(A). Leq can be measured for any period, but is typically measured for 15 minutes, 1 hour, or 24 hours. Leq for a 1-hour period is used by the Federal Highway Administration (FHWA) for assessing highway noise impacts. Leq for 1 hour is referred to as the Hourly Noise Level (HNL) in the California Airport Noise Regulations and is used to develop Community Noise Equivalent Level values for aircraft operations. Construction noise levels and ambient noise measurements in this section use the Leq scale.

Community Noise Equivalent Level

Community Noise Equivalent Level (CNEL) is a 24-hour, time-weighted energy average noise level based on the A-weighted decibel. It is a measure of the overall noise experienced during an entire day. The term "time-weighted" refers to the penalties attached to noise events occurring during certain sensitive periods. In the CNEL scale, 5 dB are added to measured noise levels occurring between the hours of 7:00 p.m. and 10:00 p.m. For measured noise levels occurring between the hours of 10:00 p.m. and 7:00 a.m., 10 dB are

added. These decibel adjustments are an attempt to account for the higher sensitivity to noise in the evening and nighttime hours and the expected lower ambient noise levels during these periods. Existing and projected future traffic noise levels in this section use the CNEL scale.

Day-Night Average Noise Level

The day-night average sound level (Ldn) is another average noise level over a 24-hour period. Noise levels occurring between the hours of 10:00 p.m. and 7:00 a.m. are increased by 10 decibels (dB). This noise is weighted to take into account the decrease in community background noise of 10 dB(A) during this period. Noise levels measured using the Ldn scale are typically similar to CNEL measurements.

Adverse Effects of Noise Exposure

Noise is known to have several adverse effects on humans, which has led to laws and standards being set to protect public health and safety, and to ensure compatibility between land uses and activities. Adverse effects of noise on people include hearing loss, communication interference, sleep interference, physiological responses, and annoyance. Each of these potential noise impacts on people is briefly discussed in the following narrative.

Hearing Loss

Hearing loss is generally not a community noise concern, even near a major airport or a major freeway. The potential for noise-induced hearing loss is more commonly associated with occupational noise exposures in heavy industry, very noisy work environments with long-term exposure, or certain very loud recreational activities (e.g., target shooting and motorcycle or car racing). The Occupational Safety and Health Administration (OSHA) identifies a noise exposure limit of 90 dB(A) for 8 hours per day to protect from hearing loss (higher limits are allowed for shorter duration exposures). Noise levels in neighborhoods, even in very noisy neighborhoods, are not sufficiently loud enough to cause hearing loss.

Communication Interference

Communication interference is one of the primary concerns in environmental noise. Communication interference includes speech disturbance and intrusion with activities such as watching television. Noise can also interfere with communications such as within school classrooms. Normal conversational speech is in the range of 60 to 65 dB(A) and any noise in this range or louder may interfere with speech.

Sleep Interference

Noise can make it difficult to fall asleep, create momentary disturbances of natural sleep patterns by causing shifts from deep to lighter stages, and cause awakening. Noise may even cause awakening that a person may or may not be able to recall.

Physiological Responses

Physiological responses are those measurable effects of noise on people that are realized as changes in pulse rate, blood pressure, and other physical changes. Studies to determine whether exposure to high noise levels can adversely affect human health have concluded that, while a relationship between noise and health effects seems plausible, there is no empirical evidence of the relationship.

Annoyance

Annoyance is an individual characteristic and can vary widely from person to person. Noise that one person considers tolerable can be unbearable to another of equal hearing capability. The level of annoyance depends both on the characteristics of the noise (including loudness, frequency, time, and duration), and how much activity interference (such as speech interference and sleep interference) results from the noise. However, the level of annoyance is also a function of the attitude of the receiver. Personal sensitivity to noise varies widely. It has been estimated that 2% to 10% of the population is highly susceptible to annoyance from any noise not of their own making, while approximately 20% are unaffected by noise.[5] Attitudes may also be affected by the relationship between the person affected and the source of noise, and whether attempts have been made to abate the noise.

Vibration

Vibration consists of waves transmitted through solid material. Groundborne vibration propagates from a source through the ground to adjacent buildings by surface waves. Vibration may comprise a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating and is measured in hertz (Hz). Most environmental vibrations consist of a composite, or "spectrum" of many frequencies, and are generally classified as broadband or random vibrations. The normal frequency range of most groundborne vibration that can be felt generally starts from a low frequency of less than one Hz to a high of about 200 Hz. Vibration is often measured in terms of the peak particle velocity (PPV) in inches per second (in/sec) when considering impacts on buildings or other structures, as PPV represents the maximum instantaneous peak of vibration that can stress buildings.

5 Wayne County Airport Authority. *Background information on noise & its measurement, 2009*

Because it is a representation of acute vibration, PPV is often used to measure the temporary impacts of short-term construction activities that could instantaneously damage built structures. Vibration is often also measured by the Root Mean Squared (RMS) because it best correlates with human perception and response. Specifically, RMS represents "smoothed" vibration levels over an extended period of time and is often used to gauge the long-term chronic impact of a project's operation on the adjacent environment. RMS amplitude is the average of a signal's squared amplitude. It is most commonly measured in decibel notation (VdB).

Vibration energy attenuates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. High frequency vibrations reduce much more rapidly than low frequencies, so that in the far-field from a source, the low frequencies tend to dominate. Soil properties also affect the propagation of vibration. When groundborne vibration interacts with a building, there is usually a ground-to-foundation coupling loss (i.e., the foundation of the structure does not move in sync with the ground vibration), but the vibration can also be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as rattling of windows or items on shelves, or the motion of building surfaces. At high levels, vibration can result in damage to structures.

Manmade groundborne vibration is generally limited to areas within a few hundred feet of certain types of construction activities, especially pile driving. Road vehicles rarely create enough groundborne vibration to be perceptible to humans unless the road surface is poorly maintained and there are potholes or bumps. If traffic induces perceptible vibration in buildings, such as window rattling or shaking of small loose items (typically caused by heavy trucks in passing), then it is most likely an effect of low-frequency airborne noise or ground characteristics. Human annoyance by vibration is related to the number and duration of events. The more events or the greater the duration, the more annoying it will be to humans.

2.2 Noise Sensitive Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as natural parks and recreation areas, historic sites, and cemeteries are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. Noise-sensitive receptors surrounding the project site include the Castle Green residences and events center to the east, the Green Hotel Apartments to the north and Central Park to the south.

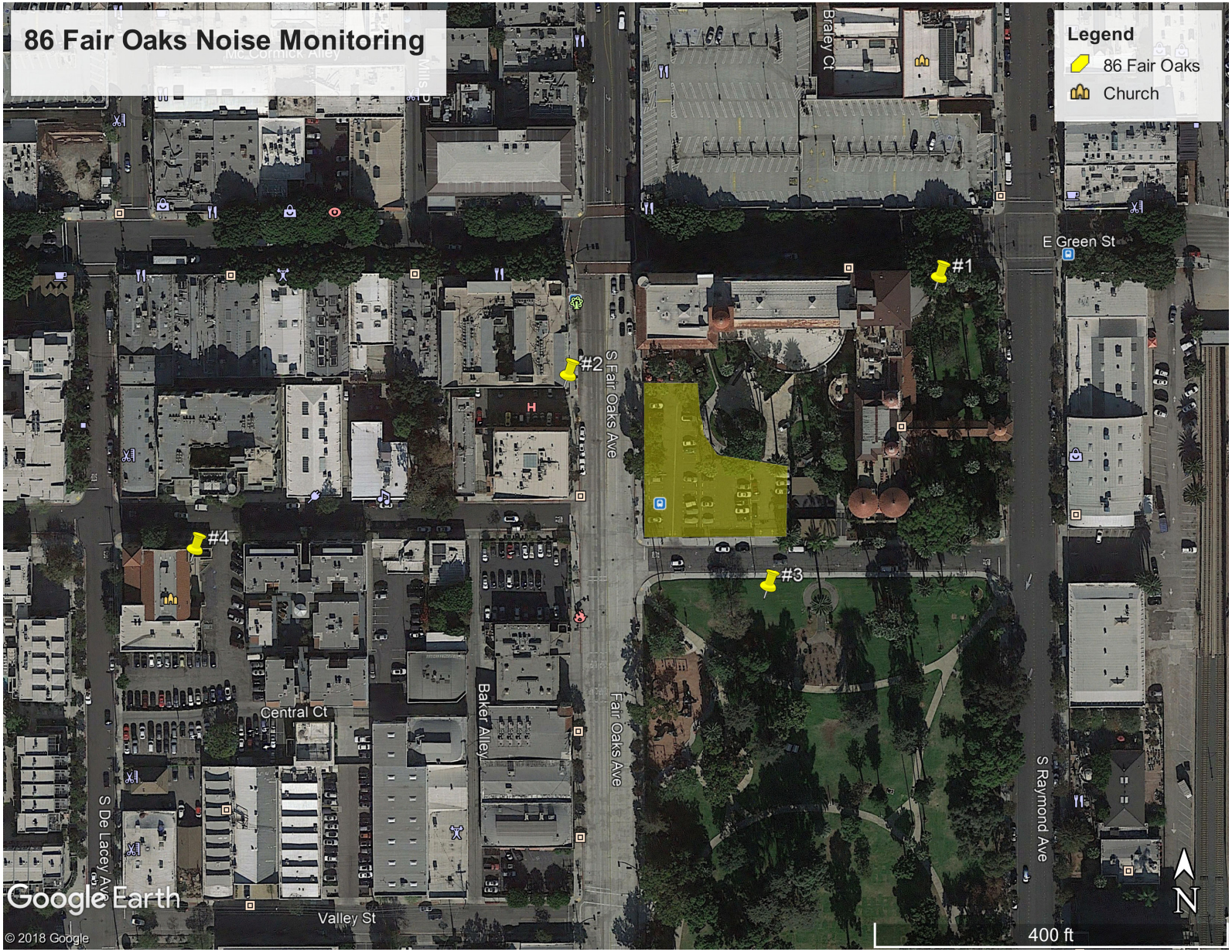
2.3 Existing Conditions

A noise monitoring survey was completed to establish existing noise levels in the City of Pasadena at locations near the project site. Existing noise levels were calculated for four locations in proximity to the project site. **Figure 1, Noise Monitoring Locations** maps these locations relative to the project site**.** Based on the results of the ambient noise measurements, it was determined that transportation related noise sources are the primary contributor to the noise environment in each of the monitoring locations. The existing average daily noise levels for these locations are presented in **Table 3, Ambient Sound-Level Readings**.

Table 3
Ambient Sound-Level Readings

Noise Measurement Location #	Date/Time	dBA Leq
Location #1	12/10/2019; 1:23 p.m.	67.9
Location #2	12/10/2019; 1:43 p.m.	68.0
Location #3	12/10/2019; 2:13 p.m.	55.8
Location #4	12/10/2019; 2:31 p.m.	57.3

The only sources of groundborne vibration in the project site vicinity are heavy-duty vehicles (e.g., refuse trucks, delivery trucks, and school buses) traveling on local roadways. Trucks and buses typically generate groundborne vibration velocity levels of around 63 VdB, and these levels could reach 72 VdB where trucks and buses pass over bumps in the road (Caltrans 2013). In terms of PPV levels, a heavy-duty vehicle traveling at a distance of 50 feet can result in a vibration level of approximately 0.001 inch per second.



SOURCE: Google Earth, 2018

FIGURE 1

IMPACT SCIENCES

Noise Monitoring Location Map

3.0 REGULATORY FRAMEWORK

3.1 State Regulations

Title 24, California Code of Regulations

The California Noise Insulation Standards of 1988 (California Code of Regulations Title 24, Section 3501 et seq.) require that interior noise levels from the exterior sources not exceed 45 dBA Ldn/community noise equivalent level (CNEL)6 in any habitable room of a multi-residential use facility (e.g., hotels, motels, dormitories, long-term care facilities, and apartment houses and other dwellings, except detached single-family dwellings) with doors and windows closed. Where exterior noise levels exceed 60 dBA CNEL/Ldn, an acoustical analysis is required to show that the building construction achieves an interior noise level of 45 dBA CNEL/Ldn or less.

3.2 Local Plans and Policies

City of Pasadena General Plan

The City of Pasadena General Plan contains policies and programs to achieve and maintain noise levels compatible with various types of land uses. The Noise Element provides policy-level direction for the City to limit people's exposure to noise. The following policies are found in the Noise Element of the Pasadena General Plan:

Objective 2	**The City will work to reduce the effects of traffic-generated noise from major roadways on residential and other sensitive land uses.**
Policy 2a	The City will encourage noise-compatible land uses along major roadways.
Policy 2b	The City will encourage site planning and traffic control measures that minimize the effects of traffic noise in residential zones.
Policy 2c	The City will encourage the use of alternative transportation modes as stipulated in the Mobility Element (walking, bicycling, transit use, electric vehicles) to minimize traffic noise in the City.

6 Measurements are based on Ldn or CNEL.

Policy 2d	The City will work with local and regional transit agencies and businesses to provide transportation services that reduce traffic and associated noise as stipulated in the Mobility Element.
Policy 2e	The City will work to reduce the effects of traffic-related noise in residential neighborhoods, including but not limited to neighborhoods adjacent to South Orange Grove Boulevard, Saint John Avenue, Pasadena Avenue, California Boulevard, and other busy streets passing thorough residential neighborhoods.
Objective 3	**The City will minimize noise from the Los Angeles to Pasadena Metro Line on residential and other sensitive land uses.**
Policy 3a	The City will encourage noise-compatible land uses and mitigation measures near the Los Angeles to Pasadena Metro Line rail system.
Policy 3b	After commencing operations and regularly thereafter, the City will work with the Los Angeles to Pasadena Metro Blue Line Construction Authority and/or the Los Angeles County Metropolitan Transportation Authority (LACMTA) to install noise attenuation features if the Gold Line (formerly known as the Blue Line) adversely affects existing adjacent residential or other noise-sensitive uses.
Objective 6	**The City will minimize noise spillovers from commercial and industrial operations into adjacent residential neighborhoods and other sensitive uses, while maximizing the Land Use Element's objectives to encourage mixed-use development in the Central District and other Specific Plan areas as well as to promote economic vitality.**
Policy 6a	The City will encourage automobile and truck access to industrial and commercial properties abutting residential zones to be located at the maximum practical distance from residential zones.
Policy 6b	The City will limit the use of motorized landscaping equipment, parking lot sweepers, and other high-noise equipment on commercial properties if their activity will result in noise that adversely affects residential zones.
Policy 6c	The City will encourage limitations on the hours of truck deliveries to industrial and commercial properties abutting residential zones unless there is no feasible

alternative or there are substantial transportation benefits for scheduling deliveries at another hour.

Objective 7 **The City will minimize the effects of nuisance noise on sensitive land uses as defined in Table 4 to the degree feasible.**

Policy 7a Whenever possible, City-sponsored events that generate noise will be scheduled during hours when effects would be minimal.

Policy 7b The City will encourage limitations on construction activities adjacent to sensitive noise receptors as defined in Table 4.

Policy 7c The City will encourage construction and landscaping activities that employ techniques to minimize noise.

Policy 7d The City will enforce noise level restrictions contained in the City of Pasadena Noise Regulations (Chapter 9.36 of the Municipal Code), except during federal, State, or local emergencies (such as power generators required for energy emergencies).

Table 4
Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure (dB, L_{dn} or CNEL)						
	55	60	65	70	75	80	
Residential - Low Density Single-Family, Duplex, Mobile Homes							
Residential - Multi-Family and Mixed Commercial/Residential Use							
Transient Lodging - Motels Hotels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arena, Outdoor Spectator Sports							

Playgrounds, Neighborhood Parks								
Golf Courses, Riding Stables, Water Recreation, Cemeteries								
Office Buildings, Business Commercial and Professional								
Industrial, Manufacturing, Utilities, Agriculture								

Clearly Acceptable - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Normally Acceptable - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditioning will normally suffice.

Conditionally Acceptable - If new construction or development proceeds, an analysis of the noise reduction requirements should be made and needed noise insulation features included in the design.

Normally Unacceptable - New construction or development should generally not be undertaken, unless it can be demonstrated that an interior level of 45 dBA can be achieved.

**Please note that these guidelines are general and may not apply to specific sites.*

Source: California General Plan Guidelines, 1998, as modified by the City of Pasadena General Plan Noise Element, 2002.

City of Pasadena Municipal Code

The City has jurisdiction over noise regulation, as stated in the City's Municipal Code, Title 9, Chapter 36 Noise Restrictions (Noise Ordinance). The Noise Ordinance is intended to enforce the City's policy to prohibit "unnecessary, excessive, and annoying noises from all sources." The Noise Ordinance generally limits the generation of noise that exceeds the actual measured existing ambient noise level by 5 dB(A) at neighboring properties, with adjustments made for steady audible tones, repeated impulsive noise, and noise occurring for limited periods. Section 9.36.060 sets interior noise level standards for multifamily residential development at 60 dB(A) during daytime hours (7:00 AM to 10:00 PM) and 50 dB(A) during nighttime hours (10:00 PM to 7:00 AM).

The City's noise ordinance includes specific provisions regarding construction noise. Section 9.36.070 of the Municipal Code prohibits the operation of construction equipment and construction activity except from 7:00 AM to 7:00 PM Monday through Friday, and from 8:00 AM to 5:00 PM on Saturday in or within 500 feet of a residential district. Operation of construction equipment is prohibited on Sunday and on defined

holidays. Section 9.36.080 of the Municipal Code prohibits the operation of powered construction equipment that generates a noise level of 85 dB(A) when measured at 100 feet.

4.0 NOISE ANALYSIS

4.1 Thresholds of Significance

The impacts of the proposed project related to noise would be considered significant if they would exceed any of the following Standards of Significance, in accordance with Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generation of excessive groundborne vibration or groundborne noise levels;
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

4.1 Methodology

Noise levels associated with project-related construction activities were calculated using the FHWA Roadway Construction Noise Model (RCNM) and combined with existing ambient noise level readings to determine new ambient noise levels with construction activities. The applicant provided a list of construction equipment assumptions that is used for RCNM inputs. Noise levels were compared to the City's noise ordinance which includes provisions regarding construction noise levels, which prohibits a noise level of 85 dB(A) when measured at 100 feet.

For operational noise impacts, the City's noise ordinance generally limits the generation of noise that exceeds the actual measured existing ambient noise level by 5 dB(A) at neighboring properties. Therefore, increases in 5dB(A) above measured ambient noise levels are considered significant, unless mitigated.

Traffic noise in the project area was estimated using peak-hour traffic obtained from the City of Pasadena Department of Transportation. As it would take a doubling of traffic volumes to increase noise levels by 3 dB(A), traffic noise was compared to the existing A.M. and P.M. peak hour volumes to determine if there would be a doubling of traffic volumes and result in an increase in noise levels beyond 3 dB(A).

Construction vibration damage criteria are assessed based on structural category (e.g. reinforced-concrete, steel, or timber). FTA guidelines consider 0.12 inch/sec PPV to be the significant impact level for buildings

extremely susceptible to vibration damage, such as the Green Hotel Apartments or Castle Green. Structures or buildings constructed of reinforced concrete, steel, or timber have a vibration damage criterion of 0.5 inch/sec PPV pursuant to FTA guidelines.[7] The FTA Guidelines include a table showing the vibration damage criteria based on structural category and is presented below in **Table 5.**

Table 5 Construction Vibration Damage Criteria

Building/Structural Category	PPV, in/sec
I. Reinforced-concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual. September 2018.

4.3 Impact Analysis

Construction Impacts

Temporary On-Site Construction Activity Noise

Construction, grading, and other noise-generating activities would occur weekdays between 7:00 a.m. and 7:00 p.m., and Saturdays between 8 a.m. and 5 p.m. in accordance with section 9.36.070 the Pasadena Municipal Code. Construction is not anticipated to occur on Sundays or holidays. Construction activities would vary over several phases of development and would include large off-road equipment such as tractors, loaders, and smaller equipment such as saws, hammers, and pneumatic tools.

As noted above, section 9.36.080 of the Pasadena Municipal Code requires that construction equipment noise not exceed 85 dB(A) at 100 feet. As such, construction noise impacts will be less than significant.

Temporary Off-Site Construction Activity Noise

Construction haul trucks would generate noise off-site during site preparation and construction. This would include removal of materials from the project site, including the export of cut-and-fill materials, removal of asphalt, base materials, and demolished materials. While this vehicle activity would increase ambient noise levels along the haul route, ambient noise levels would not be expected to significantly

7 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual. September* 2018.

increase ambient noise levels by 3 dB(A) or greater at any noise sensitive land use. Studies have shown that a 3 dB(A) increase in sound level pressure is barely detectable by the human ear. A 3 dB(A) increase in roadway noise levels requires an approximate doubling of roadway traffic volume, assuming that travel speeds and fleet mix remain constant.[8] The City of Pasadena's Transportation Data Management System shows that the street segment south of the intersection of Fair Oaks Avenue and Green Street has a traffic volume of approximately 1,354 vehicles during the A.M. peak hour, and 1,400 vehicles during the P.M. peak hour.[9] The grading period would have approximately 5,688 hauling trips (including trips to and from the site) over a 130 day period, averaging about 44 trips per day. Assuming that these hauling trips would take place during an 8-hour work day period., an average of approximately 6 hauling trips per hour would occur. Though the addition of haul trucks would alter the fleet mix of the anticipated haul route, their addition to local roadways would account for 0.44 percent of the A.M. peak hour traffic volume and 0.43 percent of the P.M. peak hour traffic volume. Since it would take a doubling of roadway traffic volume to increase noise levels by 3 dB(A), the addition of haul trucks from the project would not increase traffic to levels capable of producing 3 dB(A) ambient noise increases and there would be no perceptible increase in noise due to the addition of haul trucks. However, trucks accessing the project site, while not significantly increasing ambient traffic noise levels, have the potential to instantaneously increase noise levels as each truck passes nearby sensitive receptors (e.g., an empty truck hitting a pothole, or the application of air brakes near sensitive land uses, etc.). These temporary instantaneous noise level increases may reach a maximum range of approximately 76 to 88 dB(A) at 50 feet from the source.[10,11] At a reference distance of 100 feet, a noise level of 88 dB(A) at 50 feet would drop to approximately 82 dB(A). This would not exceed the requirements specified in Pasadena Municipal Code section 9.36.080. As a result, temporary haul truck construction noise impacts on ambient noise levels would be considered less than significant.

Temporary Construction Activity Vibration

The Federal Transit Administration provides ground-borne vibration impact criteria with respect to building damage during construction activities. Peak particle velocity (PPV), expressed in inches per second, is used to measure building vibration damage. Construction vibration damage criteria are assessed based on structural category (e.g. reinforced-concrete, steel, or timber). FTA guidelines consider 0.12 inch/sec PPV to be the significant impact level for buildings extremely susceptible to vibration damage.

---

8 California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Protocol.* September 2013.

9 City of Pasadena, *Transportation Data Management System.* Available at: https://pasadena.ms2soft.com/tcds/tsearch.asp?loc=Pasadena&mod=

10 Federal Highway Administration, Highway Construction Noise Handbook, 2006.

11 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual. September* 2018.

Structures or buildings constructed of reinforced concrete, steel, or timber have a vibration damage criterion of 0.5 inch/sec PPV pursuant to FTA guidelines.[12]

Groundborne vibration generated by construction activities associated with the proposed project would affect both on- and off-site sensitive uses located in close proximity to the project site. As shown in **Table 6, Vibration Source Levels for Construction Equipment**, vibration velocities could range from 0.003 to 0.644 inch/sec PPV at 25 feet from the source activity, with corresponding vibration levels (VdB) ranging from 58 VdB to 87 VdB at 25 feet from the source activity, depending on the type of construction equipment in use. It should be noted that pile driving and equivalent methods are prohibited by the Municipal Code.

Table 6
Vibration Source Levels for Construction Equipment

	Approximate PPV (in/sec)					Approximate RMS (VdB)				
Equipment	**25 Feet**	**50 Feet**	**60 Feet**	**75 Feet**	**100 Feet**	**25 Feet**	**50 Feet**	**60 Feet**	**75 Feet**	**100 Feet**
Large Bulldozer	0.089	0.031	0.024	0.017	0.011	87	78	76	73	69
Caisson Drilling	0.089	0.031	0.024	0.017	0.011	87	78	76	73	69
Loaded Trucks	0.076	0.027	0.020	0.015	0.010	86	77	75	72	68
Jackhammer	0.035	0.012	0.009	0.007	0.004	79	70	68	65	61
Small Bulldozer	0.003	0.001	0.0008	0.0006	0.0004	58	49	47	44	40

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018.

The sensitive receptors in **Figure 1** identify receptors that are sensitive to noise impacts. However, vibrational impacts can potentially damage buildings that are near the construction site. As such, **Table 7, Vibration Levels at Off-Site Sensitive Uses from Project Construction - Unmitigated**, shows the vibration velocity and levels that would occur at these nearby buildings and structures during construction at the project site. For clarity, the receptors in **Table 7** are listed as "Vibration Receptors." The receptors identified to be assessed for vibration impacts are the Green Hotel Apartments (Vibration Receptor #1) located to the north of the project site, the Castle Green (Vibration Receptor #2) located east of the project, a three-story red brick building located at 103-115 South Fair Oaks Avenue (Vibration Receptor #3) located west of the project, and a restaurant building located at 84 South Fair Oaks Avenue (Vibration Receptor #4). Based on the FTA guidance presented in Table 5, a vibration level of 0.12 PPV in/sec is used in this analysis as the threshold to determine potential significant vibration impacts to the existing Green Hotel Apartments, Castle Green, and restaurant building located at 84 South Fair Oaks Avenue.

12 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual. September* 2018.

Table 7
Vibration Levels at Off-Site Sensitive Uses from Project Construction - Unmitigated

Sensitive Uses Off-Site	Distance to Project Site (ft.)	Receptor Significance Threshold PPV (in./sec)	Estimated PPV (in/sec) [a]
Vibration Receptor #1 (Green Hotel Apartments)	20	0.12	0.124
Vibration Receptor #2 (Castle Green) [c]	40	0.12	0.044
Vibration Receptor #3 (103-115 South Fair Oaks Avenue)	80	0.5	0.016
Vibration Receptor #4 (84 South Fair Oaks Avenue)	15	0.12	0.191

The vibration velocities predicted to occur at Vibration Receptor #1 (Green Hotel Apartments), excluding one-story portions, located 20 feet to the north of the nearest project site boundary would be 0.124 in/sec PPV. This exceeds the FTA 0.12 in/sec PPV threshold. Vibration Receptor #2 (Castle Green) is approximately 40 feet from the project site; at this distance, vibration impacts are anticipated to be 0.044 in/sec PPV and would not exceed the FTA threshold. Vibration Receptor #3, at a distance of 80 feet, is estimated to have vibration levels of 0.016 in/sec PPV and would not exceed FTA thresholds either. Vibration Receptor #4 is estimated to have vibration levels of 0.191 in/sec PPV and would also exceed the FTA threshold of 0.12 in/sec PPV. **Mitigation Measures Noise-1 and Noise-2** would reduce potential vibration impacts to associated with construction activities to a less than significant level.

Mitigation Measures

MM Noise-1: Consult with Structural Engineer and Project Historical Architect

Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, and to the satisfaction of the City of Pasadena, the applicant shall retain a Professional Structural Engineer with experience in structural vibration analysis and monitoring for historic buildings and a Project Historical Architect as a team to perform the following tasks:

- Review the project plans for demolition and construction;
- Survey the project site and the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue, including geological testing, if required; and
- Prepare and submit a report to the Director of Planning and Community Development to include, but not be limited to, the following:

- Description of existing conditions at the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue;

- Vibration level limits based on building conditions, soil conditions, and planned demolition and construction methods to ensure vibration levels would be below 0.12 ppv in/sec, the potential for damage to the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue;

- Specific measures to be taken during construction to ensure the specified vibration level limits are not exceeded; and

- A monitoring plan to be implemented during demolition and construction that includes post-construction and post-demolition surveys of the existing Green Hotel Apartments and restaurant building at 84 South Fair Oaks Avenue.

- Examples of measures that may be specified for implementation during demolition or construction include, but are not limited to

    - Prohibition of certain types of impact equipment;

    - Requirement for lighter tracked or wheeled equipment;

    - Specifying demolition by non-impact methods, such as sawing concrete;

    - Phasing operations to avoid simultaneous vibration sources; and

    - Installation of vibration measuring devices to guide decision making for subsequent activities.

MM Noise-2: Post Construction Survey and Documentation

To the satisfaction of the City of Pasadena, at the conclusion of vibration-causing activities, in the unanticipated event of discovery of vibration-caused damage, the Structural Engineer and the Project Historical Architect shall document any damage to the existing Green Hotel Apartments and/or restaurant building located at 84 South Fair Oaks Avenue caused by construction of the project and shall recommend necessary repairs. The project applicant shall be responsible for any repairs associated with vibration-caused damage as a result of construction of the project. Any such repairs shall be undertaken and completed as required to conform to the Secretary of the Interior's Standards for the Treatment of Historic

Properties (36 Code of Federal Regulations 68), and shall apply the California Historical Building Code (California Code of Regulations, Title 24, Part 8) and other applicable codes.

Significance after Mitigation: Implementation of the above measures would reduce the construction related vibration impacts to a less than significant level.

Residual Impacts

Impacts would be less than significant.

Operation Impacts

Permanent Operational Traffic Noise

As discussed above, a 3 dB(A) increase in roadway noise levels requires an approximate doubling of roadway traffic volume, assuming that travel speeds and fleet mix remain constant. Furthermore, a 3 dB(A) noise level increase is the minimum noise level increase required for a human to perceive a change in ambient noise.

Trip generation estimates for the project were obtained from the traffic impact analysis prepared for the proposed project.[13] Trip generation information for the proposed project was added to peak hour traffic volumes to determine whether traffic increased enough to result in an audible noise level increase. The traffic study determined that the proposed project would add approximately 52 A.M. peak hour trips and 73 P.M. peak hour trips. The City of Pasadena's Transportation Data Management System shows that Dayton Street between Fair Oaks Avenue and Raymond Avenue has a traffic volume of approximately 70 vehicles during the A.M. peak hour, and 118 vehicles during the P.M. peak hour.[14] As noted above, it would take a doubling of roadway traffic volumes to increase noise levels by 3 dB(A). The project's addition of approximately 52 A.M. peak hour trips and 73 P.M. peak hour trips would not increase in traffic volumes enough to cause a significant audible increase in traffic noise.

Permanent Operational Stationary Noise

The Pasadena Municipal Code requires that noise generated by mechanical equipment not exceed 5 dB(A) above ambient noise levels at adjacent property lines.

---

13 City of Pasadena Department of Transportation, *Transportation Impact Analysis Outside of CEQA Evaluation; 86 South Fair Oaks Avenue*. May 3, 2019.

14 City of Pasadena, *Transportation Data Management System.* Available at: https://pasadena.ms2soft.com/tcds/tsearch.asp?loc=Pasadena&mod=

During project operation, the project would include stationary noises from sources associated with building operations, such as heating, ventilation, and air conditioning (HVAC) systems, as well as vehicle parking. Large ground-level heating, ventilation, and air conditioning (HVAC) systems typically generate noise levels between 50 and 65 dB(A) at 50 feet. Rooftop mounted equipment typically produces noise levels of up to approximately 56 dB(A) at 50 feet. The proposed project is anticipated to utilize rooftop mounted HVAC equipment. HVAC equipment would be located on the roof approximately 50 feet away from receptors at the nearest property line and therefore noise from the HVAC system would cause a maximum noise level of 56.0 dB(A) Leq and a new ambient noise level of approximately 58.9 dB(A) when combined with existing ambient noise. This would result in a maximum noise level increase of approximately 3.1 dB(A) Leq. This is below the Pasadena Municipal Code threshold of a 5 dB(A) increase in ambient noise levels, and would not cause any nearby sensitive land use to exceed the normally acceptable level of noise identified in **Table 4**. Therefore, on-site HVAC noise would result in a less than significant impact.

Parking noise typically generates noise levels of approximately 60 dB(A) at 50 feet. Parking from the project would occur in subterranean parking. However, as cars enter the subterranean parking from within the project site, noise generated from parking related impacts may occur at nearby receptors. Ambient noise level readings from **Table 3** show noise levels at Receptor #3 (Central Park) to be at 55.8 dB(A). At approximately 60 feet from the subterranean parking entrance, there would be an increase of approximately 4.5 dB(A) when vehicles enter the parking levels of the project and receptors are exposed to parking noise. This is below the Pasadena Municipal Code recommended threshold of a 5 dB(A) increase in ambient noise levels and would not cause any nearby sensitive land use to exceed the normally acceptable level of noise identified in **Table 4**. Therefore, parking noise would result in a less than significant impact.

Permanent Operational Aircraft Noise

The project site is not in the vicinity of a private airstrip or airport land use plan. Likewise, the project site is not located within an airport land use plan or within two miles of a public airport or public use airport. As such, the project would not expose people residing or working in the project area to excessive airport-related noise levels. No impact would occur from the proposed project and no further analysis is required.

Residual Impacts

Impacts would be less than significant

REFERENCES

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, 2013.

City of Pasadena Department of Transportation, *Transportation Impact Analysis Outside of CEQA Evaluation; 86 South Fair Oaks Avenue*. May 3, 2019.

City of Pasadena, *Transportation Data Management System.* Available at: https://pasadena.ms2soft.com/tcds/tsearch.asp?loc=Pasadena&mod=

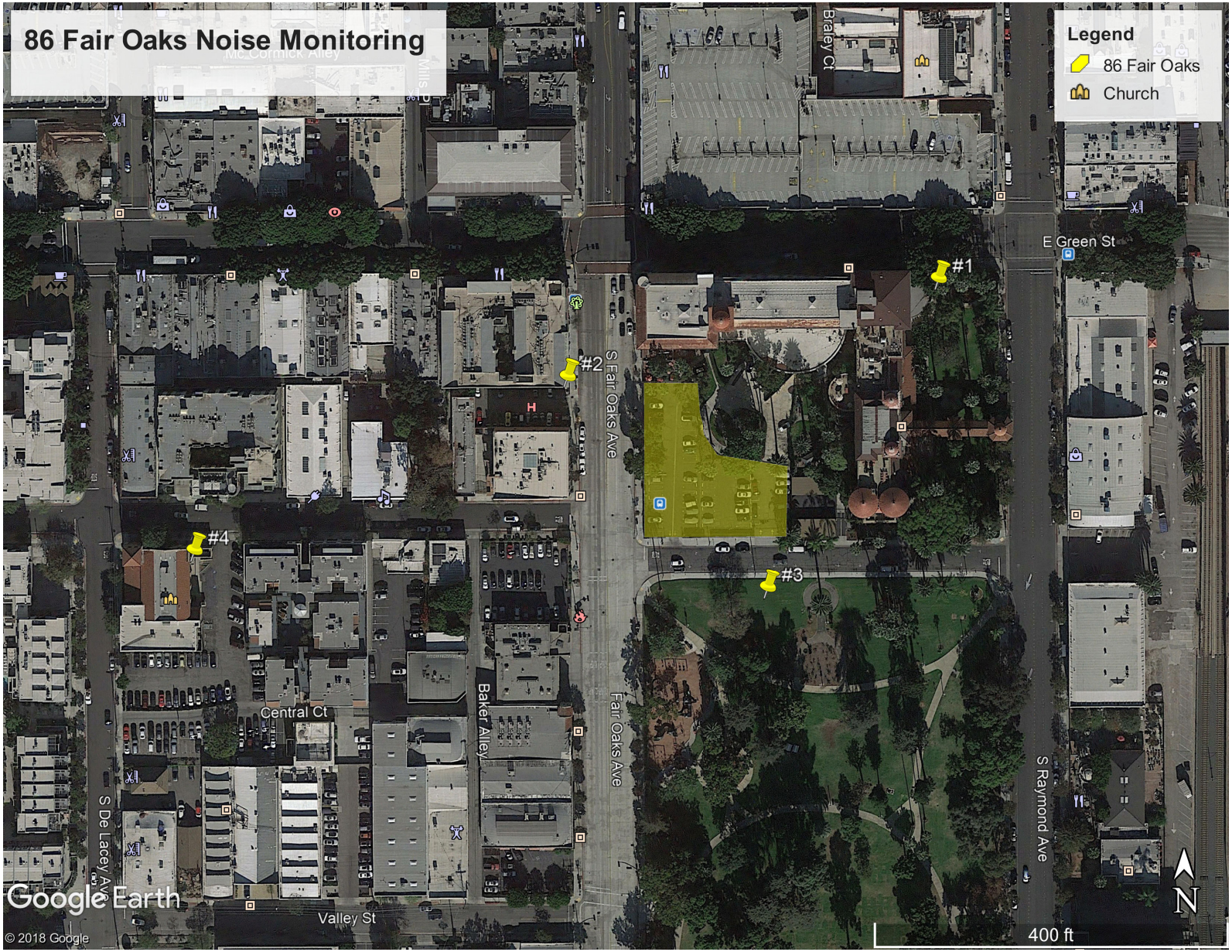
Federal Highway Administration, *Highway Noise Mitigation*, (1980) 18.

Federal Highway Administration, *Highway Noise Fundamentals*, (1980) 97.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual. September* 2018

Wayne County Airport Authority. *Background information on noise & its measurement, 2009*

Noise Monitoring Location Map



SOURCE: Google Earth, 2018

FIGURE 1

IMPACT SCIENCES

Noise Monitoring Location Map

Noise Monitoring Data

Summary

File Name on Meter	LxT_Data.058
File Name on PC	SLM_0005667_LxT_Data_058.00.ldbin
Serial Number	0005667
Model	SoundTrack LxT®
Firmware Version	2.302
User	ISI, Inc.
Location	86 Fair Oaks
Job Description	
Note	

Measurement

Description	
Start	2019-12-10 13:23:19
Stop	2019-12-10 13:38:19
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	2019-04-25 10:16:43
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1
Microphone Correction	Off
Integration Method	Linear
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Overload	144.4 dB

	A	C	Z
Under Range Peak	100.7	97.7	**102.7** dB
Under Range Limit	**49.7**	47.7	55.7 dB
Noise Floor	36.6	37.2	44.8 dB

Results

LA_{eq}	67.9 dB	
LAE	97.5 dB	
EA	620.265 µPa²h	
EA8	19.848 mPa²h	
EA40	99.242 mPa²h	
$LZ_{peak\ (max)}$	2019-12-10 13:37:31	107.9 dB
LAS_{max}	2019-12-10 13:37:32	83.0 dB
LAS_{min}	2019-12-10 13:33:19	55.7 dB
SEA	-99.9 dB	
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s
LC_{eq}	78.8 dB	
LA_{eq}	67.9 dB	
$LCeq - LAeq$	10.9 dB	
LAI_{eq}	69.7 dB	
LA_{eq}	67.9 dB	
$LAI_{eq} - LA_{eq}$	1.8 dB	

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
L_{eq}	67.9		78.8			
$L_{S(max)}$	83.0	2019/12/10 13:37:32				
$L_{S(min)}$	55.7	2019/12/10 13:33:19				
$L_{Peak(max)}$					107.9	2019/12/10 13:37:31

# Overloads	0
Overload Duration	0.0 s
# OBA Overloads	0
OBA Overload Duration	0.0 s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results

Dose	-99.9	0.00 %
Projected Dose	-99.9	0.11 %
TWA (Projected)	-99.9	40.9 dB
TWA (t)	-99.9	15.9 dB
Lep (t)	52.9	52.9 dB

Statistics

LAS5.00	73.6 dB
LAS10.00	71.4 dB
LAS33.30	65.4 dB
LAS50.00	63.4 dB
LAS66.60	62.0 dB
LAS90.00	58.9 dB

Calibration History

Preamp	**Date**	**dB re. 1V/Pa**	**6.3**	**8.0**	**10.0**	**12.5**	**16.0**	**20.0**	**25.0**	**31.5**	**40.0**	**50.0**	**63.0**	**80.0**	**100**	**125**	**160**
PRMLxT1	2019-04-25 10:16:43	-50.8	63.1	61.3	51.2	56.0	57.1	58.9	53.6	54.2	58.7	50.0	51.2	55.9	44.2	58.6	52.4
PRMLxT1	2019-01-12 12:02:16	-50.7	36.0	38.9	46.6	48.4	43.8	43.5	44.2	51.8	40.1	38.6	41.9	38.2	45.9	53.6	46.0
PRMLxT1	2018-11-01 09:59:25	-50.5	60.6	57.6	44.5	43.2	52.3	51.3	51.9	61.9	55.5	53.4	47.6	41.6	45.8	51.6	48.3
PRMLxT1	2018-11-01 09:58:54	-50.5	71.0	70.8	55.4	46.1	54.8	46.5	53.2	58.0	55.9	50.9	45.0	43.3	45.3	50.1	50.5
PRMLxT1	2018-07-12 08:32:20	-49.8	41.3	59.9	52.6	47.8	49.3	59.8	55.3	52.0	45.0	51.6	49.1	46.5	50.0	56.0	48.6
PRMLxT1	2018-07-11 12:06:07	-49.9	26.3	38.3	46.3	36.2	46.4	59.6	42.8	50.9	56.4	57.2	51.1	55.9	48.7	63.4	33.9
PRMLxT1	2018-07-11 11:29:38	-49.0	16.7	13.9	19.6	17.7	13.2	12.2	17.8	7.3	8.0	6.4	8.6	6.1	4.0	7.8	4.8

200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000	20000
37.9	51.0	48.4	43.7	35.1	29.3	25.8	93.9	32.0	29.0	40.0	29.9	40.4	32.6	34.1	35.2	36.3	37.3	38.3	39.4	41.1
44.2	45.2	46.4	45.5	37.8	33.9	27.2	93.9	30.9	28.3	39.7	30.2	40.4	32.2	33.6	34.6	35.7	37.1	38.4	39.5	41.0
53.7	47.9	42.7	44.9	38.5	31.1	27.0	94.0	31.7	28.2	40.1	30.5	40.7	32.8	33.3	35.0	36.0	36.8	38.3	39.3	40.9
51.8	47.6	44.2	43.4	38.1	30.1	27.0	93.4	30.0	27.3	39.9	29.3	39.9	32.4	32.9	33.5	34.9	36.5	37.4	38.7	40.4
48.0	43.2	48.4	48.6	47.2	36.2	34.7	114.0	49.1	28.8	64.9	29.7	58.0	31.5	34.6	35.1	35.8	36.8	38.1	39.0	40.5
43.5	46.5	43.1	47.3	37.8	34.0	28.9	113.1	48.1	26.8	62.6	29.5	54.4	30.6	30.7	31.8	32.5	31.1	31.2	29.7	29.3
8.8	7.5	6.4	7.0	6.8	7.6	10.2	10.5	10.2	12.9	13.3	14.7	13.4	14.8	16.8	17.4	17.6	19.6	20.9	21.8	22.7

Summary

File Name on Meter	LxT_Data.059
File Name on PC	SLM_0005667_LxT_Data_059.00.ldbin
Serial Number	0005667
Model	SoundTrack LxT®
Firmware Version	2.302
User	ISI, Inc.
Location	86 Fair Oaks
Job Description	
Note	

Measurement

Description		
Start	2019-12-10	13:43:07
Stop	2019-12-10	13:58:07
Duration	00:15:00.0	
Run Time	00:15:00.0	
Pause	00:00:00.0	
Pre Calibration	2019-04-25	10:16:43
Post Calibration	None	
Calibration Deviation	---	

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1
Microphone Correction	Off
Integration Method	Linear
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Overload	144.4 dB

	A	**C**	**Z**	
Under Range Peak	100.7	97.7	**102.7**	dB
Under Range Limit	**49.7**	47.7	55.7	dB
Noise Floor	36.6	37.2	44.8	dB

Results

L_{Aeq}	68.0 dB		
LAE	97.5 dB		
EA	629.830 µPa²h		
EA8	20.155 mPa²h		
EA40	100.773 mPa²h		
$L_{Zpeak\ (max)}$	2019-12-10 13:43:42	104.4	dB
L_{ASmax}	2019-12-10 13:43:43	81.6	dB
L_{ASmin}	2019-12-10 13:52:19	50.9	dB
SEA	-99.9 dB		
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0	s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0	s
L_{Zpeak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0	s
L_{Zpeak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0	s
L_{Zpeak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0	s
L_{Ceq}	76.1 dB		
L_{Aeq}	68.0 dB		
L_{Ceq} - L_{Aeq}	8.1 dB		
L_{AIeq}	69.7 dB		
L_{Aeq}	68.0 dB		
L_{AIeq} - L_{Aeq}	1.8 dB		

	A		**C**		**Z**	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
L_{eq}	68.0		76.1			
$L_{S(max)}$	81.6	2019/12/10 13:43:43				
$L_{S(min)}$	50.9	2019/12/10 13:52:19				
$L_{Peak(max)}$					104.4	2019/12/10 13:43:42

# Overloads	0	
Overload Duration	0.0	s

# OBA Overloads	0	
OBA Overload Duration	0.0	s

Dose Settings			
Dose Name	OSHA-1	OSHA-2	
Exchange Rate	5	5	dB
Threshold	90	80	dB
Criterion Level	90	90	dB
Criterion Duration	8	8	h

Results			
Dose	-99.9	0.00	%
Projected Dose	-99.9	0.06	%
TWA (Projected)	-99.9	36.8	dB
TWA (t)	-99.9	11.8	dB
Lep (t)	52.9	52.9	dB

Statistics		
LAS5.00	73.1	dB
LAS10.00	71.5	dB
LAS33.30	67.7	dB
LAS50.00	65.1	dB
LAS66.60	62.5	dB
LAS90.00	55.9	dB

Summary

File Name on Meter	LxT_Data.060
File Name on PC	SLM_0005667_LxT_Data_060.00.ldbin
Serial Number	0005667
Model	SoundTrack LxT®
Firmware Version	2.302
User	ISI, Inc.
Location	86 Fair Oaks
Job Description	
Note	

Measurement

Description	
Start	2019-12-10 14:13:08
Stop	2019-12-10 14:28:08
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	2019-04-25 10:16:43
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1
Microphone Correction	Off
Integration Method	Linear
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Overload	144.4 dB

	A	**C**	**Z**	
Under Range Peak	100.7	97.7	**102.7**	dB
Under Range Limit	**49.7**	47.7	55.7	dB
Noise Floor	36.6	37.2	44.8	dB

Results

L_{Aeq}	55.8	dB		
LAE	85.4	dB		
EA	38.358	µPa²h		
EA8	1.227	mPa²h		
EA40	6.137	mPa²h		
$L_{Zpeak\ (max)}$	2019-12-10 14:22:23		93.9	dB
L_{ASmax}	2019-12-10 14:22:50		68.5	dB
L_{ASmin}	2019-12-10 14:15:16		49.5	dB
SEA	-99.9	dB		

LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
L_{Zpeak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
L_{Zpeak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
L_{Zpeak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

L_{Ceq}	70.6	dB
L_{Aeq}	55.8	dB
L_{Ceq} - L_{Aeq}	14.7	dB
L_{AIeq}	58.4	dB
L_{Aeq}	55.8	dB
L_{AIeq} - L_{Aeq}	2.5	dB

	A		**C**		**Z**	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
L_{eq}	55.8		70.6			
$L_{S(max)}$	68.5	2019/12/10 14:22:50				
$L_{S(min)}$	49.5	2019/12/10 14:15:16				
$L_{Peak(max)}$					93.9	2019/12/10 14:22:23

# Overloads	0	
Overload Duration	0.0	s

# OBA Overloads	0	
OBA Overload Duration	0.0	s

Dose Settings			
Dose Name	OSHA-1	OSHA-2	
Exchange Rate	5	5	dB
Threshold	90	80	dB
Criterion Level	90	90	dB
Criterion Duration	8	8	h

Results			
Dose	-99.9	-99.9	%
Projected Dose	-99.9	-99.9	%
TWA (Projected)	-99.9	-99.9	dB
TWA (t)	-99.9	-99.9	dB
Lep (t)	40.8	40.8	dB

Statistics		
LAS5.00	59.9	dB
LAS10.00	58.2	dB
LAS33.30	55.8	dB
LAS50.00	54.8	dB
LAS66.60	53.4	dB
LAS90.00	51.4	dB

Summary

File Name on Meter	LxT_Data.061
File Name on PC	SLM_0005667_LxT_Data_061.00.ldbin
Serial Number	0005667
Model	SoundTrack LxT®
Firmware Version	2.302
User	ISI, Inc.
Location	86 Fair Oaks
Job Description	
Note	

Measurement

Description	
Start	2019-12-10 14:31:52
Stop	2019-12-10 14:46:52
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	2019-04-25 10:16:43
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRMLxT1
Microphone Correction	Off
Integration Method	Linear
OBA Range	Normal
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	Bin Max
Overload	144.4 dB

	A	**C**	**Z**	
Under Range Peak	100.7	97.7	**102.7**	dB
Under Range Limit	**49.7**	47.7	55.7	dB
Noise Floor	36.6	37.2	44.8	dB

Results

L_{Aeq}	57.3	dB		
LAE	86.8	dB		
EA	53.521	µPa²h		
EA8	1.713	mPa²h		
EA40	8.563	mPa²h		
$LZ_{peak\ (max)}$	2019-12-10 14:43:30		101.8	dB
LAS_{max}	2019-12-10 14:39:02		75.2	dB
LAS_{min}	2019-12-10 14:36:32		47.0	dB
SEA	-99.9	dB		

LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZ_{peak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

$LCeq$	68.6	dB
$LAeq$	57.3	dB
$LCeq - LAeq$	11.3	dB
$LAleq$	60.0	dB
$LAeq$	57.3	dB
$LAleq - LAeq$	2.7	dB

	A		**C**		**Z**	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
L_{eq}	57.3		68.6			
$L_{S(max)}$	75.2	2019/12/10 14:39:02				
$L_{S(min)}$	47.0	2019/12/10 14:36:32				
$L_{Peak(max)}$					101.8	2019/12/10 14:43:30

# Overloads	0	
Overload Duration	0.0	s

# OBA Overloads	0		
OBA Overload Duration	0.0	s	

Dose Settings			
Dose Name	OSHA-1	OSHA-2	
Exchange Rate	5	5	dB
Threshold	90	80	dB
Criterion Level	90	90	dB
Criterion Duration	8	8	h

Results			
Dose	-99.9	-99.9	%
Projected Dose	-99.9	-99.9	%
TWA (Projected)	-99.9	-99.9	dB
TWA (t)	-99.9	-99.9	dB
Lep (t)	42.2	42.2	dB

Statistics		
LAS5.00	62.8	dB
LAS10.00	60.4	dB
LAS33.30	54.4	dB
LAS50.00	52.6	dB
LAS66.60	51.0	dB
LAS90.00	48.6	dB

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 6/18/2020
Case Description: 86 Fair Oaks Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Location #1	Residential	67.9	67.9	67.9

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	280	0
Excavator	No	40		80.7	280	0
Dump Truck	No	40		76.5	280	0
Front End Loader	No	40		79.1	280	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator		65.7	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		65.7	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck		61.5	57.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader		64.1	60.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	65.7	66.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Location #2	Residential	68	68	68

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	85	0
Excavator	No	40		80.7	85	0
Dump Truck	No	40		76.5	85	0
Front End Loader	No	40		79.1	85	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator		76.1	72.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		76.1	72.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck		71.8	67.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader		74.5	70.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	76.1	77	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Location #3	Residential	55.8	55.8	55.8

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	60	0
Excavator	No	40		80.7	60	0
Dump Truck	No	40		76.5	60	0
Front End Loader	No	40		79.1	60	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator		79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck		74.9	70.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader		77.5	73.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	79.1	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Location #4	Residential	57.3	57.3	57.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)

Description	Impact Device	Usage(%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Excavator	No	40		80.7	500	0
Excavator	No	40		80.7	500	0
Dump Truck	No	40		76.5	500	0
Front End Loader	No	40		79.1	500	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	60.7	56.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	60.7	56.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	56.5	52.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	59.1	55.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.7	61.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Reference Receptor	Residential	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	100	0
Excavator	No	40		80.7	100	0
Dump Truck	No	40		76.5	100	0
Front End Loader	No	40		79.1	100	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	74.7	70.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	74.7	70.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	70.4	66.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	73.1	69.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	74.7	75.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

86 Fair Oaks — Construction Noise - Unmitigated

Reference Noise Distance: 100

Reference Noise Level: 75.6

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Construction Noise Level (RCNM)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Location #1	280		66.7	67.9	70.3	2.4
Location #2	85		77.0	68	77.5	9.5
Location #3	60		80.0	55.8	80.1	24.3
Location #4	500		61.6	57.3	63.0	5.7

APPENDIX G

Transportation

MEMORANDUM

PASADENA DEPARTMENT OF TRANSPORTATION

MOVING PEOPLE TO PLACES, CONNECTIVITY

DATE: June 11, 2019

TO: Talyn Mirzakhanian
Zoning Administrator, Planning and Development Department

FROM: Mike Bagheri
Principal Engineer, Complete Streets

RE: Transportation Impact Analysis – Condition Letter (CEQA)
CASE: 86 S Fair Oaks Ave

The City of Pasadena Department of Transportation conducted a transportation impact analysis to review potential traffic impacts related to the construction of 87 apartment units, 4 work-live units, 4,218 sf retail, and 1,974 sf restaurant on an existing surface parking lot.

The project is not expected to exceed any of the CEQA thresholds outlined in DOT's Transportation Impact Analysis Guidelines.

This study and conditions have been prepared based on the project scope provided to DOT. An update of the traffic study and its findings might be required if a significant change is made to the project scope, or if additional analysis is requested by the decision makers.

Conditions may be required as a result of the findings from the outside-of-CEQA analysis.

If you have any questions, please feel free to contact me at extension 7208.

CC: Laura Cornejo, Director of Transportation
Valerie Gibson, Transit Manager, DOT
Jon Hamblen, Parking Manager, DOT
Kevin Johnson, Senior Planner, Planning Department
Yannie Wu, Principal Engineer, Public Works
Bob Sulistio, Associate Engineer, Public Works

MXB:clv

Transportation Impact Analysis CEQA Evaluation

PASADENA
DEPARTMENT OF TRANSPORTATION

Transportation Impact Analysis

CEQA Evaluation

Category 2

Project Address: 86 South Fair Oaks Avenue

Project Summary: Mixed-use development with 87 apartment units, 4 work-live units, 4,218 sf retail, and 1,974 sf restaurant on an existing surface parking lot.

Applicant:
Architectural Resources Group, Inc.
8 Mills Place, Suite 300
Pasadena, CA 91105

Attention:
Kevin Johnson, Senior Planner
Planning Department
City of Pasadena

May 3, 2019

Table of Contents

I. Study Objective 1
II. Project Description 1
III. Existing Transportation Network 1
Street System Classifications 1
Existing Transit Service 4
IV. Transportation Impact Analysis Methodology 4
Analysis Purpose 5
Analysis Threshold Criteria - Transportation Performance Measures 5
Definitions 5
VMT Per Capita 5
VT Per Capita 6
Proximity and Quality of Bicycle Network 6
Proximity and Quality of Transit Network 7
Pedestrian Accessibility 7
V. Project's Transportation Impact Analysis 8
VI. Congestion Management Plan 12
CMP Traffic Impact Analysis 12
CMP Transit Impact Analysis 13
VII. Conclusion 14
VIII. Appendices 14

List of Figures

Figure 1. Project Site Plan 2
Figure 2. Street Classification Map 3
Figure 3. Bike Facility Map 10
Figure 4. Transit Facility Map 11

List of Tables

Table 1. Bicycle Facilities Hierarchy 6
Table 2. Description of Transit Facilities 7
Table 3. City of Pasadena CEQA Caps 8
Table 4. Transportation Performance Metrics Summary 9

I. Study Objective

This report analyzed the impact the development will have on the City transportation system by estimating incremental changes in vehicle miles traveled (VMT) per capita, vehicle trips per capita (VT), service population proximity access to transit and bike facilities, and pedestrian accessibility score.

II. Project Description

The City of Pasadena Department of Transportation conducted an analysis to review the construction of a mixed-use development with 87 apartment units, 4 work-live units, 4,218 sf retail, and 1,974 sf restaurant on an existing surface parking lot.

Vehicular site access will be provided via one driveway along Dayton Street.

Figure 1 depicts the project's site plan.

III. Existing Transportation Network

Street System Classifications

Colorado Boulevard is classified as a **City Connector**. The speed limit varies from 25 mph in the business district to 30 to 35 mph outside the business district.

Green Street is a one-way eastbound **City Connector** from Pasadena Avenue to Hill Avenue with a speed limit of 30 mph. Parking is permitted along both sides of the street.

Fair Oaks Avenue is a **City Connector** bordering the project to the west. The posted speed limit in the vicinity of the project is 35 mph. Land use along Fair Oaks Avenue is primarily commercial. Fair Oaks Avenue shall be evaluated from an urban-commercial street context.

Raymond Avenue is a **Neighborhood Connector** east of the project. The Metro Gold Line Del Mar Station is located just south of the development and is accessible from Raymond Avenue.

Dayton Street is an **Access Road** bordering the project to the south. The roadway is a narrow, undivided, two-lane roadway with parking allowed on both sides of the street. The Fair Oaks Avenue at Dayton Street intersection is unsignalized. Pasadena Central Park is located directly south of the proposed development.

Figure 2 depicts the project within the context of the City of Pasadena's adopted Street Types map.

Figure 1. Project Site Plan

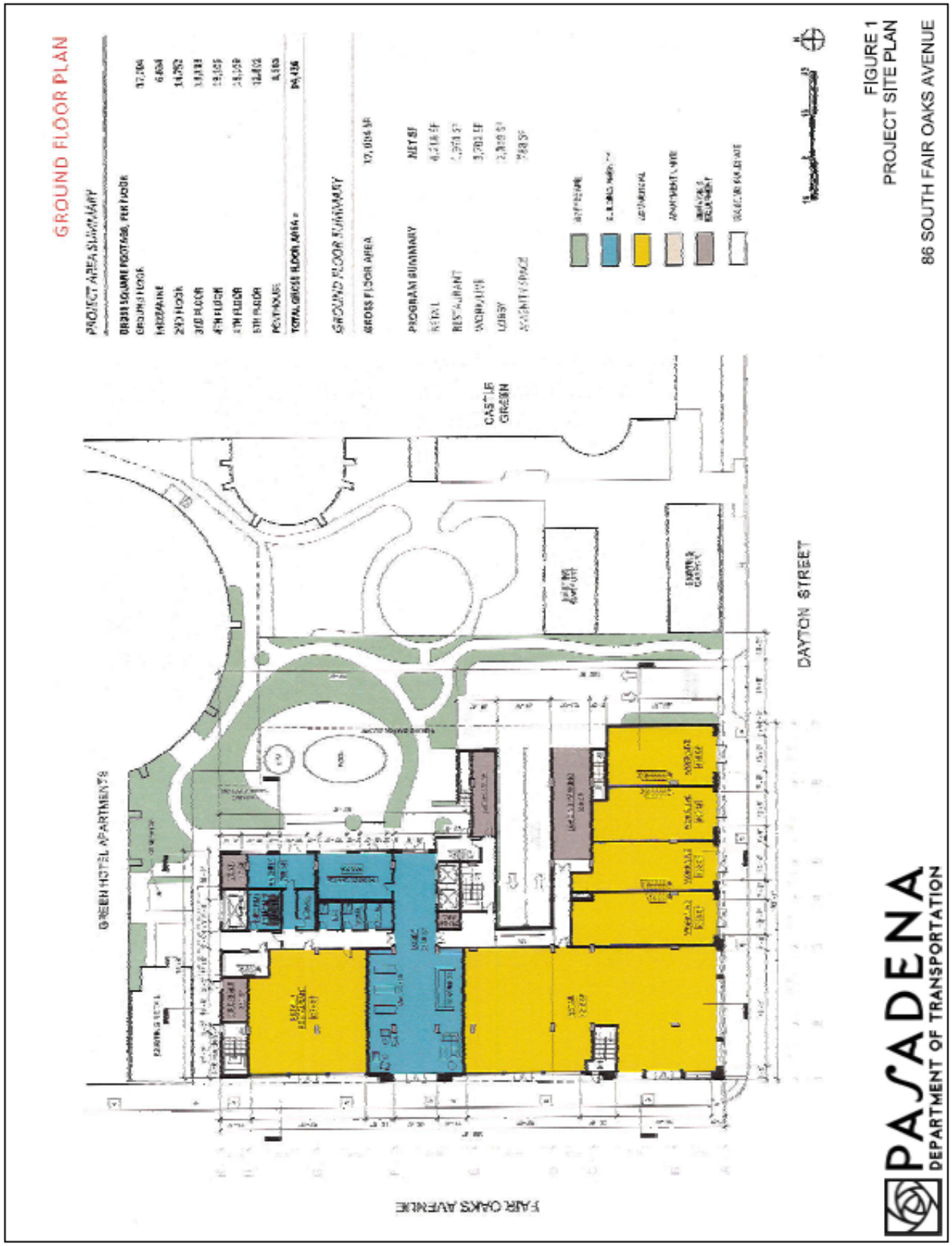
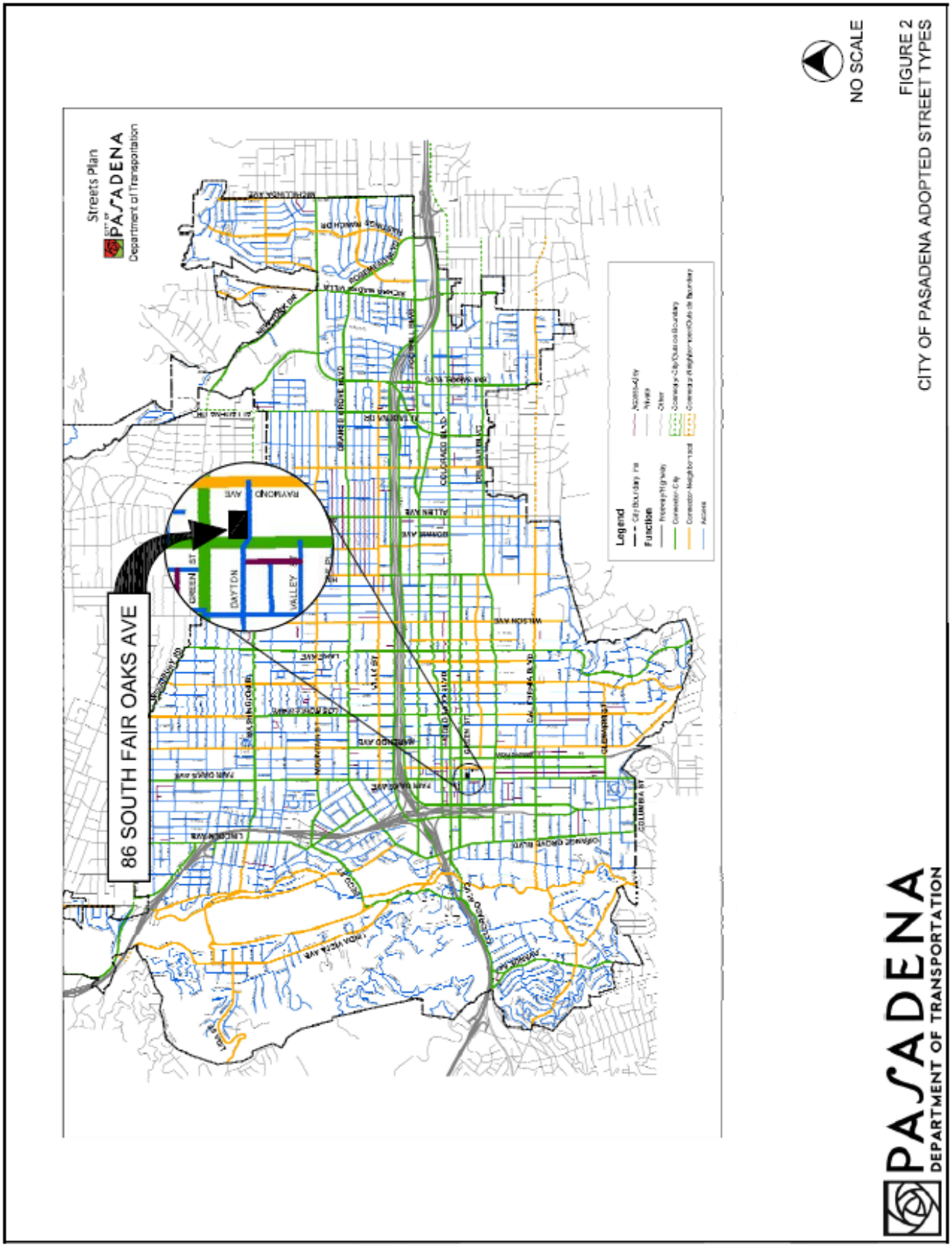


Figure 2. Street Classification Map



Existing Transit Service

Public transit service within the project study area is currently provided by LA Metro (Metro), Foothill Transit (FT), and Pasadena Transit (PT). The locations of public transit stops near the project are summarized as follows:

ID	Location	Route
1	Southwest corner of Fair Oaks Ave at Green St	Metro 260, 686, 687
2	Northeast corner of Fair Oaks Ave at Dayton St	Metro 260
3	Northeast corner of Fair Oaks Ave at Del Mar Blvd	Metro 260, 762
4	Southwest corner of Fair Oaks Ave at Del Mar Blvd	PT 20, 51;Metro 260, 686, 687, 762
5	West side of Raymond Ave b/t Dayton St/Del Mar Blvd	PT 20, 51, 52;Metro 177, 256, 501, 686, 687; Metro Gold Line
6	Southwest corner of Raymond Ave at Green St	FT 187
7	Southwest corner of Raymond Ave at Green St	PT 20, 51
8	Southeast corner of Raymond Ave at Green St	PT 20, 51, 52; Metro 177, 256, 686, 687

IV. Transportation Impact Analysis Methodology

With the City of Pasadena General Plan, the City's guiding principles cumulatively represent the community's vision for the future:

- Growth will be targeted to serve community needs and enhance quality of life.
- New construction that could affect the integrity of historic resources will be compatible with, and differentiated from, the existing historic resource.
- Economic vitality will be promoted to provide jobs, services, revenues, and opportunities.
- Pasadena will be a socially, economically, and environmentally sustainable community.
- Pasadena will be a city where people can circulate without cars.
- Pasadena will be promoted as a cultural, scientific, corporate, entertainment, and educational center for the region.
- Community participation will be a permanent part of achieving a greater city.
- Pasadena is committed to public education and a diverse educational system responsive to the broad needs of the community.

Understanding the goals and objectives of the General Plan, the Pasadena Department of Transportation sets forth goals and policies to improve overall transportation in Pasadena and create "a community where people can circulate without cars." Inherent in this vision statement is to accommodate different modes of transportation including vehicle, pedestrian, bicycle, and transit. The analysis is based on City Transportation Impact Analysis Guidelines. This report will assess accessibility of these different modes of travel and the project's transportation impacts using the City's adopted transportation performance measures.

Analysis Purpose

Pasadena reviews several types and sizes of projects that could be subject to environmental review under the California Environmental Quality Act (CEQA). Transportation impact analyses are an integral part of the environmental review process that is required for all proposed projects not categorically exempt under CEQA.

Analysis Threshold Criteria - Transportation Performance Measures

The Pasadena Department of Transportation adopted a set of performance measures and CEQA caps that are closely aligned with the Mobility Element objectives and policies. Pasadena Department of Transportation's mobility performance measures assess the quality of walking, biking, transit, and vehicular travel in the City. A combination of vehicular and multimodal performance measures are employed to evaluate system performance in reviewing new development projects. They are:

- Vehicle Miles Traveled per Capita
- Vehicle Trips per Capita
- Proximity and Quality of the Bicycle and Transit Network
- Pedestrian Accessibility

These performance measures align with the sustainability goals of the General Plan by evaluating the "efficiency" of projects by analyzing the per capita length and number of trips associated with changes in land use. With the expanded emphasis on sustainability and a continued focus on livability, the proposed performance measures will assist in determining how to balance travel modes as well as understand the mobility needs of the community.

Definitions

VMT Per Capita

The Vehicle Miles Traveled (VMT) per Capita measure sums the miles traveled for trips within the City of Pasadena Travel Demand Model (that is based on the SCAG regional model). The VMT total considers 100% of the mileage of trips that begin and end inside Pasadena and 50% of the distance travelled for trips with one end outside of Pasadena. The City's VMT is then divided by the City's total service population, defined as the population plus the number of jobs.

Although VMT itself will likely increase with the addition of new residents, the City can reduce VMT on a per-capita basis with land use policies that help Pasadena residents

meet their daily needs within a short distance from home, reducing trip lengths, and by encouraging development in areas with access to various modes of transportation other than auto.

VT Per Capita

Vehicle Trips (VT) per Capita is a measure of motor vehicle trips associated with the City. The measure sums the trips with origins and destination within the City of Pasadena, as generated by the 2013 trip-based citywide Travel Demand Model. The regional VT is calculated by adding the VT associated with trips generated and attracted within City of Pasadena boundaries, and 50% of the VT associated with trips that either begin or end in the City, but have one trip end outside of the City. The City's VT is then divided by the City's total service population, defined as the population plus the number of jobs.

As with VMT, VT itself will likely increase with the addition of new residents, but the City can reduce VT on a per-capita basis with land use policies that help Pasadena residents meet their daily needs within a short distance of home, reducing trip lengths, and by encouraging development in areas with access to various modes of transportation other than auto.

Proximity and Quality of Bicycle Network

The Proximity and Quality of Bicycle Network provides a measure of the percent of the City's service population (population + jobs) within a quarter mile of Levels 1 & 2 bicycle facility types. The facility types are aggregated into three hierarchy levels, obtained from the City's Bicycle Transportation Plan categories as shown in the following table:

Table 1. Bicycle Facilities Hierarchy

LEVEL	DESCRIPTION	FACILITIES INCLUDED
1	Advanced Facilities	Bike Paths (P1) Multipurpose Paths (PP) Cycle Tracks/Protected Bike Lanes
2	Dedicated Facilities	Buffered Bike Lanes Bike Lanes (2, P2) Bike Boulevards (BB)
3	Basic Facilities	Bike Routes (3, P3) Enhanced Bike Routes (E3, PE3) Emphasized Bikeways (PEB)

For each bike facility level, a quarter-mile network distance buffer is calculated and the total service population (population + jobs) within the buffer are added.

The City can improve measures of Bike Facility Access by improving and expanding existing bike facilities and by encouraging residential and commercial development in areas with high-quality bike facilities.

Proximity and Quality of Transit Network

The Proximity and Quality of Transit Network provides a measure of the percent of the City's service population (population + jobs) within a quarter mile of transit facility types, as defined in the following table:

Table 2. Description of Transit Facilities

TRANSIT FACILITIES HIERARCHY	
LEVEL	FACILITIES INCLUDED
1	Includes all Gold Line stops as well as corridors with transit service, whether it be a single route or multiple routes combined, with headways of five minutes or less during the peak periods.
2	Includes corridors with transit headways of between six and 15 minutes in peak periods.
3	Includes corridors with transit headways of 16 minutes or more at peak periods.

For each facility level, a quarter-mile network distance buffer is calculated and the total service population (population + jobs) within the buffer are added.

The City can improve the measures of Transit Proximity and Quality by reducing headways on existing transit routes, by expanding transit routes to cover new areas, and by encouraging residential and commercial development to occur in areas with an already high-quality transit service.

Pedestrian Accessibility

Proximity and Quality of Pedestrian Environment score provides a measure of the average walkability in the TAZ surrounding Pasadena residents, based on a Pedestrian Accessibility metric. The Pedestrian proximity metric is a simple count of the number of land use types accessible to a Pasadena resident or employee in a given TAZ within a 5-minute walk. The ten categories of land uses are:

- Retail
- Personal Services
- Restaurant
- Entertainment
- Office (including private sector and government offices)
- Medical (including medical office and hospital uses)
- Culture (including churches, religious and other cultural uses)
- Park and Open Space
- School (including elementary and high schools)
- College

The following table summarizes the City's Metrics for determining CEQA Caps:

Table 3. City of Pasadena CEQA Caps

METRIC	DESCRIPTION	IMPACT THRESHOLD
1. VMT Per Capita	Vehicle Miles Traveled (VMT) in the City of Pasadena per service population (population + jobs).	CEQA Threshold: An increase over existing Citywide VMT per Capita of **22.6**.
2. VT Per Capita	Vehicle Trips (VT) in the City of Pasadena per service population (population + jobs).	CEQA Threshold: An increase over existing Citywide VT per Capita of **2.8**.
3. Proximity and Quality of Bicycle Network	Percent of service population (population + jobs) within a quarter mile of bicycle facility types	CEQA Threshold: Any decrease in existing citywide **31.7%** of service population (population + jobs) within a quarter mile of Level 1 & 2 bike facilities.
4. Proximity and Quality of Transit Network	Percent of service population (population + jobs) located within a quarter mile of transit facility types.	CEQA Threshold: Any decrease in existing citywide **66.6%** of service population (population + jobs) within a quarter mile of Level 1 & 2 transit facilities.
5. Pedestrian Accessibility	The Pedestrian Accessibility Score uses the mix of destinations, and a network-based walk shed to evaluate walkability	CEQA Threshold: Any decrease in the Citywide Pedestrian Accessibility Score of **3.88**.

V. Project's Transportation Impact Analysis

The analysis is based on City's Transportation Impact Analysis Guidelines. The City's calibrated travel demand forecasting model (TDF) built on SCAG's regional model was used to analyze project's impacts. The City's TDF model uses TransCAD software to simulate traffic levels and travel patterns into, out of, and within the City. The program consists of input files that summarize the City's land uses, street network, travel characteristics, and other key factors. Using this data, the model performs a series of calculations to determine the amount of trips generated, the beginning and ending location of each trip, and the route taken by the trip. To be deemed accurate for project transportation impact on the transportation system, a model must be calibrated to a year in which actual land use data and traffic volumes are available and well documented. The Pasadena TDF has been calibrated to 2013 base year conditions using actual traffic counts, Census data, and land use data compiled by City staff with land uses' associated population and job increase estimates.

Projects' proposed land uses that are consistent with the General Plan and complimentary to the surrounding land uses are expected to reduce the trip length

associated with adjacent land uses; and/or increase the service population access to pedestrian, bike, and transit facilities if the project is within a quarter mile of those facilities.

The following table summarizes the following analyses of the proposed project's impacts on the transportation system using the calibrated TDF model. The results are based on the project's vehicular and non-vehicular trip making characteristics, trip length, and its interaction with other surrounding/citywide land uses, and the City's transportation network.

Table 4. Transportation Performance Metrics Summary

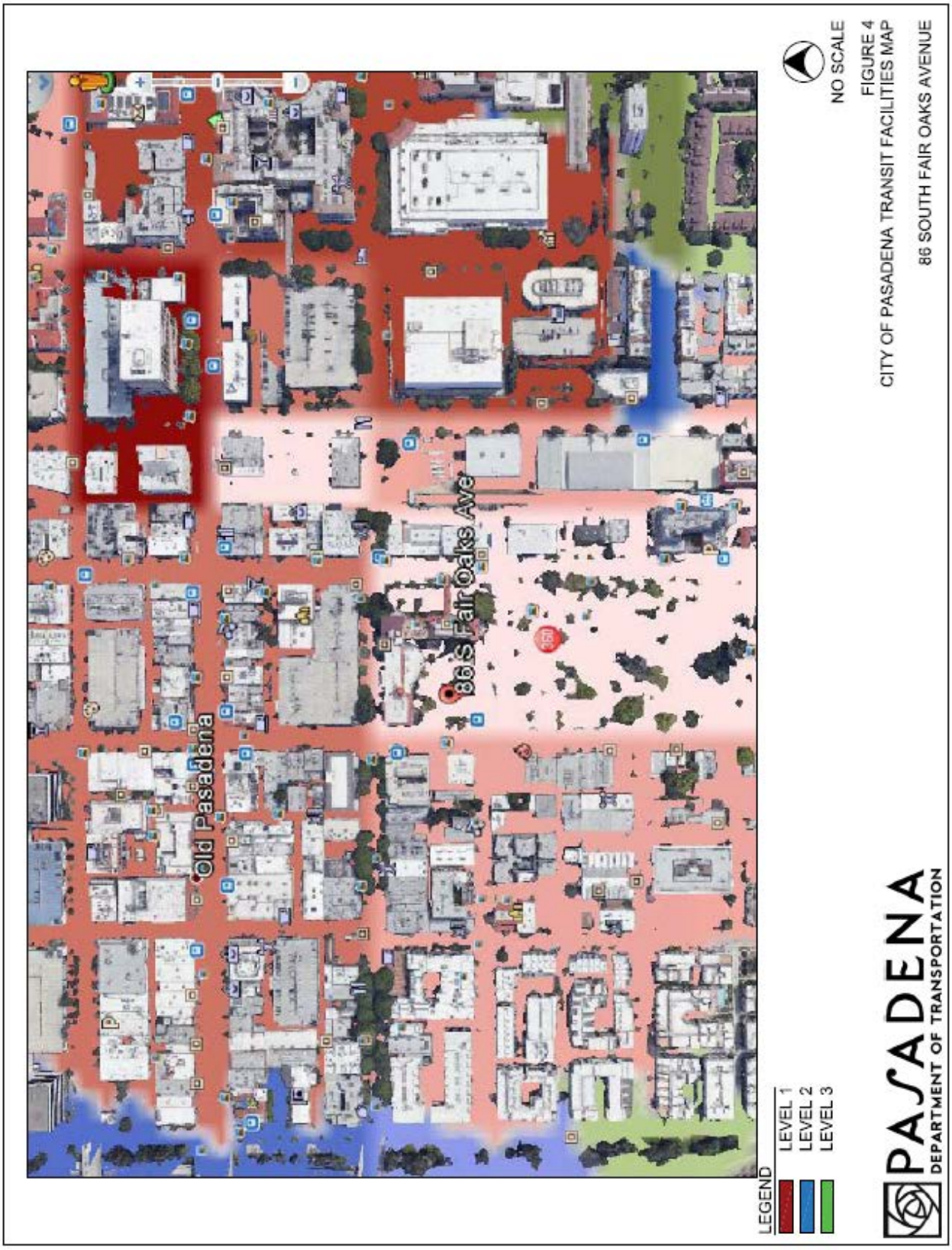
Transportation Performance Metrics	Significant Impact Cap (existing)	Incremental change (existing + project)	Significant Impact?
VMT per Capita	>22.6	16.2	No
VT per Capita	>2.8	2.8	No
Proximity and Quality of Bicycle Network	<31.7%	31.7	No
Proximity and Quality of Transit Network	<66.6%	66.7	No
Pedestrian Accessibility	<3.88	3.88	No

The TDF model calculation results determined that the project does not exceed any adopted CEQA thresholds of significance.

Figure 3. Bike Facility Map



Figure 4. Transit Facility Map



VI. Congestion Management Plan

CMP Traffic Impact Analysis

The 2010 Congestion Management Program (CMP) for Los Angeles County requires local jurisdictions to consider the regional transportation impacts that may result from major development projects through the local land use approval process. The geographic area examined in the traffic study must include the following, at minimum:

- All CMP arterial monitoring intersections where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours of adjacent street traffic
- If CMP arterial segments are being analyzed rather than intersections, the study area must include all segments where the proposed project will add 50 or more peak hour trips.
- Mainline freeway monitoring locations where the project will add 150 or more peak hour trips
- Caltrans must also be consulted through the Notice of Preparation (NOP) process to identify other specific locations to be analyzed on the state highway system.

The trip generation rates and volumes for the proposed project is summarized:

Trip Generation Rates (proposed)

						AM Peak Hour			PM Peak Hour		
Proposed Use	Land Use Code	Amount	Units	Measure	Daily	In	Out	Total	In	Out	Total
Multi-Family Mid-Rise Apartment	221	87	DU	1	5.44	0.09	0.27	0.36	0.27	0.17	0.44
Work-Live*	San Diego	5,236	SF	1000	40.00	0.72	0.48	1.20	1.80	1.80	3.60
Retail	San Diego	4,218	SF	1000	40.00	0.72	0.48	1.20	1.80	1.80	3.60
High-Turnover (Sit-Down) Restaurant	932	1,974	SF	1000	112.18	5.47	4.47	9.94	6.06	3.71	9.77

Volumes

Proposed Use		Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Multi-Family Mid-Rise Apartment		473	8	23	31	23	15	38
Work-Live*		105	2	1	3	5	5	9
Retail		169	3	2	5	8	8	15
High-Turnover (Sit-Down) Restaurant		221	11	9	20	12	7	19
Total Project Trips		968	24	35	59	48	35	82
Internal Trip Capture	0%	0	0	0	0	0	0	0
Transit Trips (Residential)	5%	24	0	1	2	1	1	2
Pass-By Trips (Restaurant + Retail)	20%	78	3	2	5	4	3	7
Net Project Vehicle Trips		866	21	32	52	43	31	73

* Work-live units uses retail with 50% walk in reductions.

Net total (proposed minus existing trips)	***866***	***21***	***32***	***52***	***43***	***31***	***73***

The trip generation calculations estimated that the project would generate 866 daily trips, 52 AM and 73 PM peak hour project trips.

The arterial monitoring station locations in Pasadena are:
- Arroyo Parkway at California Boulevard (CMP ID 119)

- Pasadena Avenue/ St John Avenue at California Boulevard (CMP ID 120)
- Rosemead Boulevard at Foothill Boulevard (CMP ID 121)

The mainline freeway monitoring locations in Pasadena are:
- 110 Freeway at Pasadena Avenue (CMP Station 1050)
- 134 Freeway west of San Rafael Avenue (CMP Station 1056)
- 210 Freeway west of Routes 134 and 710 (CMP Station 1060)
- 210 Freeway at Rosemead Boulevard (CMP Station 1061)

This project does not add 50 or more peak hour trips onto the arterial monitoring station locations during either the AM or PM weekday peak hours of adjacent street traffic. Furthermore, this project will not add 150 or more peak hour trips onto the mainline freeway monitoring locations during the peak hours. No further CMP traffic analysis is required.

CMP Transit Impact Analysis

CMP transit analysis requirements require:

- Summary of existing transit service in the study area
- Project trip generation estimates
- Project transit trip estimates
- Project components including facilities and programs to encourage public transit use
- Analysis of transit impacts and mitigations, if any.

The CMP transit trip estimates are summarized as follows:

86 South Fair Oaks Avenue			
CMP Transit Impact Analysis - Transit Trip Calculation			
	Daily	AM Peak Hour	PM Peak Hour
Total project vehicle trips w/o trip credit	968	59	82
Total person trips	1,355	83	115
% CMP transit factor [1]	15%	15%	15%
Total Transit Trips	203	12	17
* Based on the 2010 Congestion Management Program for Los Angeles County Appendix D.8.4			
[1] Primarily commercial within 1/4 mile of a CMP transit center (Gold Line Del Mar Station)			

An increase in transit trip ridership of 203 daily transit trips, 12 AM peak hour transit trips, and 17 PM peak hour transit trips are estimated. With 11 transit lines plus the Gold Line, the following table shows that there should be adequate transit capacity to serve the project:

86 South Fair Oaks Avenue										
CMP Transit Impact Analysis										
Service Route		Seats Per Car[1]	Service Frequency		Seat Capacity per Route		Available % Seat Capacity[2,3]		Available Seat Capacity	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
PT	20	18	6	4	108	72	0.05	0.05	5	4
PT	51	18	3	3	54	54	0.05	0.05	3	3
PT	52	18	3	3	54	54	0.05	0.05	3	3
FT	187	40	4	6	160	240	0.05	0.05	8	12
Metro	177	40	2	2	80	80	0.05	0.05	4	4
Metro	256	40	2	2	80	80	0.05	0.05	4	4
Metro	260	40	6	8	240	320	0.05	0.05	12	16
Metro	501	40	10	10	400	400	0.05	0.05	20	20
Metro	686	40	2	2	80	80	0.05	0.05	4	4
Metro	687	40	2	2	80	80	0.05	0.05	4	4
Metro	762	40	5	4	200	160	0.05	0.05	10	8
Metro	Gold Line	72	16	16	1,152	1,152	0.01	0.01	12	12
Totals		446	61	62	2,688	2,772	Total Available Seat Capacity		70	72
							Project transit trips		12	17
							Surplus (Deficit)		57	54

[1]Assumed based on standard bus specifications.

[2] Seat capacity assumed to be 5% during peak hour.

[3]Approximate seat capacity for a 2-car train at 36 seats per car. Number of cars per train vary between 2-3 cars. Assumed 1% available seating capacity during peak hours at the Del Mar Station Station.

VII. Conclusion

The City of Pasadena Department of Transportation conducted an analysis to review the construction of a mixed-use development with 87 apartment units, 4 work-live units, 4,218 sf retail, and 1,974 sf restaurant on an existing surface parking lot.

The Travel Demand Forecasting Model calculation results for this project determined that the project does not cause a significant impact to any of the metrics as outlined in the City's Traffic Transportation Impact Analysis Current Practice and Guidelines.

VIII. Appendices

Memorandum of Understanding
City's Travel Demand Forecasting Model Output/Results

Appendix:
Memorandum of Understanding

86 South Fair Oaks
Project Data

Total Gross Floor Area	94,426 SF
Program Summary	
Dwelling Units	87 units
Work/Live (4 units)	5,236 SF
Retail	4,218 SF
Restaurant	1,974 SF
Lobby	2,369 SF
Amenity Space	4,639 SF
Dwelling Units	87 units (excludes 4 Work/Live units)
Studios	29
1 Bedroom under 650 SF	34
1 bedroom over 650 SF	4
2 bedroom	18
2 bedroom townhouse	2
Parking Summary	198 spaces within 4 subterranean levels, includes 7 ADA spaces
Residential spaces	99
Guest	9
Work/Live	12
Retail	10
Restaurant	15
Joint (Green Hotel Replacement)	53
Bicycle Parking	
Residential	15 – Class 1
Non-Residential	4 – Class 2

GROUND FLOOR PLAN



PROJECT AREA SUMMARY

GROSS SQUARE FOOTAGE, PER FLOOR	
GROUND FLOOR	17,004
MEZZANINE	6,834
2ND FLOOR	14,752
3RD FLOOR	13,133
4TH FLOOR	13,109
5TH FLOOR	13,109
6TH FLOOR	12,802
PENTHOUSE	3,683
TOTAL GROSS FLOOR AREA =	**94,426**

GROUND FLOOR SUMMARY

GROSS FLOOR AREA	**17, 004 SF**

PROGRAM SUMMARY	NET SF
RETAIL	4,218 SF
RESTAURANT	1,974 SF
WORK/LIVE	3,702 SF
LOBBY	2,369 SF
AMENITY SPACE	788 SF

SOFTSCAPE

BUILDING AMENITY

COMMERCIAL

APARTMENT UNITS

SERVICE & EQUIPMENT

EXISTING BUILDINGS

16 0 16 32

N

Appendix:
City's Travel Demand Forecasting Model Output/Results

86 South Fair Oaks Avenue

VMT/Cap and VT/Cap Summary

Daily Trips	Internal	External
Internal	351,155	336,010
External	336,010	491,145

Pop	136,116
Emp	111,367
Ext. Factor	50%

FINAL REDUCED DAILY VMT BY SPEED BIN					EMFAC
Speed	**Internal**	**External**	**Regional**	**Total**	**INPUT**
5	109	0	1,740	1,850	0%
10	673	135	14,356	15,165	0%
15	4,135	1,353	45,870	51,358	1%
20	16,456	4,470	75,182	96,108	2%
25	98,066	12,630	150,194	260,890	5%
30	489,110	61,376	275,101	825,587	15%
35	822,415	139,323	320,207	1,281,946	23%
40	202,071	55,894	225,464	483,429	9%
45	136,021	104,933	169,393	410,347	7%
50	112,508	2,075	211,736	326,319	6%
55	95,581	7,973	229,296	332,851	6%
60	119,991	15,079	238,105	373,175	7%
65	323,603	20,896	181,045	525,544	9%
70	3,633	0	529,037	532,671	11%
75	0	0	77,279	77,279	
80	0	0	0	0	
85	0	0	0	0	
SUM	**2,424,374**	**426,138**	**2,744,006**	**5,594,519**	**100%**

TOTAL RAW DAILY SUMMARY					
Metric	**Internal**	**External**	**Regional**	**Total**	**Capita**
VMT	2,424,374	852,275	5,488,013	8,764,663	35.4
VT	351,155	672,020	-	1,023,175	4.1
Length	6.9	1.3	-	8.6	-

REDUCED DAILY SUMMARY					
Metric	**Internal**	**External**	**Regional**	**Total**	**Capita**
VMT	2,424,374	426,138	2,744,006	5,594,519	22.6
VT	351,155	336,010	-	687,165	2.8
Length	6.9	1.3	-	8.1	-

FINAL DAILY SCENARIO SUMMARY					
Pop	**Emp**	**VMT**	**VT**	**VMT/Cap**	**VT/Cap**
136,116	111,367	5,594,519	687,165	22.6	2.8

2013 EXISTING SUMMARY					
Pop	**Emp**	**VMT**	**VT**	**VMT/Cap**	**VT/Cap**
135,938	111,348	5,591,328	686,619	22.6	2.8

INCREMENTAL SCENARIO RESULTS					
Pop	**Emp**	**VMT**	**VT**	**VMT/Cap**	**VT/Cap**
177	19	3,190	546	16.2	2.8
				PASS	PASS

86 South Fair Oaks Avenue

Proximity and Quality Metric Summary

Proximity and Quality of Bicycle Network

Existing

Facility Type	Service Population	Service Population Adjustment	Final Service Population	Percent of Service Population
Level 2	78,415	0	78,415	31.7%
Level 3	123,670	0	123,670	50.0%
No Facility	45,202	0	45,202	18.3%
Exist City Total	247,286	0	247,286	100.0%

Existing + Project

Facility Type	Service Population	Service Population Adjustment	Final Service Population	Percent of Service Population
Level 2	78,415	0	78,415	31.7%
Level 3	123,670	196.8065789	123,867	50.1%
No Facility	45,202	0	45,202	18.3%
Exist City Total	247,286	196.8065789	247,483	100.0%

Proximity and Quality Metric Summary - Bicycle

Network	Service Population Adjustment	Significant Impact Threshold	Service Population %	Impact?
Bike	196.8065789	< 31.7%	31.7%	No

Proximity and Quality of Transit Network

Existing

Facility Type	Service Population	Service Population Adjustment	Final Service Population	Percent of Service Population
Level 1	90,600	0	90,600	36.6%
Level 2	74,298	0	74,298	30.0%
Level 3	50,495	0	50,495	20.4%
No Facility	31,893	0	31,893	12.9%
Exist City Total	247,286	0	247,286	100.0%

Existing + Project

Facility Type	Service Population	Service Population Adjustment	Final Service Population	Percent of Service Population
Level 1	90,600	196.8065789	90,797	36.7%
Level 2	74,298	0	74,298	30.0%
Level 3	50,495	0	50,495	20.4%
No Facility	31,893	0	31,893	12.9%
Exist City Total	247,286	196.8065789	247,483	100.0%

Proximity and Quality Metric Summary - Transit

Network	Service Population Adjustment	Significant Impact Threshold	Service Population %	Impact?
Transit	196.8065789	< 66.6%	66.7%	No

86 South Fair Oaks Avenue

Pedestrian Accessibility Calculation Summary

					Weighted Average:	**3.882616451**
PasadenaDTATAZ	Land Use Types	Population_In_TAZ	Employment_In_TAZ	Service_Population	Land Use Types	
78	7	458.1239175	90.04855263	548.1724701	7	

Transportation Impact Analysis Outside CEQA

PASADENA DEPARTMENT OF TRANSPORTATION

MOVING PEOPLE TO PLACES, CONNECTIVITY

Transportation Impact Analysis

Outside of CEQA Analysis

Project Address: 86 South Fair Oaks Avenue

Project Summary: Mixed-use development with 87 apartment units, 4 work-live units, 4,218 sf retail, and 1,974 sf restaurant on an existing surface parking lot.

Applicant:
Architectural Resources Group, Inc.
8 Mills Place, Suite 300
Pasadena, CA 91105

Attention:
Kevin Johnson, Senior Planner
Planning Department

May 3, 2019

Table of Contents

I. Study Objective 1
II. Project Description 1
III. Existing Transportation Network 1
Street System Classifications 1
Existing Transit Service 4
IV. Transportation Analysis Methodology 5
Analysis Criteria - Transportation Performance Measures 5
Caps for Determining Project Street Segment Changes 6
Caps for Determining Intersection Changes 7
Pedestrian and Bicycle Environmental Quality Index Discussion 8
V. Transportation Analysis 9
Project Trip Generation 9
Street Segment Analysis 10
Intersection Level of Service (LOS) Analysis 10
PEQI/BEQI Analysis 13
VI. Conclusion 13
VII. Appendices 13

List of Figures

Figure 1. Project Site Plan 2
Figure 2. Streets Plan Map 3
Figure 3 Project Trip Distribution and Project Traffic Volumes 11
Figure 4. City of Pasadena Adopted Transit Oriented Development Area 12

List of Tables

Table 1. City of Pasadena Metrics Cap 6
Table 2. Street Segment Caps 7
Table 3. LOS Capacity Criteria 7
Table 4: Intersection Level of Service Caps. 8
Table 5. Street Segment Volume Summary 10
Table 6. Signalized Intersection LOS Summary 10
Table 7. PEQI/BEQI Summary 13

I. Study Objective

The Department of Transportation at its discretion may analyze performance metrics outside of CEQA for projects below community-wide significance caps of 50 units and/or 50,000 square feet of development. The analysis will assess the changes to intersection Levels of Service (LOS) and "Access and Connector-Neighborhood" Street Type segments adjacent to the project. The findings may result in imposing project approval conditions to better manage project trips and protect neighborhoods from the proposed development's vehicular trips, if applicable.

II. Project Description

The City of Pasadena Department of Transportation conducted an analysis to review the construction of a mixed-use development with 87 apartment units, 4 work-live units, 4,218 sf retail, and 1,974 sf restaurant on an existing surface parking lot.

Vehicular site access will be provided via one driveway along Dayton Street.

Figure 1 depicts the project's site plan.

III. Existing Transportation Network

Street System Classifications

Colorado Boulevard is classified as a **City Connector**. The speed limit varies from 25 mph in the business district to 30 to 35 mph outside the business district.

Green Street is a one-way eastbound **City Connector** from Pasadena Avenue to Hill Avenue with a speed limit of 30 mph. Parking is permitted along both sides of the street.

Fair Oaks Avenue is a **City Connector** bordering the project to the west. The posted speed limit in the vicinity of the project is 35 mph. Land use along Fair Oaks Avenue is primarily commercial. Fair Oaks Avenue will be evaluated from an urban-commercial street context.

Raymond Avenue is a **Neighborhood Connector** east of the project. The Metro Gold Line Del Mar Station is located just south of the development and is accessible from Raymond Avenue.

Dayton Street is an **Access Road** bordering the project to the south. The roadway is a narrow, undivided, two-lane roadway with parking allowed on both sides of the street. The Fair Oaks Avenue at Dayton Street intersection is unsignalized. Pasadena Central Park is located directly south of the proposed development.

Figure 2 depicts the project in the City of Pasadena's Adopted Streets Plan map. Street segment analyses are limited to "access" and "neighborhood connector" street types within a residential context.

Figure 1. Project Site Plan

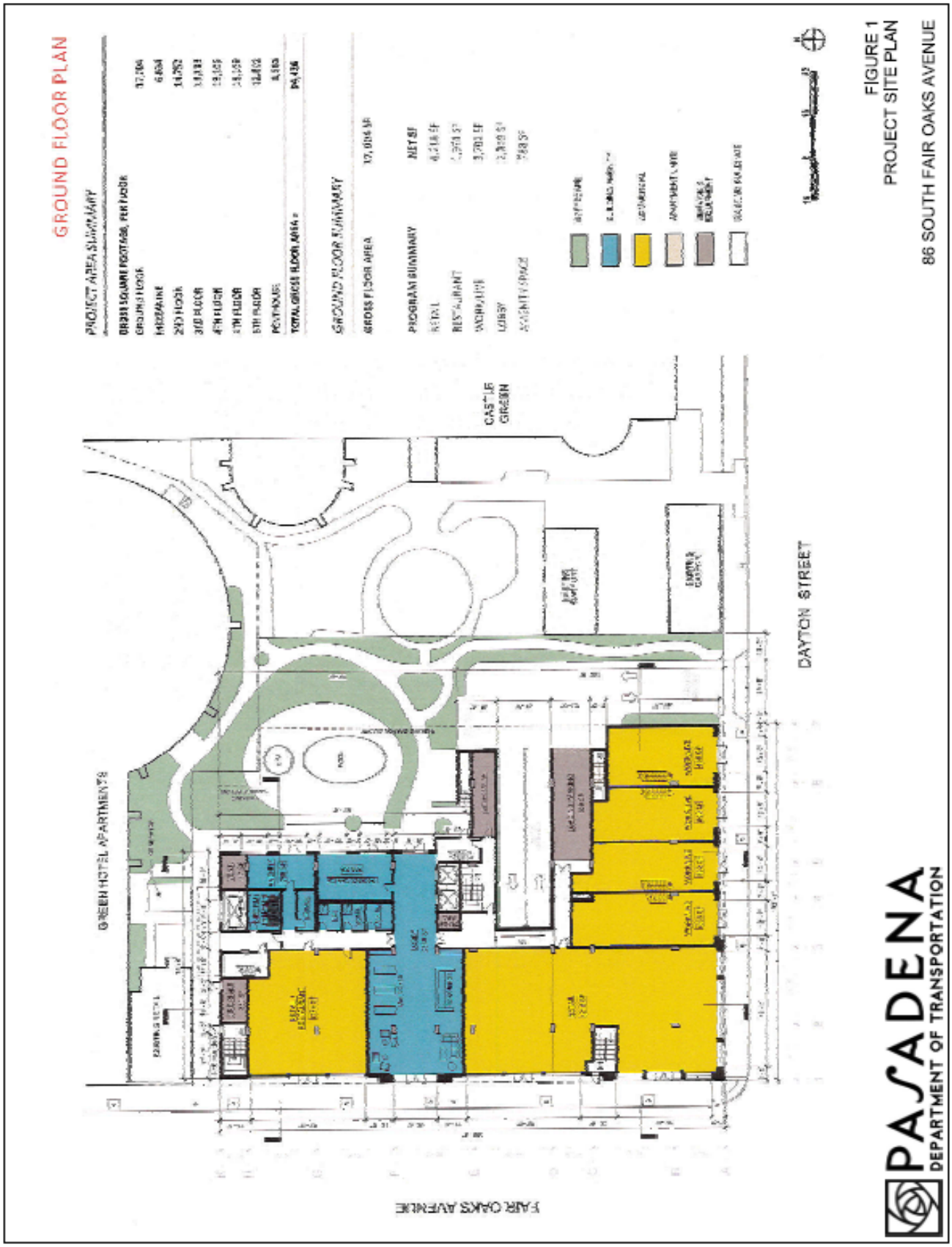
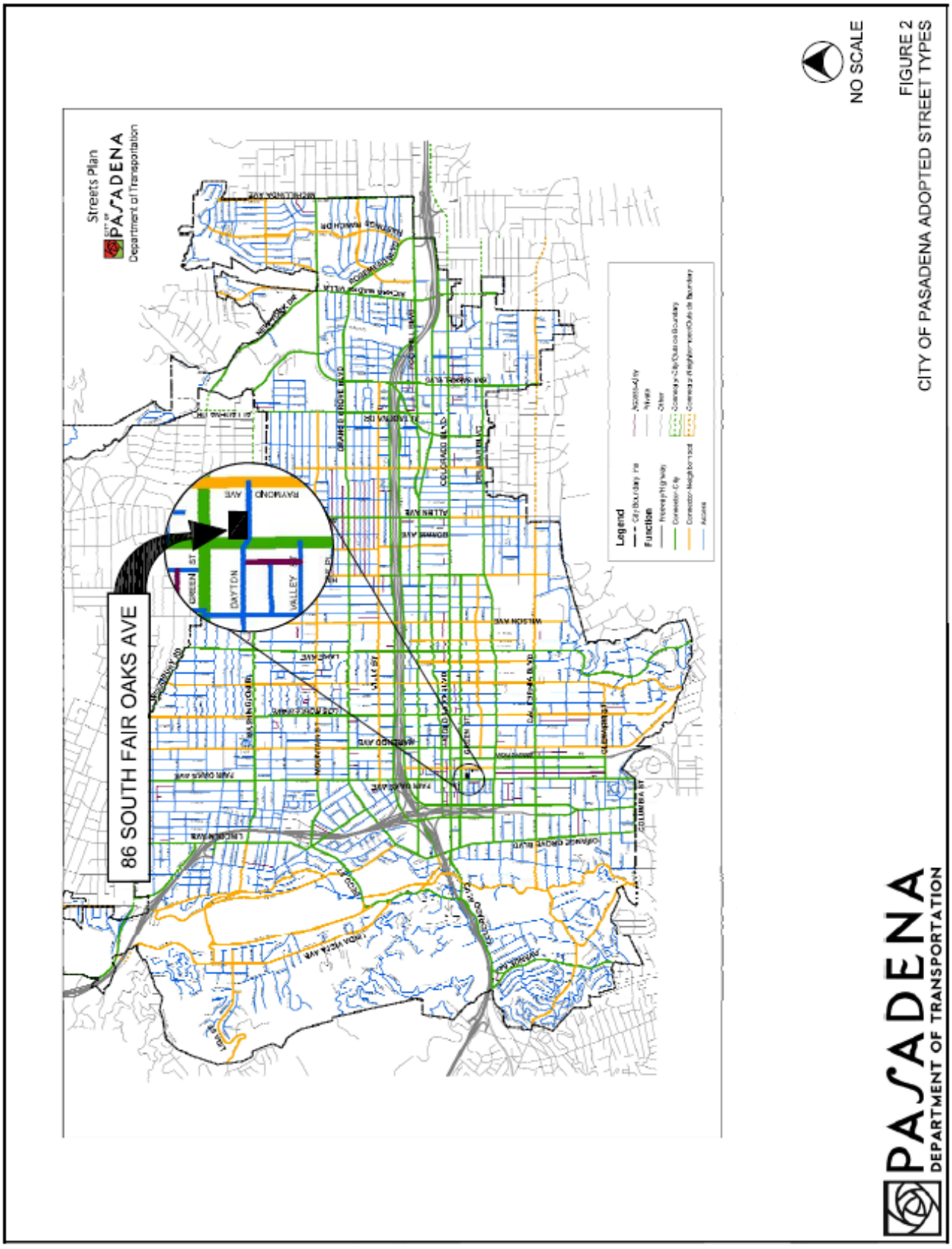


Figure 2. Streets Plan Map



The analysis considered potential traffic changes along the following street segments and intersections:

Street Segments:
- Raymond Avenue between Green Street and Dayton Street
- Raymond Avenue between Dayton Street and Del Mar Avenue
- Dayton Street between Fair Oaks Avenue and Raymond Avenue

Intersections:
- Fair Oaks Avenue and Green Street
- Fair Oaks Avenue and Del Mar Boulevard
- Raymond Avenue and Green Street
- Raymond Avenue and Del Mar Boulevard

Existing Transit Service

Public transit service within the project study area is currently provided by LA Metro (Metro), Foothill Transit (FT), and Pasadena Transit (PT). The locations of public transit stops near the project are summarized as follows:

ID	Location	Route
1	Southwest corner of Fair Oaks Ave at Green St	Metro 260, 686, 687
2	Northeast corner of Fair Oaks Ave at Dayton St	Metro 260
3	Northeast corner of Fair Oaks Ave at Del Mar Blvd	Metro 260, 762
4	Southwest corner of Fair Oaks Ave at Del Mar Blvd	PT 20, 51;Metro 260, 686, 687, 762
5	West side of Raymond Ave b/t Dayton St/Del Mar Blvd	PT 20, 51, 52;Metro 177, 256, 501, 686, 687; Metro Gold Line
6	Southwest corner of Raymond Ave at Green St	FT 187
7	Southwest corner of Raymond Ave at Green St	PT 20, 51
8	Southeast corner of Raymond Ave at Green St	PT 20, 51, 52; Metro 177, 256, 686, 687

IV. Transportation Analysis Methodology

With the City of Pasadena General Plan, the City's guiding principles cumulatively represent the community's vision for the future:

- Growth will be targeted to serve community needs and enhance quality of life.
- New construction that could affect the integrity of historic resources will be compatible with, and differentiated from, the existing historic resource.
- Economic vitality will be promoted to provide jobs, services, revenues, and opportunities.
- Pasadena will be a socially, economically, and environmentally sustainable community.
- Pasadena will be a city where people can circulate without cars.
- Pasadena will be promoted as a cultural, scientific, corporate, entertainment, and educational center for the region.
- Community participation will be a permanent part of achieving a greater city.
- Pasadena is committed to public education and a diverse educational system responsive to the broad needs of the community.

Understanding the goals and objectives of the General Plan, the Pasadena Department of Transportation sets forth goals and policies to improve overall transportation in Pasadena and create "a community where people can circulate without cars." Inherent in this vision statement is to accommodate different modes of transportation including vehicle, pedestrian, bicycle, and transit. The analysis is based on City Transportation Impact Analysis Guidelines. This report will assess accessibility of these different modes of travel and the project's transportation impacts using the City's adopted transportation performance measures.

Analysis Criteria - Transportation Performance Measures

The Department's defined criteria and categories when determining the level of transportation impact of projects fall under three categories based on project size and community-wide significance.

- Exempt projects have 10 residential units or less, are 10,000 sf or less, or generate less than 300 daily trips if less than 10,000 sf.
- Category 1 Projects considered below community-wide significance are between 11-49 residential units, or 10,001 to 49,999 sf.
- Category 2 Projects classified as having community-wide significance have 50 or more residential units, or are 50,000 sf or more.

Pasadena Department of Transportation's mobility performance measures assess the quality of walking, biking, transit, and vehicular travel in the City. A combination of vehicular and multimodal performance measures are employed to evaluate system performance in reviewing new development impacts.

The following table summarizes the City's Metrics Cap Outside of CEQA for projects below "communitywide significance:"

Table 1. City of Pasadena Metrics Cap

METRIC	DESCRIPTION	CAP*
1. Street Segment Analysis	The street segment analysis assesses traffic intrusion on local streets in residential neighborhoods	Increases of 10-15% above existing on streets with more than 1500 ADT would trigger conditions of approval to reduce project vehicular trips
2. Auto Level of Service	Level of Service (LOS) as defined by the Transportation Research Board's *Highway Capacity Manual (HCM) 2010*.	A decrease beyond LOS D Citywide or LOS E within Transit Oriented Districts (TODs) would trigger conditions of approval to reduce project vehicular trips
3. PEQI	Pedestrian Environmental Quality Index	Below average conditions
4. BEQI	Bicycle Environmental Quality Index	Below average conditions

*The adopted caps are not intended to be the absolute limits, but rather limits/ranges when exceeded may require additional project approval conditions.

Caps for Determining Project Street Segment Changes

Caps for evaluating changes in vehicular volumes on street segments were developed to measure the potential changes of net new trips from projects that intensify an existing land use, change site access, or alter existing traffic patterns. The caps are designed to capture a project's anticipated level of changes measured in terms of net new trips over existing conditions.

Specific caps have been established to determine whether there would be any potential project changes along neighborhood street segments by project traffic. A conservative approach is taken when calculating the traffic growth by basing the calculation on the increase relative to existing traffic volumes as follows:

$$\text{Percentage of Increase} = {}^{\text{net new project trips}}/_{\text{existing daily traffic}}$$

The daily traffic growth caps for determining the level of street segment transportation changes are summarized as follows:

Table 2. Street Segment Caps

Existing ADT	Project-Related Vehicular Increase in ADT
0 to 1,500 average daily trips	150 trips or more
1,501 to 3,499 average daily trips	10 percent or more of final project ADT
3,500 or more	8 percent or more of final project ADT

If project-related net trips exceed the caps in the table above, conditions of approval would require the project applicant to implement measures to discourage neighborhood intrusion by project related traffic. If the project traffic increases fall below the street segment caps, additional analyses are not required.

Caps for Determining Intersection Changes

Proposed development projects that meet or exceed the caps will be evaluated using the Highway Capacity Manual (HCM) Level of Service (LOS) analysis criteria at study intersections. This methodology determines an intersection's level of service by calculating delay. LOS descriptions are summarized in Table 3.

Table 3. LOS Capacity Criteria

HIGHWAY CAPACITY LEVEL OF SERVICE CRITERIA		
LOS	DESCRIPTION	DELAY (s)
A	Progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	< 10.0
B	Progression is good, cycle lengths are short, or both. More vehicles stop than with LOS A, causing higher levels of average delay.	> 10.0 to 20.0
C	Higher congestion may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level, though many still pass through the intersection without stopping.	> 20.0 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	> 35.0 to 55.0

E	This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor (vehicle) progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	> 55.0 to 80.0
F	This level is considered oversaturation, which is when arrival flow rates exceed the capacity of the intersection. This level may also occur at high V/C ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to such delay levels.	> 80.0
Source: 2010 *Highway Capacity Manual.*		

Intersection LOS analysis using HCM criteria will be conducted for peak hour conditions. LOS caps are summarized in the following table:

Table 4: Intersection Level of Service Caps.

Study Intersections	Existing + Project LOS Cap
Citywide	D
Transit Oriented District (TOD)	E

Where the evaluated intersections exceed the LOS caps, conditions of approval will be recommended consistent with the City's guiding principles to encourage walking, biking, and transit to and from the project site to reduce project-related vehicular trips.

Pedestrian and Bicycle Environmental Quality Index Discussion

The Pedestrian Environmental Quality Index (PEQI) and Bicycle Environmental Quality Index (BEQI) is a quantitative, observational instrument used to describe and summarize the street and intersection environmental factors known to affect people's travel behaviors. The PEQI and BEQI were developed by the San Francisco Department of Public Health as a tool to assess pedestrian and bicycle safety and needs as well as to gain attention and demand for non-vehicle travel planning. The PEQI and BEQI consists of factors associated with pedestrian and bicycle environmental quality and safety, classified into five categories; Intersection Safety, Traffic, Street Design, Land Use and Perceived Safety.

Data is primarily collected through an observational survey. Indicator scores for each indicator category are based on a survey of national experts, including City, transportation planners and consultants regarding the importance of each indicator to pedestrian and bicycle environmental quality. The scores reflect the degree to which environmental factors supportive of walking, biking, and safety have been incorporated into street segment and intersection design. The PEQI and BEQI analysis result in a score for street segments and intersections on a scale ranging between 0-100 as outlined below.

Score	Description
20 and below	Poor quality, pedestrian/bicycle conditions absent
21-40	Low quality, minimal pedestrian/bicycle conditions
41-60	Average quality, pedestrian/bicycle conditions present but room for improvement
61-80	High quality, some important pedestrian/bicycle conditions present
81-100	Highest quality, many important pedestrian/bicycle conditions present

V. Transportation Analysis

Project Trip Generation

The industry standard procedure to determine the number of daily and peak hour trips a project would generate is based on published trip generation estimates from the ITE Trip Generation manual and is summarized in the following table:

Trip Generation Rates (proposed)

						AM Peak Hour			PM Peak Hour		
Proposed Use	Land Use Code	Amount	Units	Measure	Daily	In	Out	Total	In	Out	Total
Multi-Family Mid-Rise Apartment	221	87	DU	1	5.44	0.09	0.27	0.36	0.27	0.17	0.44
Work-Live*	San Diego	5,236	SF	1000	40.00	0.72	0.48	1.20	1.80	1.80	3.60
Retail	San Diego	4,218	SF	1000	40.00	0.72	0.48	1.20	1.80	1.80	3.60
High-Turnover (Sit-Down) Restaurant	932	1,974	SF	1000	112.18	5.47	4.47	9.94	6.06	3.71	9.77

Volumes

Proposed Use		Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Multi-Family Mid-Rise Apartment		473	8	23	31	23	15	38
Work-Live*		105	2	1	3	5	5	9
Retail		169	3	2	5	8	8	15
High-Turnover (Sit-Down) Restaurant		221	11	9	20	12	7	19
Total Project Trips		968	24	35	59	48	35	82
Internal Trip Capture	0%	0	0	0	0	0	0	0
Transit Trips (Residential)	5%	24	0	1	2	1	1	2
Pass-By Trips (Restaurant + Retail)	20%	78	3	2	5	4	3	7
Net Project Vehicle Trips		866	21	32	52	43	31	73

* Work-live units uses retail with 50% walk in reductions.

Net total (proposed minus existing trips)	***866***	***21***	***32***	***52***	***43***	***31***	***73***

In summary, it is estimated that the project would generate 866 daily trips, 52 AM and 73 PM peak hour project trips.

Street Segment Analysis

Figure 3 describes the project trip distribution and project traffic intersection volumes on the street network. The calculated increase in average daily traffic along access or neighborhood connector street types is summarized in Table 5.

Table 5. Street Segment Volume Summary

Street Segment	Daily Volume	Project Volume	Vehicular Increase in ADT	Exceeds Cap?
Raymond Avenue between Green Street and Dayton Street	7,745	217	2.8%	No
Raymond Avenue between Dayton Street and Del Mar Avenue	8,106	130	1.6%	No
Dayton Street between Fair Oaks Avenue and Raymond Avenue	1,049	866	82.6%	Yes

Intersection Level of Service (LOS) Analysis

Figure 4 indicates that the project is in the City's Transit Oriented District. Therefore, the Existing + Project LOS cap for intersections is "LOS E". The calculated LOS results are summarized in Table 6.

Table 6. Signalized Intersection LOS Summary

Intersection	Peak Hour	Existing		Existing w/Project		Exceeds LOS Cap?
		Delay	LOS	Delay	LOS	Yes/No
Fair Oaks Avenue at Green Street	AM	16.3	B	16.4	B	No
	PM	18.3	B	18.6	B	No
Fair Oaks Avenue at Del Mar Boulevard	AM	45.5	D	46.0	D	No
	PM	31.5	C	31.8	C	No
Raymond Avenue at Green Street	AM	10.9	B	10.9	B	No
	PM	16.0	B	15.9	B	No
Raymond Avenue at Del Mar Boulevard	AM	18.2	B	18.3	B	No
	PM	21.1	C	21.2	C	No

Figure 3 Project Trip Distribution and Project Traffic Volumes

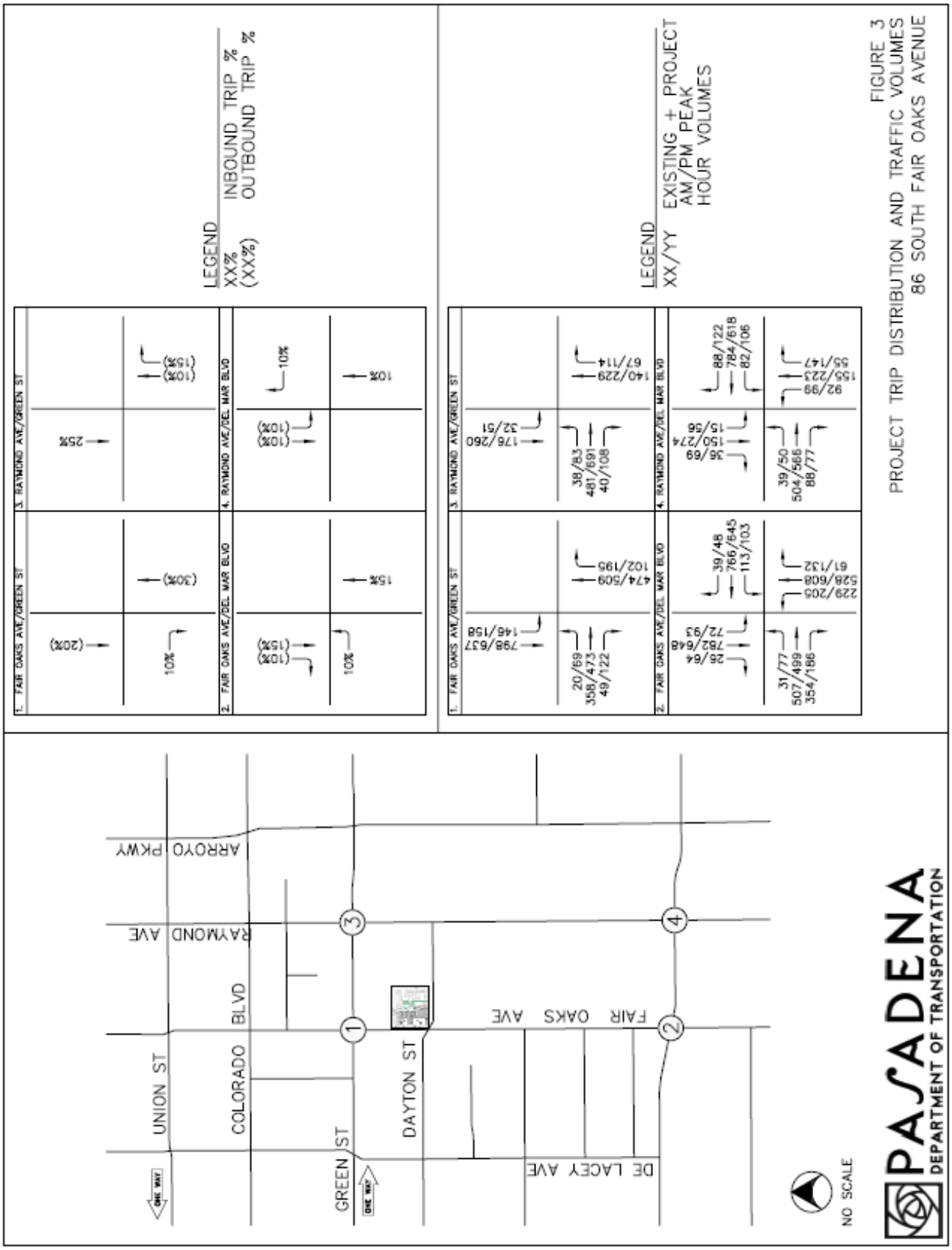
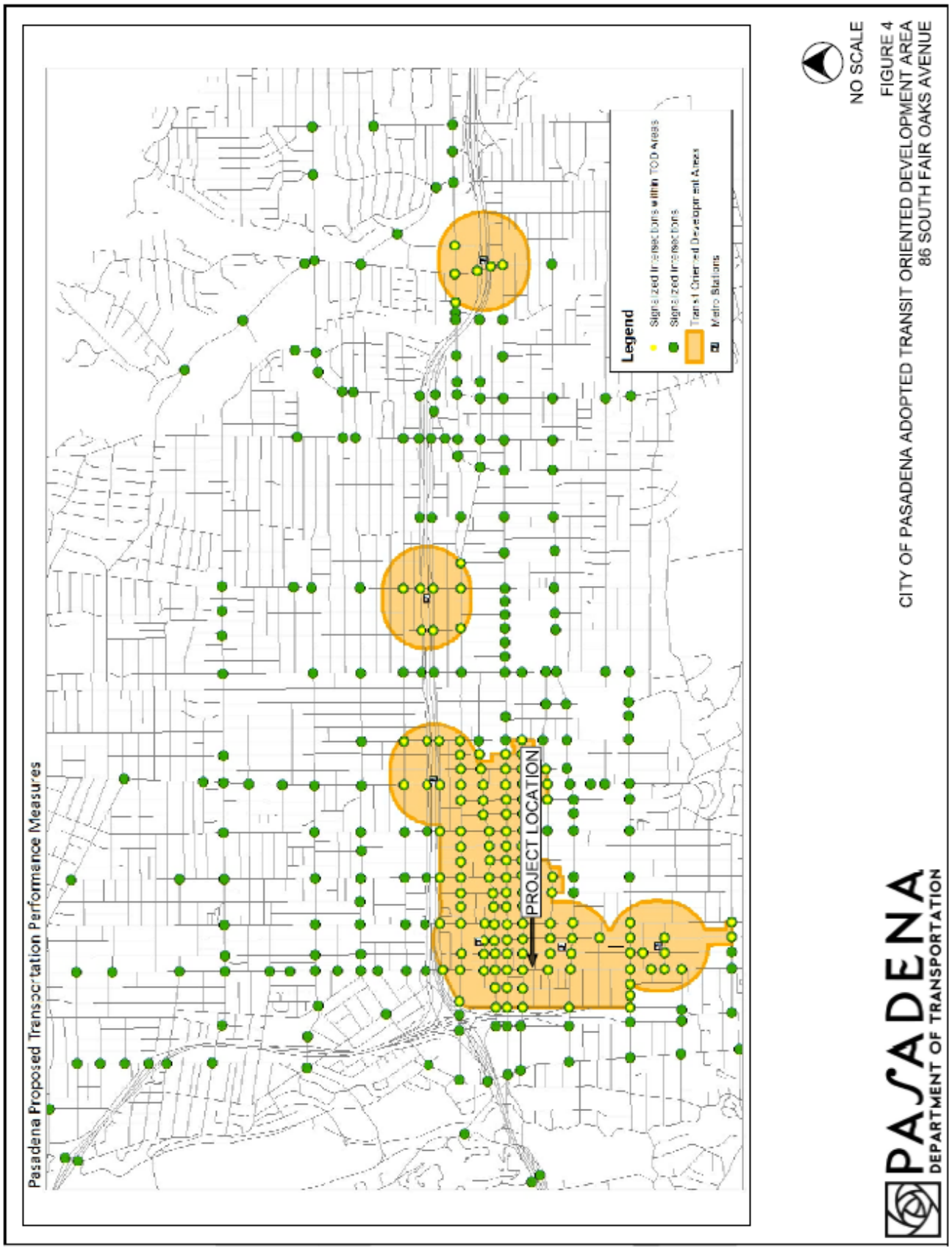


Figure 4. City of Pasadena Adopted Transit Oriented Development Area



PEQI/BEQI Analysis

An observational survey was conducted along Dayton Street between Fair Oaks Avenue and Raymond Avenue to document existing pedestrian and bicycle quality conditions. Vehicle traffic features (i.e., number of lanes, vehicle speed, etc.) as well as street quality features (i.e., sidewalk widths and impediments, driveway cuts, land use characteristics, etc.) were collected on both sides of the street.

Environmental quality of non-vehicular modes must be improved when the assessment of project study segments reveal less than average conditions. According to the PEQI and BEQI indicator and indicator category scores, the following observational scores are:

Table 7. PEQI/BEQI Summary

Segment	**PEQI Score**	**BEQI Score**
Dayton Street between Fair Oaks Avenue and Raymond Avenue		
- Northside	70 - High	45 - Average
- Southside	78 - High	50 - Average

PEQI and BEQI calculations are found in the appendix of this report.

VI. Conclusion

The City of Pasadena Department of Transportation conducted an analysis to review the construction of a mixed-use development with 87 apartment units, 4 work-live units, 4,218 sf retail, and 1,974 sf restaurant on an existing surface parking lot. Vehicular site access will be provided via one driveway along Dayton Street.

Dayton Street between Fair Oaks Avenue and Raymond Avenue exceeded the adopted segment impact caps. Conditions to reduce project vehicular trips are required.

No intersections exceed the adopted caps.

The calculated PEQI and BEQI scores determined that existing pedestrian conditions are, at minimum, average along Dayton Street.

VII. Appendices

Memorandum of Understanding
Traffic Volumes
HCM Analysis
PEQI Calculation Sheet
BEQI Calculation Sheet

Appendix:
Memorandum of Understanding

86 South Fair Oaks
Project Data

Total Gross Floor Area	94,426 SF
Program Summary	
Dwelling Units	87 units
Work/Live (4 units)	5,236 SF
Retail	4,218 SF
Restaurant	1,974 SF
Lobby	2,369 SF
Amenity Space	4,639 SF
Dwelling Units	87 units (excludes 4 Work/Live units)
Studios	29
1 Bedroom under 650 SF	34
1 bedroom over 650 SF	4
2 bedroom	18
2 bedroom townhouse	2
Parking Summary	198 spaces within 4 subterranean levels, includes 7 ADA spaces
Residential spaces	99
Guest	9
Work/Live	12
Retail	10
Restaurant	15
Joint (Green Hotel Replacement)	53
Bicycle Parking	
Residential	15 – Class 1
Non-Residential	4 – Class 2

GROUND FLOOR PLAN



PROJECT AREA SUMMARY

GROSS SQUARE FOOTAGE, PER FLOOR	
GROUND FLOOR	17,004
MEZZANINE	6,834
2ND FLOOR	14,752
3RD FLOOR	13,133
4TH FLOOR	13,109
5TH FLOOR	13,109
6TH FLOOR	12,802
PENTHOUSE	3,683
TOTAL GROSS FLOOR AREA =	**94,426**

GROUND FLOOR SUMMARY

GROSS FLOOR AREA	**17, 004 SF**

PROGRAM SUMMARY	NET SF
RETAIL	4,218 SF
RESTAURANT	1,974 SF
WORK/LIVE	3,702 SF
LOBBY	2,369 SF
AMENITY SPACE	788 SF

SOFTSCAPE

BUILDING AMENITY

COMMERCIAL

APARTMENT UNITS

SERVICE & EQUIPMENT

EXISTING BUILDINGS

16 0 16 32

N

Appendix:
Traffic Volumes

Thursday, September 13, 2018 Location: Pasadena PROJECT: SC1900

ADT2455 Raymond between Green and Dayton. **Prepared by AimTD tel. 714 253 7888**

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
0:00	13		6					12:00	69		74				
0:15	9		11					12:15	81		59				
0:30	11		7					12:30	69		72				
0:45	0	33	5	29			62	12:45	69	288	60	265			553
1:00	8		10					13:00	72		74				
1:15	5		7					13:15	71		66				
1:30	3		12					13:30	66		61				
1:45	3	19	9	38			57	13:45	72	281	70	271			552
2:00	3		3					14:00	67		73				
2:15	2		5					14:15	65		50				
2:30	2		6					14:30	94		67				
2:45	0	7	3	17			24	14:45	45	271	64	254			525
3:00	0		3					15:00	59		68				
3:15	0		0					15:15	72		61				
3:30	2		0					15:30	64		65				
3:45	0	2	0	3			5	15:45	61	256	50	244			500
4:00	0		2					16:00	79		52				
4:15	2		2					16:15	69		64				
4:30	3		0					16:30	83		84				
4:45	2	7	5	9			16	16:45	57	288	60	260			548
5:00	2		4					17:00	80		101				
5:15	2		8					17:15	90		75				
5:30	2		3					17:30	77		97				
5:45	8	14	12	27			41	17:45	78	325	82	355			680
6:00	7		15					18:00	91		88				
6:15	8		12					18:15	59		63				
6:30	16		17					18:30	68		74				
6:45	19	50	26	70			120	18:45	82	300	86	311			611
7:00	24		30					19:00	69		63				
7:15	24		37					19:15	56		58				
7:30	39		51					19:30	58		52				
7:45	57	144	67	185			329	19:45	51	234	50	223			457
8:00	49		56					20:00	42		51				
8:15	47		43					20:15	41		45				
8:30	44		46					20:30	38		51				
8:45	50	190	54	199			389	20:45	32	153	41	188			341
9:00	48		66					21:00	37		45				
9:15	56		44					21:15	25		38				
9:30	54		48					21:30	22		41				
9:45	56	214	47	205			419	21:45	22	106	46	170			276
10:00	71		47					22:00	41		40				
10:15	57		49					22:15	28		40				
10:30	69		50					22:30	15		31				
10:45	60	257	47	193			450	22:45	18	102	25	136			238
11:00	54		41					23:00	16		19				
11:15	61		44					23:15	13		14				
11:30	50		58					23:30	7		17				
11:45	73	238	62	205			443	23:45	9	45	14	64			109
Total Vol.		1175		1180			**2355**			2649		2741			**5390**

Daily Totals

NB	SB	EB	WB	Combined
3824	3921			**7745**

	AM			PM		
Split %	49.9%	50.1%	**30.4%**	49.1%	50.9%	**69.6%**
Peak Hour	11:45	11:45	**11:45**	17:15	17:00	**17:00**
Volume	292	267	**559**	336	355	**680**
P.H.F.	0.90	0.90	**0.98**	0.90	0.88	**0.94**

cs@aimtd.com Tell. 714 253 7888

Thursday, September 13, 2018 Location: Pasadena PROJECT: SC1900

ADT2217 Raymond between Dayton and Del Mar .нема South. **Prepared by AimTD tel. 714 253 7888**

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
0:00	13		10					12:00	77		70				
0:15	11		9					12:15	84		68				
0:30	10		7					12:30	71		62				
0:45	0	34	5	31			65	12:45	74	306	69	269			575
1:00	8		6					13:00	85		75				
1:15	3		6					13:15	64		63				
1:30	3		12					13:30	92		65				
1:45	4	18	6	30			48	13:45	66	307	76	279			586
2:00	3		4					14:00	67		58				
2:15	2		5					14:15	72		68				
2:30	2		7					14:30	97		59				
2:45	0	7	2	18			25	14:45	48	284	73	258			542
3:00	0		2					15:00	61		65				
3:15	0		0					15:15	83		61				
3:30	2		0					15:30	74		74				
3:45	0	2	1	3			5	15:45	55	273	66	266			539
4:00	0		1					16:00	85		69				
4:15	2		2					16:15	77		71				
4:30	3		1					16:30	84		88				
4:45	2	7	4	8			15	16:45	65	311	75	303			614
5:00	3		5					17:00	91		78				
5:15	0		7					17:15	107		86				
5:30	3		5					17:30	85		79				
5:45	11	17	11	28			45	17:45	85	368	94	337			705
6:00	9		13					18:00	104		84				
6:15	8		12					18:15	63		69				
6:30	17		17					18:30	76		70				
6:45	18	52	27	69			121	18:45	83	326	83	306			632
7:00	40		34					19:00	76		66				
7:15	29		38					19:15	62		69				
7:30	42		46					19:30	62		55				
7:45	64	175	57	175			350	19:45	52	252	57	247			499
8:00	61		51					20:00	41		48				
8:15	54		44					20:15	47		50				
8:30	52		39					20:30	48		45				
8:45	50	217	44	178			395	20:45	31	167	39	182			349
9:00	54		52					21:00	39		43				
9:15	61		45					21:15	25		47				
9:30	54		42					21:30	27		40				
9:45	61	230	47	186			416	21:45	19	110	51	181			291
10:00	71		46					22:00	43		38				
10:15	59		51					22:15	27		46				
10:30	73		46					22:30	16		33				
10:45	62	265	52	195			460	22:45	18	104	28	145			249
11:00	59		44					23:00	17		17				
11:15	61		42					23:15	14		20				
11:30	65		59					23:30	7		16				
11:45	74	259	57	202			461	23:45	13	51	15	68			119
Total Vol.		1283		1123			**2406**			2859		2841			**5700**

Daily Totals

NB	SB	EB	WB	Combined
4142	3964			**8106**

	AM			PM		
Split %	53.3%	46.7%	**29.7%**	50.2%	49.8%	**70.3%**
Peak Hour	11:45	11:45	**11:45**	17:15	17:15	**17:15**
Volume	306	257	**563**	381	343	**724**
P.H.F.	0.91	0.92	**0.93**	0.85	0.91	**0.94**

cs@aimtd.com Tell. 714 253 7888

Wednesday, September 19, 2018 Location: Pasadena PROJECT:

ADT2454 Dayton between Fair and Raymond. **Prepared by AimTD tel. 714 253 7888**

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
0:30			0		0			12:00			10		6		
0:15			2		2			12:15			11		6		
0:30			2		0			12:30			8		0		
0:45			3	7	0	2	9	12:45			12	41	4	16	57
1:00			0		0			13:00			9		5		
1:15			3		0			13:15			14		6		
1:30			0		0			13:30			15		8		
1:45			2	5	2	2	7	13:45			16	54	5	24	78
2:00			2		0			14:00			14		8		
2:15			0		0			14:15			6		9		
2:30			2		0			14:30			15		4		
2:45			0	4	0	0	4	14:45			22	57	3	24	81
3:00			0		0			15:00			16		5		
3:15			0		0			15:15			11		5		
3:30			0		0			15:30			14		2		
3:45			0	0	0	0		15:45			13	54	5	17	71
4:00			0		0			16:00			11		8		
4:15			0		0			16:15			19		6		
4:30			0		0			16:30			13		3		
4:45			0	0	0	0		16:45			20	63	13	30	93
5:00			0		0			17:00			19		5		
5:15			0		0			17:15			22		9		
5:30			0		2			17:30			24		5		
5:45			0	0	0	2	2	17:45			15	80	9	28	108
6:00			2		0			18:00			21		13		
6:15			0		0			18:15			19		9		
6:30			0		2			18:30			12		5		
6:45			2	4	3	5	9	18:45			10	62	5	32	94
7:00			4		7			19:00			16		8		
7:15			3		2			19:15			9		7		
7:30			4		3			19:30			9		5		
7:45			12	23	4	16	39	19:45			7	41	6	26	67
8:00			12		5			20:00			10		4		
8:15			3		6			20:15			9		2		
8:30			10		0			20:30			3		3		
8:45			16	41	6	17	58	20:45			7	29	4	13	42
9:00			7		10			21:00			4		0		
9:15			13		7			21:15			8		0		
9:30			7		4			21:30			3		2		
9:45			10	37	4	25	62	21:45			8	23	4	6	29
10:00			16		3			22:00			8		3		
10:15			4		7			22:15			0		0		
10:30			12		3			22:30			4		0		
10:45			6	38	8	21	59	22:45			3	15	0	3	18
11:00			10		4			23:00			2		0		
11:15			12		3			23:15			3		0		
11:30			6		6			23:30			2		0		
11:45			12	40	2	15	55	23:45			0	7	0	0	7
Total Vol.				199		105	**304**					526		219	**745**

Daily Totals

NB	SB	EB	WB	Combined
		725	324	**1049**

			AM				PM		
Split %			65.5%	34.5%	**29.0%**		70.6%	29.4%	**71.0%**
Peak Hour	0:30	0:30	8:30	8:45	**8:45**		16:45	17:15	**17:15**
Volume			46	27	**70**		85	36	**118**
P.H.F.			0.72	0.68	**0.80**		0.89	0.69	**0.87**

cs@aimtd.com Tell. 714 253 7888

INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:				
Thu, Sep 13, 18	LOCATION:	Pasadena	PROJECT #:	SC1900
	NORTH & SOUTH:	Fair Oaks	LOCATION #:	1058
	EAST & WEST:	Green	CONTROL:	SIGNAL

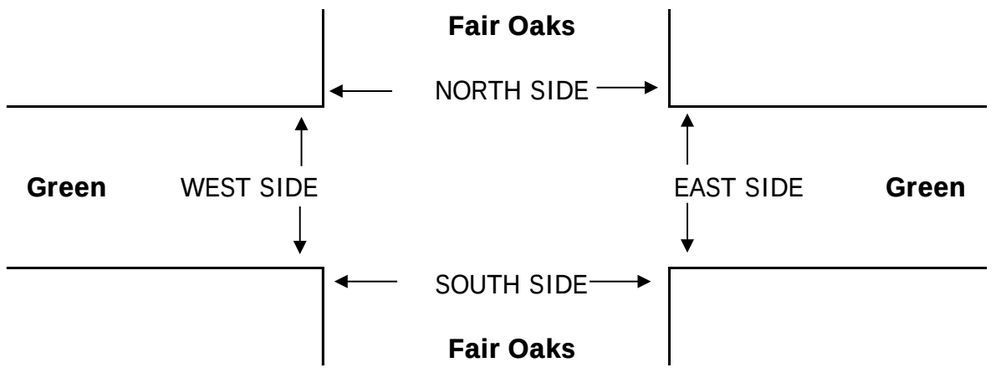
NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

☐ Add U-Turns to Left Turns

		NORTHBOUND Fair Oaks			SOUTHBOUND Fair Oaks			EASTBOUND Green			WESTBOUND Green				U-TURNS				
	LANES:	NL X	NT 2	NR 0	SL 1	ST 2	SR X	EL 0.5	ET 2	ER 0.5	WL X	WT X	WR X	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	56	9	12	114	0	7	37	16	0	0	0	251	0	0	0	0	0
	7:15 AM	0	85	22	24	122	0	3	44	15	0	0	0	315	0	0	0	0	0
	7:30 AM	0	97	26	28	174	0	1	73	11	0	0	0	410	0	0	0	0	0
	7:45 AM	0	118	28	44	198	0	5	104	7	0	0	0	504	0	0	0	0	0
	8:00 AM	0	109	31	44	209	0	1	84	15	0	0	0	493	0	0	0	0	0
	8:15 AM	0	97	16	25	199	0	4	87	16	0	0	0	444	0	0	0	0	0
	8:30 AM	0	140	27	33	188	0	10	83	9	0	0	0	490	0	0	0	0	0
	8:45 AM	0	108	18	47	180	0	11	83	14	0	0	0	461	0	0	0	0	0
	VOLUMES	0	810	177	257	1,384	0	42	595	103	0	0	0	3,368	0	0	0	0	0
	APPROACH %	0%	82%	18%	16%	84%	0%	6%	80%	14%	0%	0%	0%						
	APP/DEPART	987	/	852	1,641	/	1,487	740	/	1,029	0	/	0	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	464	102	146	794	0	20	358	47	0	0	0	1,931					
	APPROACH %	0%	82%	18%	16%	84%	0%	5%	84%	11%	0%	0%	0%						
	PEAK HR FACTOR		0.847			0.929			0.916			0.000		0.958					
	APP/DEPART	566	/	484	940	/	841	425	/	606	0	/	0	0					
PM	4:00 PM	0	125	46	35	148	0	16	100	20	0	0	0	490	0	0	0	0	0
	4:15 PM	0	132	40	31	154	0	7	101	26	0	0	0	491	0	0	0	0	0
	4:30 PM	0	126	42	39	163	0	16	104	25	0	0	0	515	0	0	0	0	0
	4:45 PM	0	132	42	44	160	0	11	97	35	0	0	0	521	0	0	0	0	0
	5:00 PM	0	131	39	37	151	0	19	101	22	0	0	0	500	0	0	0	0	0
	5:15 PM	0	133	52	29	172	0	18	130	31	0	0	0	565	0	0	0	0	0
	5:30 PM	0	103	51	52	154	0	13	116	32	0	0	0	521	0	0	0	0	0
	5:45 PM	0	133	53	40	151	0	19	126	33	0	0	0	555	0	0	0	0	0
	VOLUMES	0	1,015	365	307	1,253	0	119	875	224	0	0	0	4,158	0	0	0	0	0
	APPROACH %	0%	74%	26%	20%	80%	0%	10%	72%	18%	0%	0%	0%						
	APP/DEPART	1,380	/	1,134	1,560	/	1,477	1,218	/	1,547	0	/	0	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	0	500	195	158	628	0	69	473	118	0	0	0	2,141					
	APPROACH %	0%	72%	28%	20%	80%	0%	10%	72%	18%	0%	0%	0%						
	PEAK HR FACTOR		0.934			0.954			0.922			0.000		0.947					
	APP/DEPART	695	/	569	786	/	746	660	/	826	0	/	0	0					



		PEDESTRIAN + BIKE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
AM	7:00 AM	5	3	10	6	24
	7:15 AM	4	7	5	11	27
	7:30 AM	7	4	7	6	24
	7:45 AM	20	6	10	14	50
	8:00 AM	6	9	4	15	34
	8:15 AM	9	4	3	7	23
	8:30 AM	33	10	15	10	68
	8:45 AM	16	17	15	8	56
	TOTAL	100	60	69	77	306
	AM BEGIN PEAK HR	7:45 AM				
PM	4:00 PM	27	10	6	41	84
	4:15 PM	52	7	17	33	109
	4:30 PM	45	19	14	41	119
	4:45 PM	39	34	17	41	131
	5:00 PM	30	19	23	33	105
	5:15 PM	42	25	17	34	118
	5:30 PM	59	24	26	31	140
	5:45 PM	45	26	29	35	135
	TOTAL	339	164	149	289	941
	PM BEGIN PEAK HR	5:00 PM				

PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
5	3	9	6	23
4	7	5	11	27
6	3	7	5	21
20	6	7	12	45
6	9	4	15	34
8	4	3	7	22
30	8	13	10	61
15	12	15	7	49
94	52	63	73	282
64	27	27	44	162
27	9	5	41	82
49	5	13	27	94
45	14	12	40	111
37	29	15	39	120
29	18	23	33	103
42	23	17	33	115
59	21	25	31	136
44	26	27	35	132
332	145	137	279	893
174	88	92	132	486

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
0	0	1	0	1
0	0	0	0	0
1	1	0	1	3
0	0	3	2	5
0	0	0	0	0
1	0	0	0	1
3	2	2	0	7
1	5	0	1	7
6	8	6	4	24
0	1	1	0	2
3	2	4	6	15
0	5	2	1	8
2	5	2	2	11
1	1	0	0	2
0	2	0	1	3
0	3	1	0	4
1	0	2	0	3
7	19	12	10	48

INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

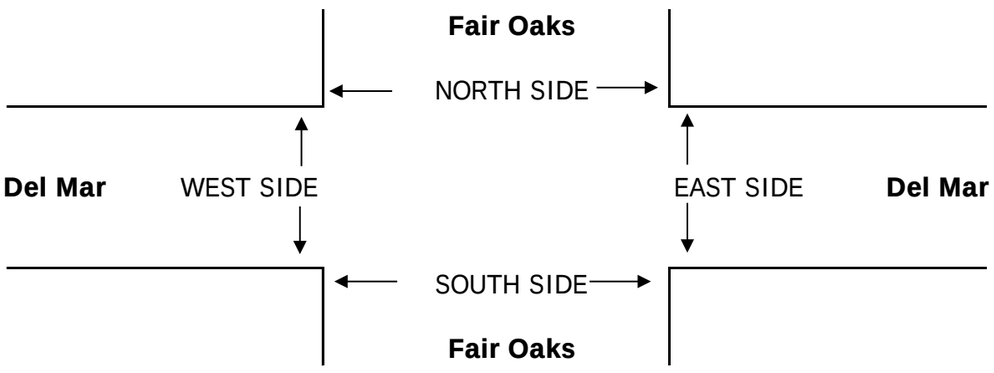
DATE:				
Thu, Sep 13, 18	LOCATION:	Pasadena	PROJECT #:	SC1900
	NORTH & SOUTH:	Fair Oaks	LOCATION #:	183
	EAST & WEST:	Del Mar	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Fair Oaks			SOUTHBOUND Fair Oaks			EASTBOUND Del Mar			WESTBOUND Del Mar				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	44	69	8	13	122	5	1	67	50	15	102	7	503	0	0	0	0	0
	7:15 AM	65	102	9	10	120	4	2	75	48	26	149	9	619	0	0	0	0	0
	7:30 AM	72	128	20	14	165	5	10	113	68	12	164	11	782	0	0	0	0	0
	7:45 AM	58	144	19	13	190	8	7	150	83	24	216	8	920	0	0	0	0	0
	8:00 AM	58	128	11	24	189	2	12	108	75	23	194	9	833	0	0	0	0	0
	8:15 AM	65	103	10	18	204	4	3	122	102	42	206	8	887	0	0	0	0	0
	8:30 AM	48	150	21	17	194	9	7	127	94	24	150	14	855	0	0	0	0	0
	8:45 AM	46	123	17	19	168	6	5	120	125	29	131	16	805	0	0	0	0	0
	VOLUMES	456	947	115	128	1,352	43	47	882	645	195	1,312	82	6,204	0	0	0	0	0
	APPROACH %	30%	62%	8%	8%	89%	3%	3%	56%	41%	12%	83%	5%						
	APP/DEPART	1,518	/	1,076	1,523	/	2,192	1,574	/	1,125	1,589	/	1,811	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	229	525	61	72	777	23	29	507	354	113	766	39	3,495					
	APPROACH %	28%	64%	7%	8%	89%	3%	3%	57%	40%	12%	83%	4%						
	PEAK HR FACTOR		0.922			0.965			0.927			0.896		0.950					
	APP/DEPART	815	/	593	872	/	1,244	890	/	640	918	/	1,018	0					
PM	4:00 PM	48	137	33	27	139	8	12	96	43	29	158	13	743	0	0	0	0	0
	4:15 PM	38	150	26	26	149	15	19	103	48	37	144	8	763	0	0	0	0	0
	4:30 PM	57	142	39	27	155	6	14	105	44	23	141	19	772	0	0	0	0	0
	4:45 PM	50	157	39	18	181	11	12	111	42	21	145	8	795	0	0	0	0	0
	5:00 PM	51	141	36	25	148	8	28	112	53	22	141	15	780	0	0	0	0	0
	5:15 PM	49	165	28	24	178	17	12	106	48	22	151	11	811	0	0	1	0	1
	5:30 PM	58	126	35	23	157	25	13	132	47	31	175	14	836	0	0	0	0	0
	5:45 PM	47	170	33	21	160	11	20	149	38	28	178	8	863	0	0	0	0	0
	VOLUMES	398	1,188	269	191	1,267	101	130	914	363	213	1,233	96	6,363	0	0	1	0	1
	APPROACH %	21%	64%	15%	12%	81%	6%	9%	65%	26%	14%	80%	6%						
	APP/DEPART	1,855	/	1,413	1,559	/	1,843	1,407	/	1,374	1,542	/	1,733	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	205	602	132	93	643	61	73	499	186	103	645	48	3,290					
	APPROACH %	22%	64%	14%	12%	81%	8%	10%	66%	25%	13%	81%	6%						
	PEAK HR FACTOR		0.939			0.910			0.915			0.905		0.953					
	APP/DEPART	939	/	722	797	/	932	758	/	724	796	/	912	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	7	6	3	5	21	7	5	2	4	18	0	1	1	1	3
	7:15 AM	6	3	1	7	17	6	2	1	7	16	0	1	0	0	1
	7:30 AM	13	6	6	7	32	11	6	6	6	29	2	0	0	1	3
	7:45 AM	8	2	6	6	22	8	1	4	6	19	0	1	2	0	3
	8:00 AM	5	3	5	4	17	5	2	5	3	15	0	1	0	1	2
	8:15 AM	8	10	8	6	32	8	9	8	6	31	0	1	0	0	1
	8:30 AM	5	11	8	10	34	5	9	8	8	30	0	2	0	2	4
	8:45 AM	9	8	2	4	23	8	6	2	4	20	1	2	0	0	3
	TOTAL	61	49	39	49	198	58	40	36	44	178	3	9	3	5	20
	AM BEGIN PEAK HR	7:45 AM					26	21	25	23	95					
PM	4:00 PM	9	16	11	14	50	8	16	10	13	47	1	0	1	1	3
	4:15 PM	5	14	8	11	38	5	14	8	10	37	0	0	0	1	1
	4:30 PM	4	9	4	6	23	4	8	4	6	22	0	1	0	0	1
	4:45 PM	9	7	10	8	34	9	6	9	7	31	0	1	1	1	3
	5:00 PM	7	9	14	14	44	5	8	13	11	37	2	1	1	3	7
	5:15 PM	9	8	4	8	29	7	8	4	8	27	2	0	0	0	2
	5:30 PM	0	11	6	8	25	0	7	3	8	18	0	4	3	0	7
	5:45 PM	6	13	10	9	38	4	11	9	6	30	2	2	1	3	8
	TOTAL	49	87	67	78	281	42	78	60	69	249	7	9	7	9	32
	PM BEGIN PEAK HR	5:00 PM					16	34	29	33	112					

INTERSECTION TURNING MOVEMENT COUNTS

T218

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:				
Thu, Sep 13, 18	LOCATION:	Pasadena	PROJECT #:	SC1900
	NORTH & SOUTH:	Raymond	LOCATION #:	1059
	EAST & WEST:	Green	CONTROL:	SIGNAL

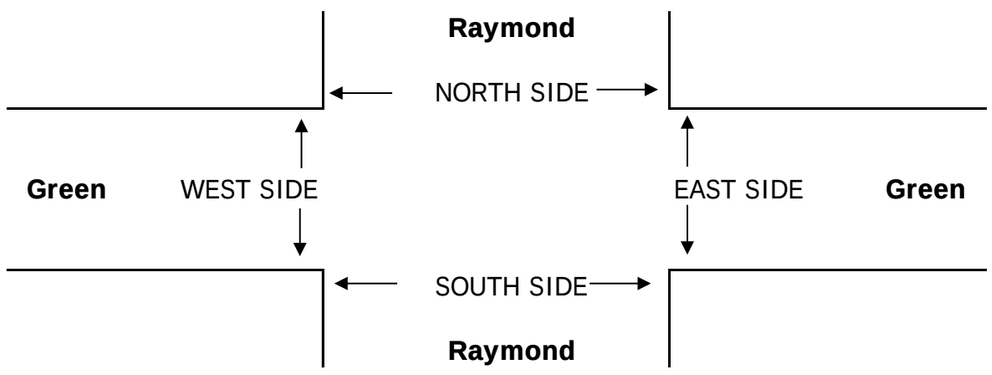
NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Raymond			SOUTHBOUND Raymond			EASTBOUND Green			WESTBOUND Green				U-TURNS				
	LANES:	NL X	NT 2	NR 0	SL 0	ST 2	SR X	EL 0.5	ET 2	ER 0.5	WL X	WT X	WR X	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	15	6	4	21	0	3	55	4	0	0	0	108	0	0	0	0	0
	7:15 AM	0	15	11	3	32	0	5	59	4	0	0	0	129	0	0	0	0	0
	7:30 AM	0	28	7	7	39	0	8	98	8	0	0	0	195	0	0	0	0	0
	7:45 AM	0	42	13	12	54	0	5	141	12	0	0	0	279	0	0	0	0	0
	8:00 AM	0	31	20	8	43	0	13	129	15	0	0	0	259	0	0	0	0	0
	8:15 AM	0	34	10	4	35	0	14	105	7	0	0	0	209	0	0	0	0	0
	8:30 AM	0	30	19	8	39	0	6	106	6	0	0	0	214	0	0	0	0	0
	8:45 AM	0	32	12	7	46	0	4	112	14	0	0	0	227	0	0	0	0	0
	VOLUMES	0	227	98	53	309	0	58	805	70	0	0	0	1,620	0	0	0	0	0
	APPROACH %	0%	70%	30%	15%	85%	0%	6%	86%	8%	0%	0%	0%						
	APP/DEPART	325	/	285	362	/	379	933	/	956	0	/	0	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	137	62	32	171	0	38	481	40	0	0	0	961					
	APPROACH %	0%	69%	31%	16%	84%	0%	7%	86%	7%	0%	0%	0%						
	PEAK HR FACTOR		0.905			0.769			0.884			0.000		0.861					
	APP/DEPART	199	/	175	203	/	211	559	/	575	0	/	0	0					
PM	4:00 PM	0	49	23	13	35	0	17	140	17	0	0	0	294	0	0	0	0	0
	4:15 PM	0	48	22	7	51	0	21	146	11	0	0	0	306	0	1	0	0	1
	4:30 PM	0	55	30	8	65	0	15	159	23	0	0	0	355	0	0	0	0	0
	4:45 PM	0	39	19	10	44	0	14	174	17	0	0	0	317	0	0	0	0	0
	5:00 PM	0	52	29	11	63	0	19	155	34	0	0	0	363	0	0	0	0	0
	5:15 PM	0	62	20	17	54	0	19	170	25	0	0	0	367	0	0	0	0	0
	5:30 PM	0	54	27	9	74	0	25	169	22	0	0	0	380	0	0	0	0	0
	5:45 PM	0	58	33	14	58	0	20	197	27	0	0	0	407	0	1	0	0	1
	VOLUMES	0	417	203	89	444	0	150	1,310	176	0	0	0	2,789	0	2	0	0	2
	APPROACH %	0%	67%	33%	17%	83%	0%	9%	80%	11%	0%	0%	0%						
	APP/DEPART	620	/	569	533	/	620	1,636	/	1,600	0	/	0	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	0	226	109	51	249	0	83	691	108	0	0	0	1,517					
	APPROACH %	0%	67%	33%	17%	83%	0%	9%	78%	12%	0%	0%	0%						
	PEAK HR FACTOR		0.920			0.904			0.904			0.000		0.932					
	APP/DEPART	335	/	310	300	/	357	882	/	850	0	/	0	0					



		PEDESTRIAN + BIKE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
AM	7:00 AM	5	0	9	4	18
	7:15 AM	7	6	6	5	24
	7:30 AM	7	8	15	9	39
	7:45 AM	13	8	9	12	42
	8:00 AM	15	12	14	2	43
	8:15 AM	19	3	10	5	37
	8:30 AM	23	13	14	7	57
	8:45 AM	22	10	24	6	62
	TOTAL	111	60	101	50	322
	AM BEGIN PEAK HR	7:45 AM				
PM	4:00 PM	42	19	20	10	91
	4:15 PM	41	23	21	24	109
	4:30 PM	32	9	17	15	73
	4:45 PM	35	9	10	19	73
	5:00 PM	37	24	14	16	91
	5:15 PM	26	28	24	17	95
	5:30 PM	41	33	29	22	125
	5:45 PM	36	22	29	11	98
	TOTAL	290	167	164	134	755
	PM BEGIN PEAK HR	5:00 PM				

		PEDESTRIAN CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
AM	7:00 AM	5	0	8	2	15
	7:15 AM	7	6	5	4	22
	7:30 AM	7	7	15	7	36
	7:45 AM	11	8	8	11	38
	8:00 AM	15	11	14	1	41
	8:15 AM	18	3	10	5	36
	8:30 AM	22	9	11	7	49
	8:45 AM	21	7	21	5	54
	TOTAL	106	51	92	42	291
	AM BEGIN PEAK HR	66	31	43	24	164
PM	4:00 PM	41	18	20	10	89
	4:15 PM	40	21	20	21	102
	4:30 PM	31	5	16	13	65
	4:45 PM	34	5	9	16	64
	5:00 PM	35	23	13	15	86
	5:15 PM	26	27	24	16	93
	5:30 PM	41	30	27	22	120
	5:45 PM	35	22	28	10	95
	TOTAL	283	151	157	123	714
	PM BEGIN PEAK HR	137	102	92	63	394

		BICYCLE CROSSINGS				
		NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	1	2	3
	7:15 AM	0	0	1	1	2
	7:30 AM	0	1	0	2	3
	7:45 AM	2	0	1	1	4
	8:00 AM	0	1	0	1	2
	8:15 AM	1	0	0	0	1
	8:30 AM	1	4	3	0	8
	8:45 AM	1	3	3	1	8
	TOTAL	5	9	9	8	31
	AM BEGIN PEAK HR					
PM	4:00 PM	1	1	0	0	2
	4:15 PM	1	2	1	3	7
	4:30 PM	1	4	1	2	8
	4:45 PM	1	4	1	3	9
	5:00 PM	2	1	1	1	5
	5:15 PM	0	1	0	1	2
	5:30 PM	0	3	2	0	5
	5:45 PM	1	0	1	1	3
	TOTAL	7	16	7	11	41
	PM BEGIN PEAK HR					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Sep 13, 18

LOCATION: Pasadena
NORTH & SOUTH: Raymond
EAST & WEST: Del Mar

PROJECT #: SC1900
LOCATION #: 294
CONTROL: SIGNAL

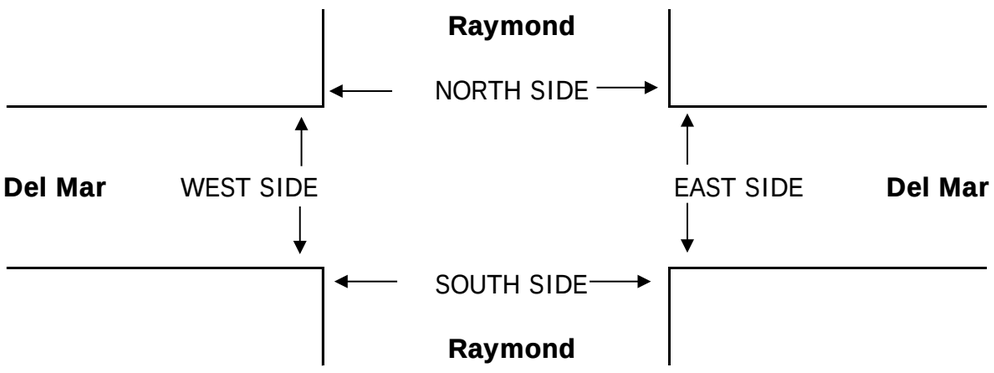
NOTES:

AM / PM / MD / OTHER / OTHER

▲ N
◄ W
E ►
S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Raymond			SOUTHBOUND Raymond			EASTBOUND Del Mar			WESTBOUND Del Mar				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	10	10	7	4	21	6	6	62	19	14	105	16	280	0	0	0	0	0
	7:15 AM	8	24	4	1	23	6	12	73	8	10	173	12	354	0	0	0	0	0
	7:30 AM	18	20	1	4	38	14	11	117	16	22	188	15	464	0	0	0	0	0
	7:45 AM	17	32	9	2	52	9	6	163	19	18	226	34	587	0	0	0	0	0
	8:00 AM	24	45	14	6	43	7	10	108	24	18	190	16	505	0	0	0	0	0
	8:15 AM	25	37	18	3	20	9	10	109	24	22	214	18	509	0	0	0	0	0
	8:30 AM	26	39	14	1	32	11	13	124	21	24	154	18	477	0	0	0	0	0
	8:45 AM	26	34	11	4	38	10	6	109	34	21	133	18	444	0	0	0	0	0
	VOLUMES	154	241	78	25	267	72	74	865	165	149	1,383	147	3,620	0	0	0	0	0
	APPROACH %	33%	51%	16%	7%	73%	20%	7%	78%	15%	9%	82%	9%						
	APP/DEPART	473	/	462	364	/	581	1,104	/	968	1,679	/	1,609	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	92	153	55	12	147	36	39	504	88	82	784	86	2,078					
	APPROACH %	31%	51%	18%	6%	75%	18%	6%	80%	14%	9%	82%	9%						
	PEAK HR FACTOR		0.904			0.774			0.839			0.856		0.885					
	APP/DEPART	300	/	278	195	/	317	631	/	571	952	/	912	0					
PM	4:00 PM	12	53	24	13	28	16	9	146	18	21	202	22	564	0	0	0	0	0
	4:15 PM	14	51	22	10	37	17	15	126	9	24	164	19	508	0	0	0	0	0
	4:30 PM	16	48	28	10	65	13	16	141	12	18	170	22	559	0	0	0	0	0
	4:45 PM	13	35	31	12	37	15	13	156	7	17	151	17	504	0	0	0	0	0
	5:00 PM	15	49	38	9	75	24	16	123	16	29	151	29	574	0	0	0	0	0
	5:15 PM	26	58	36	13	61	11	10	142	17	27	139	36	576	0	0	0	0	0
	5:30 PM	26	63	41	14	78	14	13	140	18	26	158	20	611	0	0	0	0	0
	5:45 PM	32	49	32	17	57	20	11	161	26	24	170	33	632	0	0	0	0	0
	VOLUMES	154	406	252	98	438	130	103	1,135	123	186	1,305	198	4,528	0	0	0	0	0
	APPROACH %	19%	50%	31%	15%	66%	20%	8%	83%	9%	11%	77%	12%						
	APP/DEPART	812	/	707	666	/	747	1,361	/	1,485	1,689	/	1,589	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	99	219	147	53	271	69	50	566	77	106	618	118	2,393					
	APPROACH %	21%	47%	32%	13%	69%	18%	7%	82%	11%	13%	73%	14%						
	PEAK HR FACTOR		0.894			0.910			0.875			0.927		0.947					
	APP/DEPART	465	/	387	393	/	454	693	/	766	842	/	786	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	13	3	10	4	30	12	3	9	4	28	1	0	1	0	2
	7:15 AM	6	2	11	5	24	6	2	10	5	23	0	0	1	0	1
	7:30 AM	14	3	11	5	33	13	3	11	5	32	1	0	0	0	1
	7:45 AM	6	4	14	7	31	6	3	13	4	26	0	1	1	3	5
	8:00 AM	6	4	10	6	26	6	4	10	6	26	0	0	0	0	0
	8:15 AM	7	9	23	8	47	7	7	23	6	43	0	2	0	2	4
	8:30 AM	7	8	19	4	38	6	4	19	3	32	1	4	0	1	6
	8:45 AM	10	11	20	10	51	7	9	19	10	45	3	2	1	0	6
	TOTAL	69	44	118	49	280	63	35	114	43	255	6	9	4	6	25
	AM BEGIN PEAK HR			7:45 AM			25	18	65	19	127					
PM	4:00 PM	14	9	13	19	55	10	6	12	15	43	4	3	1	4	12
	4:15 PM	9	11	10	3	33	9	11	10	2	32	0	0	0	1	1
	4:30 PM	6	8	10	12	36	6	8	10	11	35	0	0	0	1	1
	4:45 PM	15	5	15	5	40	14	5	14	2	35	1	0	1	3	5
	5:00 PM	13	8	14	7	42	10	7	14	7	38	3	1	0	0	4
	5:15 PM	12	11	26	10	59	12	10	26	8	56	0	1	0	2	3
	5:30 PM	12	3	27	7	49	11	3	27	7	48	1	0	0	0	1
	5:45 PM	6	16	16	7	45	4	15	15	7	41	2	1	1	0	4
	TOTAL	87	71	131	70	359	76	65	128	59	328	11	6	3	11	31
	PM BEGIN PEAK HR			5:00 PM			37	35	82	29	183					

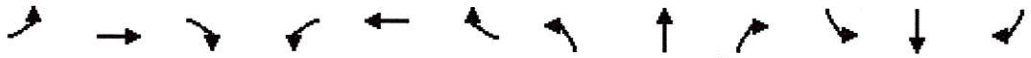
Appendix:
HCM Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑						↑↑		↰	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0						4.0		4.0	4.0	
Lane Util. Factor		0.91						0.95		1.00	0.95	
Frt		0.98						0.97		1.00	1.00	
Flt Protected		1.00						1.00		0.95	1.00	
Satd. Flow (prot)		4989						3443		1770	3539	
Flt Permitted		1.00						1.00		0.21	1.00	
Satd. Flow (perm)		4989						3443		386	3539	
Volume (vph)	20	358	47	0	0	0	0	464	102	146	794	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	389	51	0	0	0	0	504	111	159	863	0
RTOR Reduction (vph)	0	23	0	0	0	0	0	26	0	0	0	0
Lane Group Flow (vph)	0	439	0	0	0	0	0	589	0	159	863	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm									pm+pt		
Protected Phases		4						2		1	6	
Permitted Phases	4									6		
Actuated Green, G (s)		13.8						20.1		56.0	56.0	
Effective Green, g (s)		14.7						21.4		57.3	57.3	
Actuated g/C Ratio		0.18						0.27		0.72	0.72	
Clearance Time (s)		4.9						5.3		3.2	5.3	
Vehicle Extension (s)		4.8						4.8		2.5	4.8	
Lane Grp Cap (vph)		917						921		828	2535	
v/s Ratio Prot								c0.17		0.08	c0.24	
v/s Ratio Perm		0.09								0.06		
v/c Ratio		0.48						0.64		0.19	0.34	
Uniform Delay, d1		29.2						25.9		4.8	4.3	
Progression Factor		1.00						1.00		1.05	0.30	
Incremental Delay, d2		0.8						3.4		0.5	0.3	
Delay (s)		30.0						29.3		5.6	1.6	
Level of Service		C						C		A	A	
Approach Delay (s)		30.0			0.0			29.3			2.2	
Approach LOS		C			A			C			A	

Intersection Summary			
HCM Average Control Delay	16.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.5%	ICU Level of Service	A
Analysis Period (min)	15		

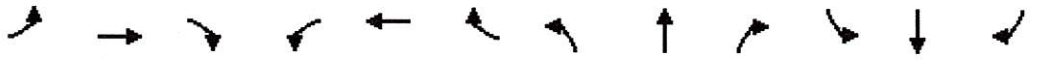
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.96		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.99		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3260		1805	3570		1805	3516		1805	3582	
Flt Permitted	0.20	1.00		0.13	1.00		0.13	1.00		0.31	1.00	
Satd. Flow (perm)	374	3260		241	3570		251	3516		590	3582	
Volume (vph)	29	507	354	113	766	39	229	525	61	72	777	23
Peak-hour factor, PHF	0.78	0.81	0.78	0.70	0.92	0.79	0.80	0.95	0.80	0.77	0.92	0.70
Adj. Flow (vph)	37	626	454	161	833	49	286	553	76	94	845	33
RTOR Reduction (vph)	0	140	0	0	4	0	0	12	0	0	3	0
Lane Group Flow (vph)	37	940	0	161	878	0	286	617	0	94	875	0
Confl. Peds. (#/hr)			67			37			45			42
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	33.0	27.6		41.4	32.8		37.5	29.7		33.9	27.9	
Effective Green, g (s)	32.1	27.5		41.3	32.7		38.5	31.5		34.9	29.7	
Actuated g/C Ratio	0.36	0.31		0.46	0.36		0.43	0.35		0.39	0.33	
Clearance Time (s)	3.2	3.9		3.2	3.9		3.2	5.8		3.2	5.8	
Vehicle Extension (s)	2.5	4.0		2.5	4.0		2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)	207	996		281	1297		228	1231		299	1182	
v/s Ratio Prot	0.01	c0.29		c0.06	0.25		c0.10	0.18		0.02	0.24	
v/s Ratio Perm	0.05			0.20			c0.44			0.10		
v/c Ratio	0.18	0.94		0.57	0.68		1.25	0.50		0.31	0.74	
Uniform Delay, d1	19.7	30.5		19.4	24.2		21.0	23.1		18.1	26.7	
Progression Factor	1.00	1.00		1.89	1.44		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	17.9		2.2	2.7		145.2	1.5		0.4	4.2	
Delay (s)	20.0	48.4		38.8	37.4		166.1	24.5		18.6	30.9	
Level of Service	B	D		D	D		F	C		B	C	
Approach Delay (s)		47.4			37.6			68.8			29.7	
Approach LOS		D			D			E			C	

Intersection Summary			
HCM Average Control Delay	45.5	HCM Level of Service	D
HCM Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



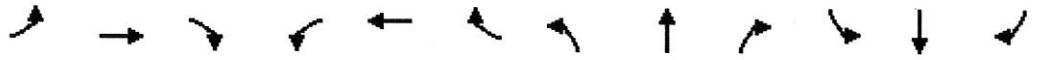
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑						↑↑			↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0						4.0			4.0	
Lane Util. Factor		0.91						0.95			0.95	
Frt		0.99						0.95			1.00	
Flt Protected		1.00						1.00			0.99	
Satd. Flow (prot)		5014						3375			3511	
Flt Permitted		1.00						1.00			0.90	
Satd. Flow (perm)		5014						3375			3170	
Volume (vph)	38	481	40	0	0	0	0	137	62	32	171	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	41	523	43	0	0	0	0	149	67	35	186	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	38	0	0	0	0
Lane Group Flow (vph)	0	593	0	0	0	0	0	178	0	0	221	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm									Perm		
Protected Phases		2						4			4	
Permitted Phases	2									4		
Actuated Green, G (s)		26.4						26.4			26.4	
Effective Green, g (s)		26.0						26.0			26.0	
Actuated g/C Ratio		0.43						0.43			0.43	
Clearance Time (s)		3.6						3.6			3.6	
Lane Grp Cap (vph)		2173						1463			1374	
v/s Ratio Prot								0.05				
v/s Ratio Perm		0.12									c0.07	
v/c Ratio		0.27						0.12			0.16	
Uniform Delay, d1		10.9						10.2			10.4	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		0.3						0.2			0.3	
Delay (s)		11.2						10.3			10.6	
Level of Service		B						B			B	
Approach Delay (s)		11.2			0.0			10.3			10.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3529		1805	3610	1615	1805	3466		1805	3504	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.48	1.00		0.61	1.00	
Satd. Flow (perm)	1805	3529		1805	3610	1615	915	3466		1160	3504	
Volume (vph)	39	504	88	82	784	86	92	153	55	12	147	36
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	42	548	96	89	852	93	100	166	60	13	160	39
RTOR Reduction (vph)	0	12	0	0	0	46	0	42	0	0	26	0
Lane Group Flow (vph)	42	632	0	89	852	47	100	184	0	13	173	0
Turn Type	Prot			Prot		Perm	pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						6	8			4		
Actuated Green, G (s)	4.9	40.3		8.2	43.6	43.6	25.3	19.7		15.2	13.9	
Effective Green, g (s)	5.6	41.9		8.9	45.2	45.2	27.2	21.6		17.4	15.8	
Actuated g/C Ratio	0.06	0.47		0.10	0.50	0.50	0.30	0.24		0.19	0.18	
Clearance Time (s)	4.7	5.6		4.7	5.6	5.6	4.3	5.9		4.3	5.9	
Vehicle Extension (s)	2.5	4.8		2.5	4.8	4.8	2.5	4.8		2.5	4.8	
Lane Grp Cap (vph)	112	1643		178	1813	811	350	832		236	615	
v/s Ratio Prot	0.02	0.18		c0.05	c0.24		c0.02	0.05		0.00	0.05	
v/s Ratio Perm						0.03	c0.06			0.01		
v/c Ratio	0.38	0.38		0.50	0.47	0.06	0.29	0.22		0.06	0.28	
Uniform Delay, d1	40.5	15.7		38.4	14.6	11.5	23.3	27.5		29.5	32.2	
Progression Factor	1.47	0.50		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.3		1.6	0.9	0.1	0.3	0.3		0.1	0.5	
Delay (s)	60.4	8.1		40.0	15.5	11.6	23.7	27.7		29.6	32.7	
Level of Service	E	A		D	B	B	C	C		C	C	
Approach Delay (s)		11.3			17.2			26.5			32.5	
Approach LOS		B			B			C			C	

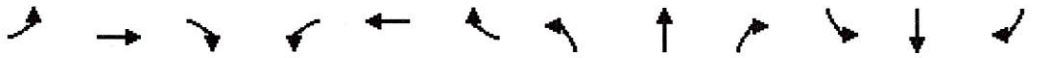
Intersection Summary			
HCM Average Control Delay	18.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑						↑↑		↰	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0						4.0		4.0	4.0	
Lane Util. Factor		0.91						0.95		1.00	0.95	
Frt		0.97						0.96		1.00	1.00	
Flt Protected		0.99						1.00		0.95	1.00	
Satd. Flow (prot)		4923						3390		1770	3539	
Flt Permitted		0.99						1.00		0.16	1.00	
Satd. Flow (perm)		4923						3390		299	3539	
Volume (vph)	69	473	118	0	0	0	0	500	195	158	628	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	514	128	0	0	0	0	543	212	172	683	0
RTOR Reduction (vph)	0	49	0	0	0	0	0	58	0	0	0	0
Lane Group Flow (vph)	0	668	0	0	0	0	0	697	0	172	683	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm									pm+pt		
Protected Phases		4						2		1	6	
Permitted Phases	4									6		
Actuated Green, G (s)		18.3						22.9		51.5	51.5	
Effective Green, g (s)		19.2						24.2		52.8	52.8	
Actuated g/C Ratio		0.24						0.30		0.66	0.66	
Clearance Time (s)		4.9						5.3		3.2	5.3	
Vehicle Extension (s)		4.8						4.8		2.5	4.8	
Lane Grp Cap (vph)		1182						1025		650	2336	
v/s Ratio Prot								c0.21		0.08	c0.19	
v/s Ratio Perm		0.14								0.09		
v/c Ratio		0.57						0.68		0.26	0.29	
Uniform Delay, d1		26.7						24.5		7.2	5.7	
Progression Factor		1.00						1.00		0.42	0.19	
Incremental Delay, d2		1.0						3.6		0.8	0.3	
Delay (s)		27.7						28.1		3.9	1.3	
Level of Service		C						C		A	A	
Approach Delay (s)		27.7			0.0			28.1			1.9	
Approach LOS		C			A			C			A	

Intersection Summary			
HCM Average Control Delay	18.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.99		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3404		1805	3556		1805	3466		1805	3541	
Flt Permitted	0.22	1.00		0.13	1.00		0.19	1.00		0.19	1.00	
Satd. Flow (perm)	421	3404		253	3556		363	3466		362	3541	
Volume (vph)	73	499	186	103	645	48	205	602	132	93	643	61
Peak-hour factor, PHF	0.78	0.81	0.78	0.70	0.92	0.79	0.80	0.95	0.80	0.77	0.92	0.70
Adj. Flow (vph)	94	616	238	147	701	61	256	634	165	121	699	87
RTOR Reduction (vph)	0	43	0	0	7	0	0	26	0	0	11	0
Lane Group Flow (vph)	94	811	0	147	755	0	256	773	0	121	775	0
Confl. Peds. (#/hr)			41			23			27			10
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	35.1	27.6		40.1	30.1		36.6	28.8		36.0	28.5	
Effective Green, g (s)	34.2	27.5		39.2	30.0		37.6	30.6		37.0	30.3	
Actuated g/C Ratio	0.38	0.31		0.44	0.33		0.42	0.34		0.41	0.34	
Clearance Time (s)	3.2	3.9		3.2	3.9		3.2	5.8		3.2	5.8	
Vehicle Extension (s)	2.5	4.0		2.5	4.0		2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)	263	1040		269	1185		264	1178		256	1192	
v/s Ratio Prot	0.03	c0.24		c0.06	0.21		c0.08	0.22		0.04	0.22	
v/s Ratio Perm	0.11			0.18			c0.33			0.16		
v/c Ratio	0.36	0.78		0.55	0.64		0.97	0.66		0.47	0.65	
Uniform Delay, d1	19.0	28.5		18.2	25.4		22.4	25.2		18.0	25.4	
Progression Factor	1.00	1.00		1.00	1.00		1.15	1.09		1.00	1.00	
Incremental Delay, d2	0.6	5.8		1.8	2.6		39.5	2.2		1.0	2.8	
Delay (s)	19.6	34.3		20.0	28.0		65.1	29.7		19.0	28.1	
Level of Service	B	C		C	C		E	C		B	C	
Approach Delay (s)		32.8			26.7			38.3			26.9	
Approach LOS		C			C			D			C	

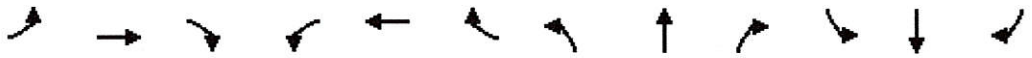
Intersection Summary			
HCM Average Control Delay	31.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑						↑↑			↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0						4.0			4.0	
Lane Util. Factor		0.91						0.95			0.95	
Frt		0.98						0.95			1.00	
Flt Protected		1.00						1.00			0.99	
Satd. Flow (prot)		4969						3367			3510	
Flt Permitted		1.00						1.00			0.85	
Satd. Flow (perm)		4969						3367			2992	
Volume (vph)	83	691	108	0	0	0	0	226	109	51	249	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	90	751	117	0	0	0	0	246	118	55	271	0
RTOR Reduction (vph)	0	23	0	0	0	0	0	65	0	0	0	0
Lane Group Flow (vph)	0	935	0	0	0	0	0	299	0	0	326	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm									Perm		
Protected Phases		2						4			4	
Permitted Phases	2									4		
Actuated Green, G (s)		36.4						36.4			36.4	
Effective Green, g (s)		36.0						36.0			36.0	
Actuated g/C Ratio		0.45						0.45			0.45	
Clearance Time (s)		3.6						3.6			3.6	
Lane Grp Cap (vph)		2236						1515			1346	
v/s Ratio Prot								0.09				
v/s Ratio Perm		0.19									c0.11	
v/c Ratio		0.42						0.20			0.24	
Uniform Delay, d1		14.9						13.3			13.6	
Progression Factor		1.44						1.00			0.06	
Incremental Delay, d2		0.5						0.3			0.4	
Delay (s)		22.0						13.6			1.2	
Level of Service		C						B			A	
Approach Delay (s)		22.0			0.0			13.6			1.2	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.94		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3545		1805	3610	1615	1805	3392		1805	3500	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.41	1.00		0.43	1.00	
Satd. Flow (perm)	1805	3545		1805	3610	1615	783	3392		819	3500	
Volume (vph)	50	566	77	106	618	118	99	219	147	53	271	69
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	615	84	115	672	128	108	238	160	58	295	75
RTOR Reduction (vph)	0	12	0	0	0	70	0	121	0	0	31	0
Lane Group Flow (vph)	54	687	0	115	672	58	108	277	0	58	339	0
Turn Type	Prot			Prot		Perm	pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						6	8			4		
Actuated Green, G (s)	4.8	31.6		7.8	34.6	34.6	21.0	17.5		19.2	16.6	
Effective Green, g (s)	5.5	33.2		8.5	36.2	36.2	23.2	19.4		21.4	18.5	
Actuated g/C Ratio	0.07	0.42		0.11	0.45	0.45	0.29	0.24		0.27	0.23	
Clearance Time (s)	4.7	5.6		4.7	5.6	5.6	4.3	5.9		4.3	5.9	
Vehicle Extension (s)	2.5	4.8		2.5	4.8	4.8	2.5	4.8		2.5	4.8	
Lane Grp Cap (vph)	124	1471		192	1634	731	276	823		255	809	
v/s Ratio Prot	0.03	c0.19		c0.06	c0.19		c0.02	0.08		0.01	c0.10	
v/s Ratio Perm						0.04	0.10			0.05		
v/c Ratio	0.44	0.47		0.60	0.41	0.08	0.39	0.34		0.23	0.42	
Uniform Delay, d1	35.8	17.0		34.1	14.7	12.4	21.6	25.0		22.2	26.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.8	1.1		4.2	0.8	0.2	0.7	0.5		0.3	0.7	
Delay (s)	37.5	18.1		38.3	15.5	12.6	22.2	25.5		22.6	26.9	
Level of Service	D	B		D	B	B	C	C		C	C	
Approach Delay (s)		19.4			18.0			24.8			26.3	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	21.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑						↑↑		↖	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0						4.0		4.0	4.0	
Lane Util. Factor		0.91						0.95		1.00	0.95	
Frt		0.98						0.97		1.00	1.00	
Flt Protected		1.00						1.00		0.95	1.00	
Satd. Flow (prot)		4986						3445		1770	3539	
Flt Permitted		1.00						1.00		0.20	1.00	
Satd. Flow (perm)		4986						3445		375	3539	
Volume (vph)	20	358	49	0	0	0	0	474	102	146	798	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	389	53	0	0	0	0	515	111	159	867	0
RTOR Reduction (vph)	0	24	0	0	0	0	0	25	0	0	0	0
Lane Group Flow (vph)	0	440	0	0	0	0	0	601	0	159	867	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm									pm+pt		
Protected Phases		4						2		1	6	
Permitted Phases	4									6		
Actuated Green, G (s)		13.8						20.2		56.0	56.0	
Effective Green, g (s)		14.7						21.5		57.3	57.3	
Actuated g/C Ratio		0.18						0.27		0.72	0.72	
Clearance Time (s)		4.9						5.3		3.2	5.3	
Vehicle Extension (s)		4.8						4.8		2.5	4.8	
Lane Grp Cap (vph)		916						926		823	2535	
v/s Ratio Prot								c0.17		0.08	c0.24	
v/s Ratio Perm		0.09								0.06		
v/c Ratio		0.48						0.65		0.19	0.34	
Uniform Delay, d1		29.2						25.9		4.9	4.3	
Progression Factor		1.00						1.00		1.13	0.30	
Incremental Delay, d2		0.8						3.5		0.5	0.3	
Delay (s)		30.0						29.4		6.0	1.6	
Level of Service		C						C		A	A	
Approach Delay (s)		30.0			0.0			29.4			2.3	
Approach LOS		C			A			C			A	

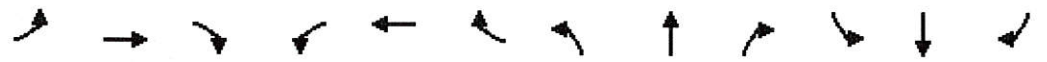
Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.96		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.99		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3260		1805	3570		1805	3517		1805	3579	
Flt Permitted	0.20	1.00		0.13	1.00		0.13	1.00		0.31	1.00	
Satd. Flow (perm)	374	3260		241	3570		243	3517		586	3579	
Volume (vph)	31	507	354	113	766	39	229	528	61	72	782	26
Peak-hour factor, PHF	0.78	0.81	0.78	0.70	0.92	0.79	0.80	0.95	0.80	0.77	0.92	0.70
Adj. Flow (vph)	40	626	454	161	833	49	286	556	76	94	850	37
RTOR Reduction (vph)	0	140	0	0	4	0	0	12	0	0	3	0
Lane Group Flow (vph)	40	940	0	161	878	0	286	620	0	94	884	0
Confl. Peds. (#/hr)			67			37			45			42
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	33.0	27.6		41.4	32.8		37.5	29.7		33.9	27.9	
Effective Green, g (s)	32.1	27.5		41.3	32.7		38.5	31.5		34.9	29.7	
Actuated g/C Ratio	0.36	0.31		0.46	0.36		0.43	0.35		0.39	0.33	
Clearance Time (s)	3.2	3.9		3.2	3.9		3.2	5.8		3.2	5.8	
Vehicle Extension (s)	2.5	4.0		2.5	4.0		2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)	207	996		281	1297		225	1231		298	1181	
v/s Ratio Prot	0.01	c0.29		c0.06	0.25		c0.10	0.18		0.02	0.25	
v/s Ratio Perm	0.06			0.20			c0.44			0.10		
v/c Ratio	0.19	0.94		0.57	0.68		1.27	0.50		0.32	0.75	
Uniform Delay, d1	19.7	30.5		19.4	24.2		20.8	23.1		18.1	26.8	
Progression Factor	1.00	1.00		1.89	1.44		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	17.9		2.2	2.7		152.1	1.5		0.4	4.4	
Delay (s)	20.1	48.4		38.7	37.5		172.9	24.6		18.6	31.2	
Level of Service	C	D		D	D		F	C		B	C	
Approach Delay (s)		47.4			37.7			70.8			30.0	
Approach LOS		D			D			E			C	

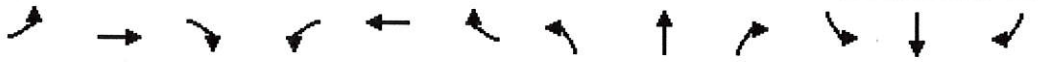
Intersection Summary			
HCM Average Control Delay	46.0	HCM Level of Service	D
HCM Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑						↑↑			↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0						4.0			4.0	
Lane Util. Factor		0.91						0.95			0.95	
Frt		0.99						0.95			1.00	
Flt Protected		1.00						1.00			0.99	
Satd. Flow (prot)		5014						3367			3512	
Flt Permitted		1.00						1.00			0.90	
Satd. Flow (perm)		5014						3367			3170	
Volume (vph)	38	481	40	0	0	0	0	140	67	32	176	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	41	523	43	0	0	0	0	152	73	35	191	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	41	0	0	0	0
Lane Group Flow (vph)	0	593	0	0	0	0	0	184	0	0	226	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm									Perm		
Protected Phases		2						4			4	
Permitted Phases	2									4		
Actuated Green, G (s)		26.4						26.4			26.4	
Effective Green, g (s)		26.0						26.0			26.0	
Actuated g/C Ratio		0.43						0.43			0.43	
Clearance Time (s)		3.6						3.6			3.6	
Lane Grp Cap (vph)		2173						1459			1374	
v/s Ratio Prot								0.05				
v/s Ratio Perm		0.12									c0.07	
v/c Ratio		0.27						0.13			0.16	
Uniform Delay, d1		10.9						10.2			10.4	
Progression Factor		1.00						1.00			1.00	
Incremental Delay, d2		0.3						0.2			0.3	
Delay (s)		11.2						10.4			10.6	
Level of Service		B						B			B	
Approach Delay (s)		11.2			0.0			10.4			10.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3529		1805	3610	1615	1805	3468		1805	3505	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.48	1.00		0.61	1.00	
Satd. Flow (perm)	1805	3529		1805	3610	1615	910	3468		1158	3505	
Volume (vph)	39	504	88	82	784	88	92	155	55	15	150	36
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	42	548	96	89	852	96	100	168	60	16	163	39
RTOR Reduction (vph)	0	12	0	0	0	48	0	42	0	0	26	0
Lane Group Flow (vph)	42	632	0	89	852	48	100	186	0	16	176	0
Turn Type	Prot			Prot		Perm	pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						6	8			4		
Actuated Green, G (s)	4.9	40.2		8.2	43.5	43.5	25.4	19.8		15.3	14.0	
Effective Green, g (s)	5.6	41.8		8.9	45.1	45.1	27.3	21.7		17.5	15.9	
Actuated g/C Ratio	0.06	0.46		0.10	0.50	0.50	0.30	0.24		0.19	0.18	
Clearance Time (s)	4.7	5.6		4.7	5.6	5.6	4.3	5.9		4.3	5.9	
Vehicle Extension (s)	2.5	4.8		2.5	4.8	4.8	2.5	4.8		2.5	4.8	
Lane Grp Cap (vph)	112	1639		178	1809	809	350	836		237	619	
v/s Ratio Prot	0.02	0.18		c0.05	c0.24		c0.02	0.05		0.00	0.05	
v/s Ratio Perm						0.03	c0.06			0.01		
v/c Ratio	0.38	0.39		0.50	0.47	0.06	0.29	0.22		0.07	0.28	
Uniform Delay, d1	40.5	15.7		38.4	14.7	11.5	23.3	27.4		29.5	32.1	
Progression Factor	1.47	0.50		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.3		1.6	0.9	0.1	0.3	0.3		0.1	0.5	
Delay (s)	60.1	8.2		40.0	15.5	11.7	23.6	27.7		29.6	32.6	
Level of Service	E	A		D	B	B	C	C		C	C	
Approach Delay (s)		11.4			17.3			26.4			32.4	
Approach LOS		B			B			C			C	

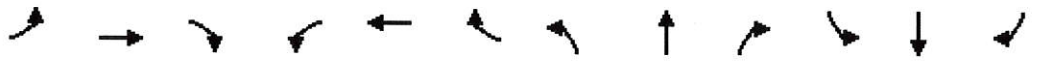
Intersection Summary			
HCM Average Control Delay	18.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑						↑↑		↰	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0						4.0		4.0	4.0	
Lane Util. Factor		0.91						0.95		1.00	0.95	
Frt		0.97						0.96		1.00	1.00	
Flt Protected		0.99						1.00		0.95	1.00	
Satd. Flow (prot)		4919						3392		1770	3539	
Flt Permitted		0.99						1.00		0.16	1.00	
Satd. Flow (perm)		4919						3392		296	3539	
Volume (vph)	69	473	122	0	0	0	0	509	195	158	637	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	514	133	0	0	0	0	553	212	172	692	0
RTOR Reduction (vph)	0	52	0	0	0	0	0	56	0	0	0	0
Lane Group Flow (vph)	0	670	0	0	0	0	0	710	0	172	692	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm									pm+pt		
Protected Phases		4						2		1	6	
Permitted Phases	4									6		
Actuated Green, G (s)		18.3						23.2		51.5	51.5	
Effective Green, g (s)		19.2						24.5		52.8	52.8	
Actuated g/C Ratio		0.24						0.31		0.66	0.66	
Clearance Time (s)		4.9						5.3		3.2	5.3	
Vehicle Extension (s)		4.8						4.8		2.5	4.8	
Lane Grp Cap (vph)		1181						1039		643	2336	
v/s Ratio Prot								c0.21		0.08	c0.20	
v/s Ratio Perm		0.14								0.10		
v/c Ratio		0.57						0.68		0.27	0.30	
Uniform Delay, d1		26.7						24.3		7.3	5.7	
Progression Factor		1.00						1.00		0.76	0.23	
Incremental Delay, d2		1.0						3.6		0.9	0.3	
Delay (s)		27.7						28.0		6.4	1.6	
Level of Service		C						C		A	A	
Approach Delay (s)		27.7			0.0			28.0			2.6	
Approach LOS		C			A			C			A	

Intersection Summary			
HCM Average Control Delay	18.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		

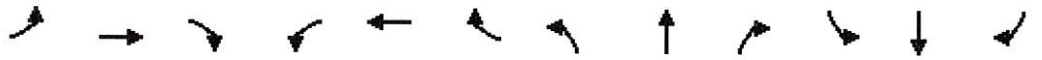
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.99		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3404		1805	3556		1805	3467		1805	3539	
Flt Permitted	0.22	1.00		0.13	1.00		0.19	1.00		0.19	1.00	
Satd. Flow (perm)	419	3404		254	3556		355	3467		357	3539	
Volume (vph)	77	499	186	103	645	48	205	608	132	93	648	64
Peak-hour factor, PHF	0.78	0.81	0.78	0.70	0.92	0.79	0.80	0.95	0.80	0.77	0.92	0.70
Adj. Flow (vph)	99	616	238	147	701	61	256	640	165	121	704	91
RTOR Reduction (vph)	0	43	0	0	7	0	0	26	0	0	11	0
Lane Group Flow (vph)	99	811	0	147	755	0	256	779	0	121	784	0
Confl. Peds. (#/hr)			41			23			27			10
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	35.0	27.5		40.0	30.0		36.7	28.9		36.1	28.6	
Effective Green, g (s)	34.1	27.4		39.1	29.9		37.7	30.7		37.1	30.4	
Actuated g/C Ratio	0.38	0.30		0.43	0.33		0.42	0.34		0.41	0.34	
Clearance Time (s)	3.2	3.9		3.2	3.9		3.2	5.8		3.2	5.8	
Vehicle Extension (s)	2.5	4.0		2.5	4.0		2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)	262	1036		269	1181		261	1183		255	1195	
v/s Ratio Prot	0.03	c0.24		c0.06	0.21		c0.08	0.22		0.04	0.22	
v/s Ratio Perm	0.11			0.18			c0.33			0.16		
v/c Ratio	0.38	0.78		0.55	0.64		0.98	0.66		0.47	0.66	
Uniform Delay, d1	19.1	28.6		18.3	25.5		22.4	25.2		18.0	25.4	
Progression Factor	1.00	1.00		1.00	1.00		1.15	1.09		1.00	1.00	
Incremental Delay, d2	0.7	5.9		1.8	2.7		43.1	2.2		1.0	2.8	
Delay (s)	19.8	34.5		20.1	28.1		68.8	29.7		19.0	28.2	
Level of Service	B	C		C	C		E	C		B	C	
Approach Delay (s)		33.0			26.8			39.1			27.0	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM Average Control Delay	31.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑						↑↑			↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0						4.0			4.0	
Lane Util. Factor		0.91						0.95			0.95	
Frt		0.98						0.95			1.00	
Flt Protected		1.00						1.00			0.99	
Satd. Flow (prot)		4969						3363			3511	
Flt Permitted		1.00						1.00			0.85	
Satd. Flow (perm)		4969						3363			2996	
Volume (vph)	83	691	108	0	0	0	0	229	114	51	260	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	90	751	117	0	0	0	0	249	124	55	283	0
RTOR Reduction (vph)	0	23	0	0	0	0	0	66	0	0	0	0
Lane Group Flow (vph)	0	935	0	0	0	0	0	307	0	0	338	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm									Perm		
Protected Phases		2						4			4	
Permitted Phases	2									4		
Actuated Green, G (s)		36.4						36.4			36.4	
Effective Green, g (s)		36.0						36.0			36.0	
Actuated g/C Ratio		0.45						0.45			0.45	
Clearance Time (s)		3.6						3.6			3.6	
Lane Grp Cap (vph)		2236						1513			1348	
v/s Ratio Prot								0.09				
v/s Ratio Perm		0.19									c0.11	
v/c Ratio		0.42						0.20			0.25	
Uniform Delay, d1		14.9						13.3			13.6	
Progression Factor		1.44						1.00			0.06	
Incremental Delay, d2		0.5						0.3			0.4	
Delay (s)		22.0						13.6			1.2	
Level of Service		C						B			A	
Approach Delay (s)		22.0			0.0			13.6			1.2	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.94		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3545		1805	3610	1615	1805	3394		1805	3501	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.42	1.00		0.39	1.00	
Satd. Flow (perm)	1805	3545		1805	3610	1615	804	3394		746	3501	
Volume (vph)	50	566	77	106	618	122	99	223	147	56	274	69
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	615	84	115	672	133	108	242	160	61	298	75
RTOR Reduction (vph)	0	12	0	0	0	72	0	124	0	0	31	0
Lane Group Flow (vph)	54	688	0	115	672	61	108	278	0	61	342	0
Turn Type	Prot			Prot		Perm	pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						6	8			4		
Actuated Green, G (s)	4.7	32.4		7.6	35.3	35.3	19.5	16.0		19.5	16.0	
Effective Green, g (s)	5.4	34.0		8.3	36.9	36.9	21.7	17.9		21.7	17.9	
Actuated g/C Ratio	0.07	0.42		0.10	0.46	0.46	0.27	0.22		0.27	0.22	
Clearance Time (s)	4.7	5.6		4.7	5.6	5.6	4.3	5.9		4.3	5.9	
Vehicle Extension (s)	2.5	4.8		2.5	4.8	4.8	2.5	4.8		2.5	4.8	
Lane Grp Cap (vph)	122	1507		187	1665	745	266	759		253	783	
v/s Ratio Prot	0.03	c0.19		c0.06	c0.19		c0.02	0.08		0.01	c0.10	
v/s Ratio Perm						0.04	0.09			0.05		
v/c Ratio	0.44	0.46		0.61	0.40	0.08	0.41	0.37		0.24	0.44	
Uniform Delay, d1	35.9	16.4		34.3	14.3	12.1	22.7	26.3		22.1	26.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.9	1.0		5.0	0.7	0.2	0.7	0.6		0.4	0.8	
Delay (s)	37.7	17.4		39.4	15.0	12.3	23.4	26.8		22.5	27.5	
Level of Service	D	B		D	B	B	C	C		C	C	
Approach Delay (s)		18.9			17.7			26.1			26.8	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	21.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Appendix:
PEQI Calculation Sheet

City of Pasadena
Department of Transportation
Pedestrian Environmental Quality Index
Calculation Summary
-- Segment --

Segment: Dayton Street
Limits: Between Fair Oaks Ave and Raymond Ave

Indicator Category		Score Weight	Indicator Response	Eastbound (South side) Surveyed Response Category Score	Indicator Response	Westbound (North side) Surveyed Response Category Score
Traffic						
	Number of Lanes	0.64	1	13	1	13
	Posted Speed Limit	0.64	25 mph or none posted	4	25 mph or none posted	4
	Traffic Volume[1]	0.64	1,000-6,000 V/D	11	1,000-6,000 V/D	11
	Street Traffic Calming Features (TCFs)	0.64	None	0	None	0
				28		**28**
Street design						
	Width of Sidewalk	1.35	8-12 ft	20	8-12 ft	20
	Width of Throughway	1.35	4-6 ft	13	4-6 ft	13
	Large SW Obstructions	1.35	None	22	None	22
	Sidewalk Impediments	1.35	None	24	None	24
	Trees	1.35	Sporadic	7	Sporadic	7
	Driveway Cuts	1.35	None	15	1 to 5	7
	Presence of Buffer	1.35	Parallel parking	11	Parallel parking	11
	Planters/Gardens	1.35	Yes	4	Yes	4
	Public Seating	1.35	No	0	No	0
				116		**108**
Land Use						
	Public Art/ Historic Sites	0.15	Yes	4	Yes	4
	Retail Use/Public Places	0.15	3 or more	11	None	0
				15		**4**
Perceived Safety						
	Lighting	0.34	Continuous	17	Continuous	17
	Illegal Graffiti	0.34	No	2	No	2
	Litter	0.34	No	11	No	11
	Empty Spaces	0.34	No	4	No	4
				34		**34**
Domain Summary		Score Weight		Category Score		Category Score
	Traffic	0.64	Traffic	28	Traffic	28
	Street Design	1.35	Street Design	116	Street Design	108
	Land Use	0.15	Land Use	15	Land Use	4
	Safety	0.34	Safety	34	Safety	34
		2.48		193		174

PEQI Score **78** Eastbound (South side)

PEQI Score **70** Westbound (North side)

[1] Traffic volumes are based on segment volumes, not directional traffic volumes.

Appendix:
BEQI Calculation Sheet

City of Pasadena
Department of Transportation
Bicycle Environmental Quality Index
Calculation Summary

Segment: Dayton Street
Limits: Between Fair Oaks Ave and Raymond Ave

Indicator Category	Score Weight	Indicator Response	Eastbound (South side) Surveyed Response Category Score	Indicator Response	Westbound (North side) Surveyed Response Category Score
Street design					
Presence of a Marked Area for Bicycle Traffic	2.05	None	4	None	4
Width of Bike Lane	2.05	None	0	None	0
Bicycle Lane Markings	2.05	None	4	None	4
Connectivity of Bicycle Lanes	2.05	No	13	No	13
Pavement Type/Condition	2.05	Smooth Surface	40	Smooth Surface	40
Street Slope	2.05	< 5%	27	< 5%	27
Driveway Cuts	2.05	None	27	Few (Less than Five)	16
Presence of Trees	2.05	Sporadically Lined	22	Sporadically Lined	22
			137		**126**
Vehicle Traffic					
Posted Speed Limit	1.39	25	29	25	29
Traffic Volume - Avg # of Vehicles Per Day	1.39	1,000 - 5,000	19	1,000 - 5,000	19
Percentage of Heavy Vehicles	1.39	Less than 5%	36	Less than 5%	36
Parallel Parking Adjacent to Bicycle Lane/Route	1.39	Time-restricted Parallel Parking (TPP) < 7 ft	19	Time-restricted Parallel Parking (TPP) < 7 ft	19
Traffic Calming Features Streets	1.39	0 TCF	11	0 TCF	11
Number of Lanes	1.39	1	36	1	36
			150		**150**
Safety/Other					
Presence of Bicycle Lane Signs	0.42	No	15	No	15
Bicycle/Pedestrian Scale Lighting	0.42	Yes - Public	36	Yes - Public	36
			51		**51**
Land Use					
Bicycle Parking	0.66	No	12	No	12
Retail Use	0.66	3 or More	22	0	14
Line of Site	0.66	Clear Line of Sight	36	Clear Line of Sight	36
			70		**62**

Domain Summary	Score Weight	Min Score	Category Score	Min Score	Category Score
Street design	2.05	62	137	62	126
Vehicle Traffic	1.39	59	150	59	150
Safety/Other	0.42	30	51	30	51
Land Use	0.66	33	70	33	62
	4.52	184	408	184	389

BEQI Score [1] **50** Eastbound (South side)

BEQI Score [1] **45** Westbound (North side)

[1] BEQI calculation did not consider intersection indicators.

APPENDIX H

Letters Received on the SCEA during the Public Comment Period

Letter A-1

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 269-1124
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Serious Drought.
Making Conservation
a California Way of Life.

April 1, 2021

Mr. Kevin Johnson
Planning Division
Design & Historic Preservation Section
City of Pasadena
175 North Garfield Avenue
Pasadena, CA 91101

RE: Central Park Apartments
Vic. LA-210 PM R25.54
LA-710 PM R32.45
SCH # 2021030197
GTS # LA-2021-03510AL-SCEA

Dear Mr. Johnson:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The Proposed Project involves the redevelopment of an existing surface parking lot, with the construction of a new 6-story (plus mezzanine), approximately 93,355 gross square-foot mixed-use development, with approximately 11,400 square feet of commercial/retail uses, and 84 apartments, over four levels of subterranean parking.

The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. Senate Bill 743 (2013) has been codified into CEQA law. It mandates that CEQA review of transportation impacts of proposed developments be modified by using Vehicle Miles Traveled (VMT) as the primary metric in identifying transportation impacts. As a reminder, Vehicle Miles Traveled (VMT) is the standard transportation analysis metric in CEQA for land use projects after the July 1, 2020 statewide implementation date. You may reference The Governor's Office of Planning and Research (OPR) website for more information.

1

http://opr.ca.gov/ceqa/updates/guidelines/

This development should incorporate multi-modal and complete streets transportation elements that will actively promote alternatives to car use and better manage existing parking assets. Prioritizing and allocating space to efficient modes of travel such as

bicycling and public transit can allow streets to transport more people in a fixed amount of right-of-way.

Caltrans supports the implementation of complete streets and pedestrian safety measures such as road diets and other traffic calming measures. Please note the Federal Highway Administration (FHWA) recognizes the road diet treatment as a proven safety countermeasure, and the cost of a road diet can be significantly reduced if implemented in tandem with routine street resurfacing.

Also, Caltrans has published the VMT-focused Transportation Impact Study Guide (TISG), and Caltrans Interim Land Development and Intergovernmental Review (LD-IGR) Safety Review Practitioners Guidance.

https://dot.ca.gov/programs/transportation-planning/office-of-smart-mobility-climate-change/sb-743

The Travel Demand Forecasting Model calculation results for the proposed project determined that the project would not cause a significant impact to any of the metrics as outlined in the City's Traffic Transportation Impact Analysis Current Practice and Guidelines. The transportation analysis also concluded that the project would not cause a decrease in the percentage of existing citywide service population within a quarter mile of Level 1 and 2 transit or bike facilities. Furthermore, the analysis also concluded that the project would not decrease the Citywide Pedestrian Accessibility Score. 1

Additionally, the proposed project lies within 0.25 miles of the Gold Line/Del Mar Metro Station and encourages bike use by providing end-of-trip bicycle storage. Therefore, the project will not conflict with a program plan, ordinance, or policy addressing the circulation system and will encourage the use of alternative modes of transportation.

The CEQA transportation analysis (included as Appendix G) utilized a CEQA threshold of an increase of the existing Citywide VMT per capita of 22.6. The analysis concluded an incremental change (existing plus project) of 16.2, which is below the significant impact cap. There would be a less than significant impact.

The project has been evaluated by the Pasadena Department of Transportation (PasDOT) and its impact on circulation due to the proposed use and its design has been found not to be hazardous to traffic circulation either within the project or in the vicinity of the project. In addition, the project's circulation design meets the City's engineering standards. Therefore, the proposed project would not increase hazards due to a design feature or incompatible use and would have no associated impacts.

For this project, transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a

transportation permit from Caltrans. It is recommended that large size truck trips be limited to off-peak commute periods and idle time not to exceed 10 minutes.

1

If you have any questions, please feel free to contact Mr. Alan Lin the project coordinator at (213) 269-1124 and refer to GTS # LA-2021-03510AL-MND.

Sincerely,

Anthony Higgins for

MIYA EDMONSON
IGR/CEQA Branch Chief

email: State Clearinghouse

Letter A-2

LOS ANGELES COUNTY SANITATION DISTRICTS
Converting Waste Into Resources

Robert C. Ferrante
Chief Engineer and General Manager

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
(562) 699-7411 • www.lacsd.org

March 24, 2021

Ref. DOC 6091161

Mr. Kevin Johnson
Senior Planner
City of Pasadena
175 North Garfield Avenue
Pasadena, CA 91101

Dear Mr. Johnson:

SCEA Response Letter for the Central Park Apartment Project

The Los Angeles County Sanitation Districts (Districts) received the Draft Sustainable Communities Environmental Assessment (SCEA) for the subject project forwarded by your office on March 8, 2021. The proposed project is located within the jurisdictional boundary of District No. 16. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' Arroyo-Seco Trunk Sewer Section 4, located in Garfield Avenue just east of Arroyo Seco Parkway. The Districts' 21-inch diameter trunk sewer has a capacity of 13.4 million gallons per day (mgd) and conveyed a peak flow of 2 mgd when last measured in 2015.

2. The wastewater generated by the proposed project will be treated at the Joint Water Pollution Control Plant located in the City of Carson, which has a capacity of 400 mgd and currently processes an average flow of 261.1 mgd, or the Los Coyotes Water Reclamation Plant located in the City of Cerritos, which has a capacity of 37.5 mgd and currently processes an average flow of 21.7 mgd.

1

3. The expected increase in average wastewater flow from the project site, described in the plan as a mixed-use development consisting of 11,400 square feet of retail space and 84 residential apartments, is 16,809 gallons per day. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, under Services, then Wastewater Program and Permits, select Will Serve Program, and scroll down to click on the Table 1, Loadings for Each Class of Land Use link.

4. The Districts are empowered by the California Health and Safety Code to charge a fee to connect facilities (directly or indirectly) to the Districts' Sewerage System or to increase the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is used by the Districts to upgrade or expand the Sewerage System. Payment of a connection fee may be required before this project is permitted to discharge to the Districts' Sewerage System. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, under Services, then Wastewater (Sewage) and select Rates & Fees. In determining the impact to the Sewerage System and applicable connection fees, the Districts will determine the user category (e.g. Condominium, Single Family home, etc.) that best represents the actual or anticipated use of the parcel(s) or facilities on the parcel(s) in the development. For more specific information regarding the connection fee application procedure and fees, the developer should contact the Districts' Wastewater Fee Public Counter at (562) 908-4288, extension 2727.

5. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CCA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise the developer that the Districts intend to provide this service up to the levels that are legally permitted and to inform the developer of the currently existing capacity and any proposed expansion of the Districts' facilities. 1

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717 or at araza@lacsd.org.

Very truly yours,

Adriana Raza

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:dc

cc: A. Schmidt
A. Howard

Letter A-3

Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.2000 Tel
metro.net

April 6, 2021

Kevin Johnson
City of Pasadena
Planning & Community Development Department
175 North Garfield Avenue
Pasadena, CA 91101
Sent by Email: kevinjohnson@cityofpasadena.net

RE: Central Park Apartments Project
Notice of Draft Sustainable Communities Environmental Assessment (SCEA)

Dear Mr. Johnson:

Thank you for coordinating with the Los Angeles County Metropolitan Transportation Authority (Metro) regarding the proposed Central Park Apartments Project (Project) located at 86 South Fair Oaks Avenue in the City of Pasadena (City). Metro is committed to working with local municipalities, developers, and other stakeholders across Los Angeles County on transit-supportive developments to grow ridership, reduce driving, and promote walkable neighborhoods. Transit Oriented Communities (TOCs) are places (such as corridors or neighborhoods) that, by their design, allow people to drive less and access transit more. TOCs maximize equitable access to a multi-modal transit network as a key organizing principle of land use planning and holistic community development.

Per Metro's area of statutory responsibility pursuant to sections 15082(b) and 15086(a) of the Guidelines for Implementation of the California Environmental Quality Act (CEQA: Cal. Code of Regulations, Title 14, Ch. 3), the purpose of this letter is to provide the City with specific detail on the scope and content of environmental information that should be included in the Sustainable Communities Environmental Assessment (SCEA) for the Project. In particular, this letter outlines topics regarding the Project's potential impacts on the Metro bus services and facilities which should be analyzed in the SCEA, and provides recommendations for mitigation measures as appropriate. Effects of a project on transit systems and infrastructure are within the scope of transportation impacts to be evaluated under CEQA.[1]

1

In addition to the specific comments outlined below, Metro is providing the City and Architectural Resources Group, Inc. (Applicant) with the Metro Adjacent Development Handbook (attached), which provides an overview of common concerns for development adjacent to Metro right-of-way (ROW) and transit facilities, available at www.metro.net/projects/devreview/.

[1] See CEQA Guidelines section 15064.3(a); Governor's Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts In CEQA, December 2018, p. 19.

Project Description
The Project includes the redevelopment of an existing surface parking lot with the construction of a new 6-story mixed-use project over four levels of subterranean parking.

Recommendations for SCEA Scope and Content

Bus Service Adjacency

1. Service: Metro Bus Line 260 operates on Fair Oaks Avenue, adjacent to the Project. One Metro Bus stop is directly adjacent to the Project at the southwest corner of Fair Oaks Avenue Dayton Street. Other transit operators such as Foothill Transit and Pasadena Transit may provide service in the vicinity of the Project and should be consulted.

2. Impact Analysis: The SCEA should analyze potential effects on Metro Bus service and identify mitigation measures as appropriate. Potential impacts may include impacts to transportation services, stops, and temporary or permanent bus service rerouting. Specific types of impacts and recommended mitigation measures to address them include, without limitation, the following:

    a. Bus Stop Condition: The SCEA should identify all bus stops on all streets adjacent to the Project site. During construction, the Applicant may either maintain the stop in its current condition and location, or temporarily relocate the stop consistent with the needs of Metro Bus operations. Temporary or permanent modifications to any bus stop as part of the Project, including any surrounding sidewalk area, must be Americans with Disabilities Act (ADA)-compliant and allow passengers with disabilities a clear path of travel between the bus stop and the Project. Once the Project is completed, the Applicant must ensure any existing Metro bus stop affected by the Project is returned to its pre-Project location and condition, unless otherwise directed by Metro.

    b. Driveways: Driveways accessing parking and loading at the Project site should be located away from transit stops, and be designed and configured to avoid potential conflicts with on-street transit services and pedestrian traffic to the greatest degree possible. Vehicular driveways should not be located in or directly adjacent to areas that are likely to be used as waiting areas for transit.

    c. Bus Stop Enhancements: Metro encourages the installation of enhancements and other amenities that improve safety and comfort for transit riders. These include benches, bus shelters, wayfinding signage, enhanced crosswalks and ADA-compliant ramps, pedestrian lighting, and shade trees in paths of travel to bus stops. The City should consider requesting the installation of such amenities as part of the Project.

    d. Bus Operations Coordination: The Applicant shall coordinate with Metro Bus Operations Control Special Events Coordinator at 213-922-4632 and Metro's Stops and Zones Department at 213-922-5190 not later than 30 days before the start of Project construction. Other municipal bus services may also be impacted and shall be included in construction outreach efforts.

1

Transit Supportive Planning: Recommendations and Resources

Considering the Project's proximity to Del Mar Station, Metro would like to identify the potential synergies associated with transit-oriented development:

1. Transit Supportive Planning Toolkit: Metro strongly recommends that the Applicant review the Transit Supportive Planning Toolkit which identifies 10 elements of transit-supportive places and, applied collectively, has been shown to reduce vehicle miles traveled by establishing community-scaled density, diverse land use mix, combination of affordable housing, and infrastructure projects for pedestrians, bicyclists, and people of all ages and abilities. This resource is available at https://www.metro.net/projects/tod-toolkit.

2. Land Use: Metro supports development of commercial and residential properties near transit stations and understands that increasing development near stations represents a mutually beneficial opportunity to increase ridership and enhance transportation options for the users of developments. Metro encourages the City and Applicant to be mindful of the Project's proximity to the Del Mar Station, including orienting pedestrian pathways towards the station.

3. Transit Connections and Access: Metro strongly encourages the Applicant to install Project features that help facilitate safe and convenient connections for pedestrians, people riding bicycles, and transit users to/from the Project site and nearby destinations. The City should consider requiring the installation of such features as part of the conditions of approval for the Project, including: 1

    a. Bicycle Use and Micromobility Devices: The provision of adequate short-term bicycle parking, such as ground-level bicycle racks, and secure, access-controlled, enclosed long-term bicycle parking for residents, employees, and guests. Bicycle parking facilities should be designed with best practices in mind, including highly visible siting, effective surveillance, ease to locate, and equipment installation with preferred spacing dimensions, so bicycle parking can be safely and conveniently accessed. Similar provisions for micro-mobility devices are also encouraged.

    b. First & Last Mile Access: The Project should address first-last mile connections to transit and is encouraged to support these connections with wayfinding signage inclusive of all modes of transportation. For reference, please review the First Last Mile Strategic Plan, authored by Metro and the Southern California Association of Governments (SCAG), available on-line at: http://media.metro.net/docs/sustainability_path_design_guidelines.pdf

4. Parking: Metro encourages the incorporation of transit-oriented, pedestrian-oriented parking provision strategies such as the reduction or removal of minimum parking requirements and the exploration of shared parking opportunities. These strategies could be pursued to reduce automobile-orientation in design and travel demand.

5. Wayfinding: Any temporary or permanent wayfinding signage with content referencing Metro services or featuring the Metro brand and/or associated graphics (such as Metro Bus pictograms) requires review and approval by Metro Signage and Environmental Graphic Design.

6. Transit Pass Programs: Metro would like to inform the Applicant of Metro's employer transit pass programs, including the Annual Transit Access Pass (A-TAP), the Employer Pass Program

(E-Pass), and Small Employer Pass (SEP) Program. These programs offer efficiencies and group rates that businesses can offer employees as an incentive to utilize public transit. The A-TAP can also be used for residential projects. For more information on these programs, please visit the programs' website at https://www.metro.net/riding/eapp/.

If you have any questions regarding this letter, please contact me by phone at 213-922-2671, by email at DevReview@metro.net, or by mail at the following address:

1

Metro Development Review
One Gateway Plaza
MS 99-22-1
Los Angeles, CA 90012-2952

Sincerely,

Shine Ling, AICP
Manager, Transit Oriented Communities

cc: Architectural Resources Group, Inc.

Attachments and links:

- Adjacent Development Handbook: https://www.metro.net/projects/devreview/

Letter O-1

May 3, 2021

Kevin Johnson
Senior Planner
Design and Historic Preservation
City of Pasadena

Dear Kevin Johnson:

I wish to comment on the Central Park Apartments project that is proposed for the corner of Dayton and Fair Oaks Avenue. As a resident of Pasadena since 1989, and a resident and board member of the Castle Green Homeowner's Association (HOA) since 2012, I am concerned about the impacts to the historic setting, as well as the larger economic and political issues the development poses for the City of Pasadena.

I'd like to start by saying that neither I nor the Castle Green HOA oppose development of the site. I know that sounds surprising, but it deserves emphasis: we're not attempting to shut down other uses for the property, but we are concerned about several issues that I will outline in this letter.

We can begin with a few practical considerations. The current design proposal is significantly larger than the one the applicant proposed previously. The project has gone from 64 units to 84 units plus 4 ground floor live/work units, with only four additional affordable housing units. The increase in size means that not only will Castle Green quite literally be put in the shade, but so too will Hotel Green, where elderly residents often cannot leave their apartments. These residents are already limited to the reduced open space afforded by the parking lot conversion. This parking lot is their only option because the park can be unsafe. 1

On a planning level, I'd like to point out G&K are proceeding as if they obtained a Certified Final Environmental Impact Report, but it has been delayed since 2015. To my knowledge, the data was limited in scope and originated much earlier—in 2013. The city has changed substantially since then, including the robust use of the children's area of Central Park, located at Dayton and Fair Oaks and directly across from the proposed development. The rehabilitation of the park, with family-friendly access, is one of the City's great achievements. Its eastern perimeter—Raymond Avenue—is a beautiful late Victorian street scape, as is its western boarder of Fair Oaks Avenue. But the park, and especially the children's zone, is but one of several potential Old Town victims of the environmental impacts from this proposed development. Consider, for example, traffic and parking: since the 2013 data collection, the city has increased in population considerably, particularly with the completion of the Westgate development, who's residents are the primary users of the children's playground, a mere 30 yards from the front door and driveway of the proposed Central Park Apartments. How does the public access the park from the north and west approaches? How do families get little ones safely to the swings and climbing bars? The proposed restrictions to Dayton and

obvious impacts on Fair Oaks (as well as Raymond) will severely affect the general public, and especially the many families who live in the neighborhood.

In my layman's understanding, the developer is attempting to avoid the sorts of questions and issues outlined above by invoking the authority of a Sustained Communities Environmental Assessment (SCEA) instead of adhering to laws in place at the time it was first submitted for review. The resulting structure is massive and threatens existing buildings. In effect, the developer is using the SCEA as a shield for huge differences in the current proposal, totaling a 35% bonus overall in units and size of structure. Because of the 35% increase, the parking levels have gone from 2 subterranean levels to 4. The proposed structure now has eleven levels to it. It doesn't take an expert to grasp that the engineering for such a massive structure, with its deep digging, will directly endanger two of its neighbors: Castle Green, and Hotel Green. And I wouldn't want to be the crepe shop on Fair Oaks that will be squeezed in between Hotel Green and the looming Central Park Apartments.

As the longest-serving member of the Castle Green HOA, over the years I have attended several meetings with G&K's team members and representatives. In those conversations I heard remarkably uninformed ideas come forward. For example, when discussing uses for their proposed commercial space, they suggested approaching Trader Joe's. The person was flabbergasted when I said we have the original nearby, under a mile walk. He next offered a Whole Foods, not knowing that the West Coast flagship is less than a mile from here. My point is that G&K do not have their finger on the pulse of Pasadena, have not performed market research for the commercial spaces they intend to build, and are uninterested in what the commercial future of Old Town might look like. Given the enormous investment they intend to make, one would wish for more than large, empty commercial spaces; at the moment I think we have enough of those, and I doubt the public will see wisdom in creating more. And if G&K aspire to build a landmark structure (as their website states), shouldn't they be obligated to harmonize aesthetically as well as commercially with the neighborhood—an historic and beautiful Old Town that this city worked so hard to achieve? Instead, what the developer has in mind is outsized and cookie-cutter, and inappropriate in the urban and architectural context of the city's most iconic park and building—Castle Green and Central Park, for which their proposal is (ironically enough) named.

1

I'll close by reiterating that the Castle Green HOA does not oppose development of the site. But it urges the City to practice oversight, including mindfulness about the negative effects of the SCEA draft proposal when historical properties are involved. In our instance it's not just Castle Green and Hotel Green that are endangered, but also the park and the larger vision of a city that spent over 30 years cultivating one of the most distinctive and charming urban settings in the country—Old Town. Viewed more broadly, all of Pasadena is unique for its abundance of historical properties; it is part of what draws people here. Greenlighting this development as proposed under the SCEA rules will set a precedent that I urge the city to consider with care—we have too many treasures, and would be wise not to put them in the shade of testosterone-scaled projects built next door to them. Let's meet our housing and growth needs with responsible development that integrates with the entirety of its environment—environmental, aesthetic, and commercial--and doesn't just exploit a loophole in the law.

Letter O-1

Yours sincerely,



Colleen Jaurretche
VP Castle Green Board of Governors

Letter O-2

Chatten-Brown, Carstens & Minteer LLP
2200 Pacific Coast Highway, Suite 318
Hermosa Beach, CA 90254
www.cbcearthlaw.com
310-798-2400

Brandt-Hawley Law Group
Chauvet House • PO Box 1659
Glen Ellen, CA 95442
preservationlawyers.com
707.938.3900

April 23, 2021

Victor M. Gordo, Mayor
Members of the City Council
Kevin Johnson, Senior Planner
Planning and Community Development Department
City of Pasadena
via email

Subject: **Sustainable Communities Environmental Assessment (SCEA)**
Central Park Apartments

Honorable Mayor Gordo, City Councilmembers, and Mr. Johnson:

Thank you for providing an extension until May 6 for public comment on the Draft SCEA for the Central Park Apartments, per our request last month on behalf of the Castle Green Homeowners Association. 1

Since then, in researching SCEA requirements we have become aware that the Central Park Apartments project in fact cannot qualify for the SCEA process. We bring that to your attention now because a shift in your project environmental review to revise the 2015 EIR would avoid delay and cost.

The relevant provisions of the California Environmental Quality Act that address the SCEA process begin at Public Resources Code section 21155.1. That section mandates "applicability requirements" for a "sustainable communities project." One criterion is that the project "*not have a significant effect on historical resources pursuant to Section 21084.1*." (Pub. Resources Code, § 21155.1 (a)(5).) Castle Green and the Green Hotel are historical resources pursuant to Section 21084.1 as they are listed in the California Register of Historical Resources. 2

It is evident that the project would have significant impacts on Castle Green and the Green Hotel. And should there be a dispute about that, CEQA's low-threshold 'fair argument' standard applies. The application of the parallel historical resources exception to CEQA categorical exemptions is similarly dependent on whether "a project may cause a substantial adverse change in the significance of a historical resource." The California Supreme Court's decision in *Berkeley Hillside Preservation v City of Berkeley* (2015) 60 Cal.4th 1086, 1117, endorsed the fair argument standard on that issue, and there is no contrary authority. *Berkeley Hillside* cited *Valley Advocates v. City of Fresno* (2008) 160 Cal.App.4th 1039, 1072, with approval as to its holding that "the fair argument standard applies to the question of whether the proposed project 'may cause a substantial adverse change in the significance of an historical resource' and thereby have a significant effect on the environment."

2

Because there is a fair argument that the proposed project will significantly affect known historic resources, the SCEA procedures do not apply.

For projects that can qualify for SCEA review — thus, not here — a separate section of the SCEA statutory provisions deals with "project review." IF a project is determined subject to the SCEA process, under Section 21155.2 (b)(7) a public agency's "review and approval" are then reviewed for legal adequacy under the deferential substantial evidence standard. The statute also makes clear that an agency's decision to use the SCEA process, if qualified, is discretionary.

We would be happy to discuss these points with city staff and counsel.

Thank you.

Sincerely,

Susan Brandt-Hawley

Douglas P. Carstens

Letter O-3

CBCM
Chatten-Brown, Carstens & Minteer LLP
2200 Pacific Coast Highway, Suite 318
Hermosa Beach, CA 90254
www.cbcearthlaw.com
310-798-2400

Brandt-Hawley Law Group
Chauvet House • PO Box 1659
Glen Ellen, CA 95442
preservationlawyers.com
707.938.3900

May 6, 2021

Kevin Johnson, Senior Planner
Planning and Community Development Department
City of Pasadena
via email

Subject: Comments on Draft Sustainable Communities Environmental Assessment For Central Park Apartments at 86 S. Fair Oaks Avenue

Dear Mr. Johnson:

On behalf of the Castle Green Homeowners Association, we object to the City's proposed reliance on a Sustainable Communities Environmental Assessment (SCEA) as a basis for its consideration of the proposed Central Park Apartments project (Project) proposed by Goldrich Kest.

The applicant, architectural firm Architectural Resources Group Inc. (ARG), proposes a 32,362-square foot project at 86 South Fair Oaks Avenue. As an initial matter, we note that an inappropriate or incompatible project could have the effect of detracting not just on views to and from the National Register-designated Hotel Green Apartments and Castle Green, but could change the low-rise scale of the entire historic district. Any consideration of a project in this area must be undertaken with utmost sensitivity to the broad context of this historic property. Additionally, consideration of this project should also encompass impacts on local traffic patterns known or discovered that also significantly affect the ambience of the district. Consideration of cumulative impacts, air quality and land use impacts, known or uncovered areas of controversy, and alternatives should not be lost by relying upon the SCEA review process rather than a more appropriate environmental impact report (EIR) review process. 1

I. TO BETTER INFORM AND SERVE THE PUBLIC, THE CITY SHOULD RELY ON AN EIR RATHER THAN A SCEA.

Procedurally, relying on a SCEA would surely be a poor policy choice as well as a violation of the California Environmental Quality Act (CEQA) because the impacts the project creates disqualify it from SCEA eligibility. 2

As a practical matter, an EIR has already been prepared and circulated for a previous project proposed by Goldrich Kest in 2014 called the Green Hotel Apartments. That EIR review process should continue — with appropriate updating and responses to comments — rather than shifting to a SCEA document that constrains City review by negating or omitting analyses of alternatives and traffic impacts, among other omitted analysis to properly review this larger project's impacts.

Even if reliance on a SCEA were to be available, it would be within the City's limited discretion to decide whether to choose that process. And if so, the SCEA would have to meet the criteria set forth in CEQA and it should be reviewed and commented on by the Design Commission and City Planning Commission, as in an EIR process, before being considered by the City Council. The City Council needs the benefit of input and recommendations from both appointed bodies before making a decision about such a momentous project. The City need not set a precedent here about use of SCEAs in general; it may simply act on its knowledge that differences of opinion about project impacts remaining can be addressed in an EIR process much more *readily* than in a truncated SCEA review process. 2

Below is an explanation of why historic impacts prevent the use of a SCEA. The Association will also discuss other impacts such as alternatives, traffic, and aesthetics that further highlight the superiority of using an EIR rather than a SCEA for such a significant project that will profoundly affect the character of the entire City.

II. HISTORIC IMPACTS COULD BE SIGNIFICANT, THUS REQUIRING AN ENVIRONMENTAL IMPACT REPORT, AND NOT ALLOWING A SUSTAINABLE COMMUNITIES ENVIRONMENTAL ASSESSMENT.

The Project is proposed *on* a historically designated site. As has been pointed out to the City in correspondence from Kelly Sutherlin MacLeod, AIA, and Francesca Smith, an architectural historian, the boundaries of the historic Castle Green and Green Hotel are defined in the original National Register registration form. Those boundaries include the entire square block bounded by Raymond Avenue on the east, Green Street on the north, Fair Oaks Avenue on the west and Dayton Street on the south. 3

A SCEA is only allowed if the Project will cause no adverse impacts to historic resources. The relevant provisions of CEQA that address the SCEA process begin at Public Resources Code section 21155.1. That section mandates "applicability requirements." One criterion is that the project "*not have a significant effect on historical resources pursuant to Section 21084.1*." (Pub. Resources Code, § 21155.1 (a)(5).) Castle Green and the Green Hotel are historical resources pursuant to Section 21084.1 as they are listed in the California Register of Historical Resources.

It is evident that the project would have significant impacts on Castle Green and the Green Hotel. CEQA's low-threshold 'fair argument' standard applies. The application of the parallel historical resources exception to CEQA categorical exemptions is similarly dependent on whether "a project may cause a substantial adverse change in the significance of a historical resource." Such a substantial adverse change does not have to go so far that the resource would be delisted, as changes short of those that would cause delisting can also be substantial and adverse. The California Supreme Court's decision in *Berkeley Hillside Preservation v City of Berkeley* (2015) 60 Cal.4th 1086, 1117, endorsed the fair argument standard on that issue, and there is no contrary authority. *Berkeley Hillside* cited *Valley Advocates v. City of Fresno* (2008) 160 Cal.App.4th 1039, 1072, with approval as to its holding that "the fair argument standard applies to the question of whether the proposed project 'may cause a substantial adverse change in the significance of an historical resource' and thereby have a significant effect on the environment." 3

In sum, because there is a fact-based fair argument that the proposed project will significantly affect known historic resources, the SCEA procedures do not apply.

For projects that can qualify for SCEA review — thus, not here — a separate section of the SCEA statutory provisions deals with "project review." *If*, and only if, a project is determined subject to the SCEA process, under Section 21155.2 subdivision (b)(7) a public agency's "review and approval" are then reviewed for legal adequacy under the deferential substantial evidence standard. Again, the statute also makes clear that an agency's decision to use the SCEA process, if qualified, is discretionary.

III. A REASONABLE RANGE OF ALTERNATIVES TO THE PROPOSED PROJECT MUST BE INCLUDED IN AN EIR.

Relying on a SCEA would deprive the City of an ability to examine alternative configurations and designs of the proposed project. In the previous EIR for the Green Hotel Apartments Project, only one alternative was deemed possible (see enclosure 1, p. 1-5 [addressing Reduced Height Alternative]) — a known inadequacy compounded by the SCEA. 4

CEQA's core statutory purpose is to *avoid* adverse impacts. There are many alternate uses for the Project site that would not adversely affect historic resources. An EIR must analyze alternate locations that could accommodate the type of project the proponents plan without causing the same significant impacts.

In addition to off-site locations, alternate onsite designs that reduce significant impacts must also be considered, including two reduced-density alternatives. One such alternative could be the original third wing extension from Colonel Green's never built "1903 Concept." Sadly, the SCEA unjustly refers to this Project as based on this concept,

calling it "The 1903 Vision." Yet the proposed Project is in complete contradiction to Colonel Green's intent and illustrations, and to Goldrich & Kest's own admitted attempt to illustrate the 1903 Concept in 2011 (Scheme C of three presented options.) (See 2015 FEIR, Attachment G, PDF page 38.)

By choosing to rely on the SCEA, the City Planning Department proposes to avoid CEQA's core requirement to analyze feasible, less environmentally damaging alternatives. This effort to avoid analysis of alternatives must be rejected.

As the SCEA at Appendix A, page 1, states: "Public Resources Code Section 21151.2 requires that a transit priority project incorporate all feasible mitigation measures, performance standards, or criteria from prior applicable EIRs." 4

The SCEA asserts "The City has complied with PRC Section 21151.2 by reviewing all of the suggested mitigation measures in Connect SoCal (2020 – 2045 Regional Transportation Plan/Sustainable Communities Strategy) and the City of Pasadena General Plan EIR for imposition on the project." However, this is incorrect. The SCEA has not incorporated mitigation measures from the Draft EIR prepared for the Castle Green Apartments proposal. Alternatives are a form of mitigation measure: "The chief goal of CEQA is mitigation or avoidance of environmental harm. To argue that only mitigation measures need be discussed overlooks the fact that alternatives are a type of mitigation." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 403.)

The Green Hotel Apartments Final EIR dated June 2015 by CDM Smith included a reduced density alternative called the "Smaller Scale Alternative" that would have reduced historic resource impacts. (FEIR, p. 3-25; see enclosure 1, p. 1-5 [addressing Reduced Height Alternative.) This alternative must be analyzed.

IV. ALL OF THE PROJECT'S POTENTIALLY SIGNIFICANT ENVIRONMENTAL EFFECTS MUST BE COMPREHENSIVELY ADDRESSED IN AN EIR.

A SCEA is not intended to address all potential significant impacts of a proposed project. Instead, a SCEA is only intended to address certain specified impacts on the theory that transit-oriented development is to be encouraged despite impacts it may have. 5

An EIR must comprehensively identify and address all of the "significant environmental effects" of a proposed project. (Public Resources Code § 21100(b)(1); CEQA Guidelines § 15126.2.) Both "[d]irect and indirect significant environmental effects" must be analyzed, "giving due consideration to both the short-term and long-term effects." (CEQA Guidelines § 15126.2(a).) In addition to the aesthetic and historic

impacts that are discussed above, it will be critical for an EIR to address impacts in the areas of biological resources, air quality and human health, traffic and access, and land use plans. 5

We and others have submitted comments on prior proposed versions of the current Project, which had been undergoing environmental review that included preparation of a draft and final EIR. (See enclosure 1 [summary section of Final EIR].)

A. Air Quality and Human Health Could Be Adversely Affected.

The SCEA states that 45,500 cubic yards of grading soil export and use of construction equipment is planned. (SCEA, p. 4.0-28.) The extent and nature of the construction activities will likely lead to extensive air quality impacts. With nearby sensitive receptors such as the Hotel Green Apartments, Castle Green, and the Children's Park Playground in Central Park, avoiding or mitigating air pollution impacts to the fullest possible extent will be critical. 6

B. Land Use and Planning Impacts Must Be Addressed.

The Central District Specific Plan should guide development in this area. The SCEA dismisses the possibility of Project conflicts with this plan in a mere one page conclusory discussion. (SCEA, p. 4.0-104.) The conclusion is not based upon sufficient examination of the Plan's requirements.

The Central District Specific Plan requires that infill construction should be consistent with existing buildings (page 99); view corridors should be protected (page 132); and well-defined open space should be created (page 147). Other requirements apply as well. These and the Central District Specific Plan's other requirements should be fully explained and applied to the Project before the City considers consistency of the project with this fundamental plan. 7

SCEA Appendix A - Incorporation of Applicable Mitigation Measures, Performance Standards and Criteria from Prior Applicable EIRs - lists the Connect SoCal 2020-2045 transportation strategy and the City of Pasadena General Plan EIR in the introductory paragraph. It does not list the previous 2014-15 project EIR (see Enclosure 1) as contributing to mitigation measures. Thus, the mitigations proposed in Appendix A do not rely on the previous uncertified EIR.

The sixty-eight SCEA mitigation measures largely depend on the Connect SoCal 2020-2045 strategy (including 45 measures or 66% of all included measures), far less than on the Pasadena General Plan/Central District/Old Pasadena Plan (23 measures, or

34% of all measures).

The SCEA could be in direct conflict with the Inclusionary Housing Ordinance Objective 7: "…infill… that respect existing resources will be encouraged." 7

The SCEA is also in direct conflict with the Central District Specific Plan objectives of Design Review in three steps if the Design Commission is not the lead decision-making body and final word. In a prior review process for the Green Hotel Apartments Project, City staff member Kevin Johnson stated at the April 8, 2013 scoping session that the Design Commission would be the ultimate decision making body.

C. Traffic and Safety Access Issues Must Be Clearly Addressed Rather Than Relegated to an Appendix in the SCEA.

The Project as proposed will severely impact Dayton Avenue, which is a small street that already strains under its traffic burden. (See Enclosure 1, 2015 Green Hotel Apartments Project Final EIR, p. 1-13 [stating "the increased traffic introduced along Dayton Street between Fair Oaks Avenue and Raymond Avenue would constitute a significant impact" for which there is "No feasible mitigation" so it is a "Significant and unavoidable" impact].) An EIR must thoroughly assess traffic impacts to this and other local roads around the Project site. Fire Department safety and access must be critical subjects of an EIR.

With our prior March 10, 2014 letter about the prior project proposal on the site, we submitted a traffic and impact analysis prepared by Tom Brohard. This analysis is hereby incorporated by reference, since project impacts will be similar. 8

The SCEA has a section in the Transportation Appendix (Appendix G) that is called "Transportation Impact Analysis - Outside of CEQA Analysis" (dated 5/3/2019) (Appendix G *PDF pg. 511-527*) that uses updated data to analyze three street segments and four intersections. It *fails* to look at South Fair Oaks segment from Dayton to Delmar, and *fails* to look at *unsignalized* Dayton/Fair Oaks & Dayton/Raymond intersections - inadequacies pointed out in 2015 EIR documents. It also omits Fair Oaks Avenue segment from Dayton to Green street that *was* included in 2015 EIR, which means SCEA omits meaningful Fair Oaks Avenue segment and daily trips analysis.

In the attachment, Table 5 and 6, page 10 (*PDF pg. 524*) of this section in the report states that the Dayton Street Roadway Segment again fails because the Vehicular Increase in ADT is 82.6%. 2019 figures show that *existing* daily trips have risen from 883 (2013) to 1,049 (2019), and this larger SCEA Project generates 866 new daily trips, causing the failure of the Dayton Street Segment.

The SCEA relies on 2013 and 2015 data from the uncertified 2015 EIR. The

SCEA also has three traffic sections in the Appendix G (Transportation) that rely on possibly outdated bike and pedestrian issues, and the 2015 FEIR showed 64 units creating an additional 693 daily trips on Dayton segment, a 77% increase, while SCEA project volume shows net 866 new trips (SCEA Appendix G, p. 12), a 83% increase, after reducing Gross Total trips of 963 (92% increase) with transit credits, et cetera. Existing daily trips on Dayton were 883 in the 2015 EIR.

The 'cumulative projects' analysis that the SCEA omits from the main document (in the Outside CEQA portion of Appendix G in the SCEA) is using 2013 data, clearly not adequately reflective of anything relevant to today's Pasadena.

The SCEA deprives the public of a proper understanding of the traffic impacts the proposed project would have. Instead of an SCEA, the City should update the EIR and subject it to proper public review and participation with comments and responses.

The SCEA allows Traffic and Transportation issues to be avoided when considering significant impacts. In order to qualify for an SCEA, the public agency must certify that there is sufficient infrastructure in an area. (Pub. Resources Code s. 21155.1 [requiring certification that "The transit priority project and other projects approved prior to the approval of the transit priority project …can be adequately served by existing utilities."]) Roadways are part of the existing public utility infrastructure that must support a project. Yet the SCEA refers to the previous 2015 FEIR that analyzes the 2015 Project:

- Contains less than 75% of the number of units of the 2021 SCEA Project.
- Contains less than 80% of the square footage of the 2021 SCEA Project.
- Contains less than 25% of the parking spaces of the 2021 SCEA Project.
- Produces 20% less daily car trips of the 2021 SCEA Project.
- Has one less excavated level of parking than the 2021 SCEA Project.

8

The SCEA relies on uncertified Transportation information from 2013 and 2015, outdated materials for this NEW project. The City cannot have it both ways by a) utilizing SCEA for a "NEW" project, but relying on 2013 data from a previous uncertified EIR from a smaller project that was never supported or affirmed.

The SCEA relies on Bicycle/Pedestrian mode studies on Dayton Street to say that no mitigation or improvements needed, yet it is clear that Dayton Street configurations must change to handle the 83% increase (about 853 trips in excess of City's limit for this roadway segment per 2015 EIR's smaller project), and there are no required or proposed Dayton Street or intersection mitigation. APX G, PDF pg. 75, 77.
Additionally, it appears that no PEQI or BEQI was performed on any other roadway segment. (See SCEA Appendix G, p. 13.) How do residents from the East Ambassador Campus get to Central Park?

The SCEA relies on HCM Signalization Intersection Capacity Analysis (Apx. G, PDF pg. 57-73), yet ignores the dangerous and challenging unsignalized intersections at Dayton/Fair Oaks (split configuration) and at Dayton Raymond. Therefore, by omission, the SCEA falsely and inadequately concludes that there are no intersection issues, just as the uncertified 2015 EIR did.

In fact, the SCEA's abbreviated traffic studies fail to study, let alone suggest needed mitigation for, the two critical unsignalized intersections at both ends of the significantly impacted Dayton Street Segment. (Appendix G, 5/3/19 Transportation Impact Analysis (PDF pg. 42). This analytical failure occurs again as in the challenged and uncertified 2015 FEIR. 8

Fair Oaks Avenue driveway is stated to be "… in direct ***contrast*** to the City's Street Design Guidelines." (January 22, 2018 Predevelopment Plan Review for City Council – Doc.) But it is not in *conflict*, and no data is provided to support the City's rejection outright. Being "in contrast" does not disqualify a Fair Oaks driveway, which suggests the SCEA (and previous EIR) should have studied this option.
The City knows that the project's impact on the Dayton Street Segment was significant with the smaller 2015 project (Enclosure 1, p. 1-13), and is far more significant for the current Project under SCEA review. In both, no mitigation is considered, let alone studied.

Bicycle parking with no bike improvements required or mandated, despite the unsafe existing unsignalized intersection conditions at the split Dayton/Fair Oaks intersections, does not mitigate impacts. Pedestrian review when no crosswalk or safety improvements are required or mandated, despite the horrible intersection conditions at the split Dayton/Fair Oaks intersections does not mitigate impacts.

D. The Current Proposed Project Continues A Prior Proposal But the SCEA Provides Insufficient Information.

The history of proposals at the Project site is relevant. In 2011, initiating the Central Park Apartments, ARG presented three possible development schemes to the public. "Scheme C" was described as similar to Colonel Green's 1903 concepts, and was encouraged for exploration. However, G&K rejected it outright. This history is relevant because today's SCEA project is claiming to be some sort of reincarnation of the "1903 vision" by G&K, yet today's overbearing Project is significantly *not* anything like the respectfully smaller Scheme C (for which the Association makes no endorsement here). 9

In 2013, an EIS for the revived Project was roundly panned in public scoping sessions, yet G&K proceeded to the DEIR in 2014, which by evidence of the public and Design Commission's comments all had extensive concerns and questions, and a general

consensus that this inadequate DEIR that failed to address any 2013 concerns *and raised further additional concerns* that mushroomed with the 2015 Revised Draft EIR and Final EIR hearings. The SCEA makes no mention of the prior history of project proposals for this same Project site. (SCEA, p. 3.0-5 ["prior applicable EIRs" named are "SCAG Connect SoCal… EIR, the City of Pasadena General Plan EIR, and the Central District Specific Plan EIR"; no others are identified].)

In 2017, there was a Design Commission Preliminary Review with only a reduced set of plans and a 13 page staff report not made available until a few days before this review. In 2018 there was a Predevelopment Plan Review in front of the City Council. At both reviews, only more questions arose as the massive size and impacts, and poor level of design. And it appeared obvious that the 1903 concepts were being left back with 2011's Scheme C.

There is a failure that continues to expand today with G&K's failure to heed many public or Design Commission concerns and questions with a new, larger SCEA project demanding less transparency and public review and now a City Council review rather than the Design Commission with lower standards of approval.

Since the 2021 Central Park Apartments Project still relies on the *uncertified* 2015 FEIR (and 2013 data) with uncertified responses to all of the public comments, the SCEA is inappropriately applied to this oversized 2021 Project. 9

The SCEA avoids identification and study of standard, critical environmental issues:

- No Alternatives are put forward;
- No Known Areas of Controversy are addressed, despite 11 identified in the 2015 DEIR, as well as at least 9 additional concerns from public comments (6 noted in the DEIR and at least 3 more from the public comments). All of the 2014-15 "areas" apply. (See Enclosure 1, pp. 1-6 to 1-7.)
- Additional Areas of Controversy noted in the 2015 FEIR Public Comments are relevant but are not mentioned or studied. (See Enclosure 1, pp. 1-6 to 1-7.)
- Specific Issues to be Resolved in the 2015 FEIR are not identified or addressed, let alone resolved.
- No Cumulative Development Impacts are identified or studied. The 2015 FEIR relies on 2013 Cumulative Projects, 2013 city population and other now-outdated 2013 transportation facts. The significantly larger 2021 Project relies on outdated 2013/2015 data, despite far more Cumulative projects through 2021+.
- The SCEA contains an inapplicable (and possibly inaccurate) "Outside of CEQA Analysis" section that proves the 2021 Project is detrimental to the Dayton Street Roadway Section, yet fails to study adjacent Dayton Street intersections or request mitigation. It studies less than the 2015 EIR, yet today's project is far bigger.

The 2015 DEIR's Section 4.0 Environmental Checklist is 103 pages, more that 236% the size of SCEA's Section 4.0 Environmental Checklist of just 55 pages, despite the larger, more complex and arguably more impactful 2021 Project. The SCEA fails to provide adequate review of environmental impacts.

The SCEA relies on a minimized, subjective and unproven Environmental Checklist in analyzing environmental impacts, while its Appendices rely on 2015 and 2013 data that require updating for this larger 2021 Project. 9

Additional informational deficiencies and inadequacies of the SCEA are detailed in the enclosed May 5, 2021 Letter of Mike Salazar, Architect of the Castle Green Architecture and Design Committee for the Castle Green Homeowners Association. (Enclosure 2) and relevant comment letters that were submitted on the prior version of the Project proposed for the Project site (Enclosure 3). Please respond to each of these points in each of these letters as they are incorporated herein.

E. Re-Submission Of All Previous Comments on the Prior Version of this Proposal.

All public comments submitted in writing for the 2013-2015 Scoping, DEIR, Revised Draft EIR and Final EIR for the Green Hotel Apartments Project are hereby incorporated by reference and their applicability is clear to this enlarged version of the Project under SCEA review. Impacts of the currently proposed Project are likely *greater than were studied* in the 2014-15 EIR process because the current project has 35% more units, over 20% more square footage, has more height and height exemptions, and significantly more aesthetic, traffic and environmental impacts. 10

Further, the audio records of every review of projects proposed on the Project site from 2014 to the present that contain Commissioner, Councilmember, Staff and public comment are hereby incorporated by reference.

CONCLUSION.

As explained above, the City lawfully cannot and should not rely on a SCEA process. The proposed SCEA also fails the City and the public as an informational document upon which to consider such an impactful Project. The City should require revision and finalization of the EIR process that it started, and proceed with review and recommendation by the Design Commission before any approval actions are considered. 11

Thank you for your consideration of these comments.

Sincerely,

Douglas P. Carstens
dpc@cbcearthlaw.com

Susan Brandt-Hawley

susanbh@preservationlawyers.com

Enclosures:

1. Summary pp. i to 1-13 from 2015 Final EIR for Green Hotel Apartments
2. May 5, 2021 Letter from Mike Salazar, Architect of the Castle Green Architecture and Design Committee for the Castle Green Homeowners Association
3. Relevant Comment Letters regarding prior version of Project proposed on Project site

ENCLOSURE 1

State Clearinghouse Number: 2013031067

FINAL ENVIRONMENTAL IMPACT REPORT

City of Pasadena

Planning & Community Development Department



Green Hotel Apartments Project

June 2015

CDM Smith

Table of Contents

Section 1 Summary 1-1

Section 2 Corrections and Additions 2-1

Section 3 Comments and Responses 3-1

3.1 Background 3-1

3.1.1 Draft EIR Published January 24, 2014 3-1

3.1.2 Recirculated Draft EIR Published January 20, 2015 3-2

3.2 List of Commenters 3-3

3.2.1 List of Public Agencies and Private Parties Commenting on the Draft EIR 3-3

3.2.2 List of Public Agencies and Private Parties Commenting on the Recirculated Draft EIR 3-3

3.3 Responses to Comments 3-3

3.3.1 Topical Responses to Comments on the Draft EIR 3-3

Topical Response (TR)–CR-1 Potential Impacts to Historic Resources 3-4

TR-AES-1 Potential View Impacts 3-8

TR-ALT-1 Project Alternatives 3-10

3.3.2 Individual Responses to Comments on the Draft EIR 3-29

Letter No. 1 County Sanitation Districts of Los Angeles County 3-31

Letter No. 2 Pasadena Heritage 3-37

Letter No. 3 Castle Green Homeowner's Association 3-47

Letter No. 4 Chatten-Brown & Carstens LLP 3-91

Letter No. 5 Ann Scheid 3-103

Letter No. 6 Kelly Sutherlin McLeod, FAIA 3-111

3.3.3 Comments Received at the Public Hearing on the Draft EIR 3-126

3.3.4 Individual Responses to Comments on the Recirculated Draft EIR 3-130

Letter No. 7 Ciy of San Marino 3-131

Letter No. 8 Castle Green Homeowner's Association 3-135

3.3.5 Comments Received at the Public Hearing on the Recirculated Draft EIR 3-157

Section 4 Mitigation Monitoring and Reporting Program 4-1

Attachment 1 – Design Process Memorandum

List of Figures

Figure 2-3a	Aerial Overview – Oblique Angel	2-7
Figure 2-5	Site Plan and First Floor Layout	2-9
Figure 3.1-2	Location of On-Site Trees	2-13 & 3-83
Figure 3-1-15	Vantage Point Locations – Vantage Points 5 through 8	2-15 & 3-11
Figure 3-1.16	Vantage Point 5	2-17 & 3-13
Figure 3.1-17	Vantage Point 6	2-19 & 3-15
Figure 3.1-18	Vantage Point 7	2-21 & 3-17
Figure 3.1-19	Vantage Point 8	2-23 & 3-19
Figure 3.1-20	Vantage Point Locations – Vantage Points 9	2-25 & 3-21
Figure 3.1-21	Vantage Point 9	2-27& 3-23

List of Tables

Table 1	Summary of Project Impacts, Conditions of Approval, Mitigation Measures, and Residual Impacts	1-7
Table 2-1	Summary Disposition of Protected Trees with Project Implementation	2-3 & 3-81
Table 3-1	Summary of On-Site Trees	2-5 & 3-79
Table 3-2	Summary Disposition of Protected Trees with Project Implementation	2-11 & 3-80
Table 4-6	Reduced Height Alternative – Traffic Generation	2-33
Table 4-1	Mitigation Monitoring and Reporting Program	4-3

Section 1
Summary

Introduction

In accordance with the *California Environmental Quality Act (CEQA),* specifically, *CEQA Guidelines* Sections 15088, 15089, and 15132, the City of Pasadena (the City) has prepared the Final Environmental Impact Report (EIR) for the proposed Green Hotel Apartments Project (proposed project or project). A Final EIR is defined by Section 15362(b) of the *CEQA Guidelines* as "containing the information contained in the Draft EIR; comments, either in verbatim or in summary received in the review process; a list of persons commenting; and the responses of the Lead Agency to the comments received."

The Final EIR is organized in the following sections:

- **Section 1 – Summary**: This Section is intended to provide a summary of the CEQA requirements, including Project Location, Setting and Description information, Alternatives to the Project, Areas of Controversy, Issues to be Resolved and a Summary of the Project Impacts and Mitigation Measures.
- **Section 2 – Corrections and Additions**: This Section includes changes to text within the Draft EIR and the Recirculated Draft EIR as a result of either comments received from interested parties during the public review period or as initiated by the Lead Agency (City of Pasadena or City).
- **Section 3 – Comments and Responses**: This Section includes all comments received on the original Draft EIR during the document's 45-day public review period, which began on January 24, 2014 and was completed on March 11, 2014, and on the Recirculated Draft EIR during the document's 45-day public review period, which began on January 20, 2015 and was completed on March 5, 2015. A list of public agencies, organizations, and individuals who submitted comments on the Draft EIR and/or the Recirculated Draft EIR is provided. Responses to comments received on the Draft EIR and Recirculated Draft EIR have been prepared and are included in this Section of this Final EIR.
- **Section 4 – Mitigation Monitoring and Reporting Program**: This Section includes a list of all mitigation measures for the project and identifies the timing associated with, and entity responsible for, implementing each mitigation measure in a table format. Space is provided within the table for tracking mitigation implementation and effectiveness.

This document, along with the Draft EIR (incorporated by reference), make up the Final EIR as defined in *CEQA Guidelines*, Section 15132, which states:

> *The Final EIR shall consist of:*
>
> *(a) The Draft EIR or a revision of the Draft.*
>
> *(b) Comments and recommendations received on the Draft EIR either verbatim or in summary.*

(c) A list of persons, organizations, and public agencies commenting on the Draft EIR.

(d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.

(e) Any other information added by the Lead Agency.

Uses of the Final EIR

The Final EIR allows the public and the decision makers the opportunity to review revisions to the Draft EIR and Recirculated Draft EIR, the comments and responses to those comments, and other components of the EIR, such as the Mitigation Monitoring and Reporting Program, prior to approval of the project. The Final EIR serves as the environmental document to support approval of the proposed project, either in whole or in part.

After completing the Final EIR, and before approving the project, the Lead Agency must make the following three certifications as required by Section 15090 of the *CEQA Guidelines*:

- That the Final EIR has been completed in compliance with CEQA;
- That the Final EIR was presented to the decision-making body of the Lead Agency, and that the decision-making body reviewed and considered the information contained in the Final EIR prior to approving the project; and
- That the Final EIR reflects the Lead Agency's independent judgment and analysis.

Additionally, pursuant to Section 15093(b) of the *CEQA Guidelines*, when a Lead Agency approves a project that would result in significant unavoidable impacts that are disclosed in the Final EIR, the agency must state its reasons for supporting the approved action in writing. This Statement of Overriding Considerations is supported by substantial information in the record, which includes the Final EIR.

Project Location and Setting

The City of Pasadena (City) is located approximately ten miles northeast of the City of Los Angeles in the County of Los Angeles. Regional access to the City is provided by State Route 134 (SR 134), Interstate 210 (I-210 or Foothill Freeway), State Route 110 (SR110), and Interstate 710 (I-710). The project site is located at 86 South Fair Oaks Avenue, at the northeast corner of Fair Oaks Avenue at Dayton Street. Vehicle access points at the project site currently exist on Dayton Street and South Fair Oaks Avenue. The project site is located within a developed area of Downtown Pasadena on one of the City's main commercial streets and is surrounded by residential, commercial, retail, and recreational land uses. The project site is bordered by a one-story cafe building and the existing Green Hotel Apartments on the north, Castle Green on the east, Dayton Street and Central Park on the south, and South Fair Oaks Avenue on the west.

The project site is rectangular in shape and approximately 32,362 square feet in size. The site is currently flat and has a surface parking lot with 60 parking spaces (4 handicapped parking spaces and 56 regular parking spaces), a billboard, concrete pathways, benches, an outdoor eating area, and 20 trees (15 of which are protected under the City Trees and Tree Protection Ordinance). The 15 protected trees consist of eight Mexican fan palms, two California fan palms, one Canary Island palm, three Camphor trees, and one Indian laurel fig tree.

The project site is zoned CD-1 (Central District Specific Plan Sub-district 1, Old Pasadena Subdistrict) and has a General Plan Land Use designation of Specific Plan. The project site also is within the Old Pasadena Historic District which is listed in the National Register of Historic Places (National Register). The Castle Green, located to the east of the project site, and the existing Green Hotel Apartments buildings, located to the north of the project site, were listed together, along with the project site, in the National Register in 1982, and are therefore also listed in the California Register of Historical Resources (California Register). The Castle Green/Green Hotel Apartments listing that includes the project site is an individual listing on the National Register (not as an historic district), and the two buildings were also listed as contributors to the Old Pasadena Historic District (1983; revised, 2007). The boundaries of the Castle Green and existing Green Hotel Apartments are defined in the original National Register registration form as: "The square block bounded by Raymond Avenue on the east, Green Street on the north, Fair Oaks [A]venue on the west and Dayton Street on the south." Thus, the entire block, which includes the project site, is listed as a historical property in the National Register.

Across Dayton Street to the south is Central Park, a 9.2 acre park which is also a contributing resource to the Old Pasadena Historic District. Across Fair Oaks Avenue to the west are three to four-story mixed-use buildings and parking lots, and across Raymond Avenue to the east are one and two-story commercial uses, all of which are also within the boundaries of the Old Pasadena Historic District. The Los Angeles County Metropolitan Transportation Authority (Metro) Del Mar Gold Line Light Rail Station is located less than a quarter of a mile to the southeast of the project site along Raymond Avenue just north of Del Mar Boulevard.

Project Objectives

The objectives for the proposed project include the following:

- Provide new apartments to assist in satisfying the increasing demand for this product type in the City of Pasadena, and particularly in the Central District and within easy walking distance of jobs and the Metro Gold Line.
- Provide new restaurant, commercial, and retail shops in Old Pasadena, thereby increasing tax revenues throughout the City.
- Provide multi-family housing within a transit-oriented district and within the immediate vicinity of a Metro Gold Line station.
- Provide affordable multi-family housing to the City's underserved affordable market demand, particularly within the Central District and within walking distance of service oriented jobs.
- Provide the residents of the adjacent existing Green Hotel Apartments appropriate parking with direct ingress/egress.
- Build out the third parcel of the Castle Green/existing Green Hotel Apartments in a manner that is based on the original turn of the 20th century vision, which has been underutilized as surface parking since the 1950's, to thereby create a compatible new gateway framing an entrance to Old Pasadena.
- Broaden the retail connection on Fair Oaks Avenue to Colorado Boulevard by providing retail services along the street frontage.

- Create a mixed-use development that faces, compliments, and engages with the open space to the south of the site.
- Preserve views of the park from the south-facing units of the existing Green Hotel Apartments by providing an open space corridor between the Castle Green and the proposed project.

Project Characteristics

The proposed project involves construction and operation of a six-story mixed-use building with 64 residential units and 5,000 square feet of commercial space on an existing surface parking lot currently occupied by a billboard, 60 parking spaces and landscaping at 86 South Fair Oaks Avenue in Pasadena. The project site is 32,362 square feet and the proposed multi-story mixed-use building would be 76,980 square feet in size.

The ground floor would consist of 5,000 square feet of commercial space and 20 parking spaces, with 11 of the 20 parking spaces "tucked under" the building. In addition, 15 bicycle parking spaces (4 open rack and 11 enclosed) would be provided on the ground floor. Residential units would be located on the second through sixth floors. The proposed project would provide 9,600 square feet of private open space and recreational uses, which would consist of 2,880 square feet of open space (including a pool), a 1,050 square-foot gym, and 5,670 square feet of open space provided in the courtyard on the ground floor.

Parking for the project would be provided in compliance with City's Zoning Code and would be accommodated with 20 parking spaces on the ground floor and two levels of underground parking providing 147 parking spaces. The City's Zoning Code requires the provision of a minimum of 107 spaces for the new building as well as replacement of the 60 existing spaces on-site, which serve the existing Green Hotel Apartments. The proposed building would have a height of 75 feet and would comprise 76,980 square feet of gross floor area (2.38 floor area ratio). The height, floor area ratio, and setbacks meet the development standards for the CD-1 zoning district.

The driveway to the project site would be located along Dayton Street and would provide access to the surface and underground parking. Both ingress and egress would be available from Dayton Street. Pedestrian access to the residential lobby and commercial uses would be available off of Fair Oaks Avenue.

Construction of the proposed project would require the removal of 10 of the 15 trees protected under the City's ordinance.[1] The City's Tree Protection Ordinance requires protected trees to be replaced, but allows for several replacement alternatives. If all protected trees to be removed are proposed to be replaced with non-palm trees, they may be replaced with 76 non-palm trees of a minimum 24-inch box size or 48 non-palm trees of a minimum 36-inch box size. Alternatively, if protected palm species are proposed to be replaced with new palm trees, the aggregate height of replacement palm trees must total 167.5 feet, and the remaining removed non-palm trees may be replaced with either 40 24-inch box trees or 24 36-inch box trees.

The Tree Replacement Matrix adopted by the City Council in 2010 also indicates that protected specimen trees must be replaced with specimen or native trees on the list of protected native and

[1] In addition to the 15 protected trees located within the project site, there are three protected trees located directly adjacent to the project site, as shown in Figure 3.1-2 of the Final EIR and accounted for in Table 3-2 of the Final EIR (Tree Nos. 7, 22, and 23). Those three protected trees would remain in-place with project implementation.

specimen trees. The four protected non-palm trees proposed to be removed are on the list of specimen trees; therefore the trees planted to replace them must be on the list of protected native or specimen trees. The City's Tree Protection Ordinance also states that "the developer may request to pay a fee instead of planting on site up to 50 percent of the required number of replacement trees."

A total of 24 new 36-inch box trees and new palm trees totaling 176 feet in height would be planted on-site, thereby meeting the required replacement trees per the City's Tree Protection Ordinance. Three existing palm trees would be transplanted on-site to naturally draining soil and the new trees would be planted in either naturally draining soil or planters above the subterranean parking. Planters would be raised to provide a portion of the required five-foot planter depth above the grade. Therefore, the proposed project would meet the requirements of the City's Tree Protection Ordinance. Removal of protected trees requires adherence to the ordinance through the review and approval of applications for each removed tree and findings are required to be made to ensure the removals meet the ordinance. The requested tree removals will be reviewed in conjunction with the design review that is required for the proposed project.

Construction activities associated with the proposed project are anticipated to include demolition, site preparation, excavation, grading, construction of the new mixed-use building, application of coatings, paving, painting/striping, installation of lighting/security lighting, and landscaping. Construction would occur in one phase lasting approximately 28 months, beginning in August 2014 and completing in December 2016. Site clearing and grubbing activities would last for approximately five days, demolition of the existing parking lot would occur over a period of approximately one month, grading of the project site is anticipated to take approximately three months, building sub-phase (i.e., construction of the building and underground parking levels) would last for 16 months, application of architectural coatings would last approximately 10 months, and asphalt application would last approximately two months, with some construction phases overlapping. Construction staging would occur on-site and construction of the proposed project would require a maximum of 40 construction workers. Demolition of the existing parking lot would produce approximately 620 cubic yards (cy) of debris. Grading and excavation on the project site would produce approximately 30,000 cy of soil for export.

Alternatives to the Project

CEQA requires that an environmental impact report (EIR) describe a range of reasonable alternatives to a proposed project that could feasibly avoid or lessen any significant environmental impacts, while attaining the basic objectives of the project. Comparative analysis of the impacts of these alternatives is required. In response to the significant impacts associated with the proposed project, the City developed and considered the following alternatives to the project:

- Alternative 1 – No Project

  The No Project Alternative is the No Build Alternative and assumes that the proposed building would not be constructed; the site would remain in its current state and continue to be occupied by a billboard and utilized for parking by residents of the existing Green Hotel Apartments building.

- Alternative 2 – Reduced Height

  The Reduced Height Alternative assumes the construction of a mixed-use building, much like the proposed building; however, two fewer floors would be constructed thereby reducing the

number of residential units from 64 to 42 and reducing the required number of parking spaces from 166 to 131. A total of 5,000 square feet of commercial space would remain within the ground floor of the building under the Reduced Height Alternative.

Four other alternatives were considered but rejected as infeasible, as outlined further in Section 4.0, Alternatives.

The *CEQA Guidelines* require that an environmentally superior alternative be identified from the alternatives considered in an EIR. The No Project Alternative would result in no environmental impacts and therefore would be the Environmentally Superior Alternative to the proposed project. However, as required by *CEQA Guidelines* Section 15126.6(e)(2), if the No Project Alternative is identified as the Environmentally Superior Alternative, a second build alternative must be identified as the Environmentally Superior Alternative. As such, Alternative 2, the Reduced Height Alternative, would be the Environmentally Superior Alternative to the proposed project because this alternative would reduce the severity of the significant and unavoidable traffic impact along the Dayton Street segment between Fair Oaks Avenue and Raymond Avenue.

Areas of Known Controversy

The *CEQA Guidelines* require a Draft EIR to identify areas of controversy known to the lead agency, including issues raised by other agencies and the public. Comments were received from public agencies and interested parties in response to the circulated Notice of Preparation (NOP). In compliance with *CEQA Guidelines*, the City held two scoping meetings on April 8 and April 15, 2013, to solicit comments and to inform the public of the proposed EIR. Comments were also received in response to the published NOP (provided in Appendix A), which identified environmental topics that local and regional agencies recommended for analysis in the Draft EIR. The following environmental topics of potential controversy were identified during the scoping meetings and/or NOP process:

- Aesthetic and landscaping changes through the removal of trees/canopy trees and survival of new and transplanted trees;
- Ingress/Egress along Dayton Street;
- Fire Safety and emergency access along Dayton Street;
- Increased traffic from project implementation;
- Density and height of project relative to surrounding land uses and buildings;
- Historical significance of entire block on which the project site is located;
- Impact on views from surrounding buildings;
- Alternatives to the proposed design;
- Air quality impacts to sensitive receptors, and specifically the neighboring Castle Green, the existing Green Hotel Apartments, and Central Park;
- Unreinforced masonry walls of Castle Green Apartments could be impacted by excavation, vibration, and other construction activities; and

- Loss of soil during construction could cause displacement of Castle Green.

As a result of the comments received during the scoping process, the following environmental topics were evaluated in depth in this Draft EIR:

- Aesthetics;
- Air Quality;
- Cultural Resources;
- Greenhouse Gases;
- Noise and Vibration; and
- Transportation and Circulation.

Issues to be Resolved

The *CEQA Guidelines* require an EIR to present issues to be resolved by the lead agency. These issues include the choice between alternatives and whether or how to mitigate potentially significant environmental impacts. The major issues to be resolved by the City of Pasadena, as the Lead Agency for the project include the following:

- Whether the recommended mitigation measures should be adopted or modified;
- Whether additional mitigation measures need to be applied to the project; and
- Whether the project or an alternative should be approved.

Summary of Project Impacts, Conditions of Approval, and Mitigation Measures

A summary of the environmental impacts associated with implementation of the proposed project, conditions of approval (COA) and mitigation measures (MM) included to avoid or lessen the severity of potentially significant environmental impacts, and residual impacts, is provided in Table 1, Summary of Project Impacts, Conditions of Approval, Mitigation Measures, and Residual Impacts, below.

Table 1 Summary of Project Impacts, Conditions of Approval, Mitigation Measures, and Residual Impacts

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
Aesthetics		
The project would introduce a new 6-story building on a site located within a built-out environment adjacent to two existing six- and seven-story buildings. The project would not have a substantial adverse effect on a scenic vista (i.e., blocking views of the San Gabriel Mountains from public vantage points or from the adjacent uses).	No mitigation is required	Less than significant impact
The project would introduce a new building on a site covered with mature trees and utilized only for surface parking. However, the project	No mitigation is required	Less than significant impact

would not substantially degrade the existing visual character or quality of the site and its surroundings.		
The project would create a new source of increased levels of ambient lighting and glare in the immediate vicinity of the site; however, light emanating from the new building would be consistent with the ambient nighttime illumination levels of existing development and proposed exterior lighting would be shielded and oriented in a manner that will prevent spillage or glare onto surrounding uses.	No mitigation is required	Less than significant impact
The project would result in new shadows being cast on light-sensitive uses; however, the project site is in an urban environment, immediately adjacent to existing buildings of comparable massing and height.	No mitigation is required	Less than significant impact
Air Quality		
The project would create emissions during construction and operation but would not conflict with implementation of the applicable air quality plan.	No mitigation is required	No impact
The project would create emissions from operational/area sources and from increased vehicle trips , but would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.	No mitigation is required	Less than significant impact
The project would generate emissions from operational/area sources and from increased vehicle trips but would not result in a cumulatively considerable net increase of any nonattainment criteria pollutant.	No mitigation is required	Less than significant impact
The project construction would generate emissions that would not exceed, but would nearly approach, the $PM_{2.5}$ emissions thresholds; as such, mitigation is included to ensure that the project would not expose sensitive receptors to substantial pollutant concentrations during construction.	**MM AQ-1**: Construction Equipment Engine Requirements. The construction contractor shall ensure that off-road construction equipment be equipped with engines that meet the model year 2007 or Tier 3 emission standards for off-road compression-ignition (diesel) engines (13 CCR 2420-2425.1). Older model year engine may also be used if they are retrofit with a diesel particulate filter to reduce PM emissions to the applicable emission standards. **MM AQ-2**: Construction Equipment Limitations. The construction contractor shall ensure that the cumulative hours of operation for all off-road diesel equipment do not exceed 60 hours per day.	Less than significant impact
The project would generate odors from construction equipment and potentially from commercial uses during operations; however, the project would not create objectionable odors affecting a substantial number of people.	No mitigation is required	Less than significant impact
Cultural Resources[2]		
The project is adjacent to but would not	No mitigation is required	Less than

[2] As part of the Final EIR, an additional condition of approval, COA-CULT-1, was incorporated into the project to address unanticipated archaeological finds during project construction. As described in Section 2 below, it was already concluded in the Initial Study/Notice of Preparation that implementation of the proposed project would not result in significant impacts to archaeological or paleontological resources. The addition of COA-CULT-1 does not change that earlier conclusion; hence, it is not a mitigation measure and is therefore not listed in this table.

involve demolition or physical alteration of the historic Hotel Green or Castle Green Apartments or any other historic structures.		significant impact
The project involves new construction adjacent to existing historic resources and would not involve relocation of a historic resource.	No mitigation is required.	Less than significant impact
The project involves new construction adjacent to existing historic resources and would not involve conversion, rehabilitation or alteration of a significant resource and would comply with the Standards 9 and 10 of the Secretary of the Interior's Standards for Rehabilitation.	No mitigation is required	Less than significant impact
The project would involve the construction of a new building adjacent to existing historic resources; however, the new construction would not reduce the integrity or significance of important resources on the site or in the vicinity. The historic character and integrity of the Castle Green and existing Green Hotel Apartments would remain intact.	No mitigation is required	Less than significant impact
Greenhouse Gases		
The project would generate greenhouse gas emissions as a result of vehicles traveling to and from the apartments, natural gas combustion from space heating, disposal of solid waste, and electricity used directly by the building and indirectly to supply water to the site and to treat wastewater; however, these emissions would not exceed the SCQAMD's proposed screening-level significant threshold for commercial land uses.	No mitigation is required	Less than significant impact
The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses.	No mitigation is required	No impact
Noise and Vibration		
The project could expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Maximum construction noise levels (which would occur occasionally and intermittently when equipment would work closest to the sensitive receptors at the property line at full power) are estimated at 91 dBA at the existing Green Hotel Apartments and 81 dBA at Castle Green at the ground floor. However average construction noise levels would be 75 dBA and 74 dBA, respectively. Noise levels would be slightly lower at elevations above the ground floor because of increased distance between the source and receptor. Since the maximum noise levels to be generated during construction is 80 dBA at 100 feet from the noise source, construction noise levels would not exceed the City's Noise Ordinance limit for construction noise of 85 dBA at a distance of 100 feet. However, mitigation is included to minimize noise levels to neighboring properties to the maximum extent feasible.	**COA NOISE-1**: Noise Barriers. Before the start of pavement demolition, the contractor shall erect a 20-foot-high temporary noise barrier, such as a curtain of durable flexible composite material with sound-absorptive material on one or both sides and solid wall composed of $^{5}/_{8}$-inch plywood or heavier, on the northern and eastern sides of the project site. The noise barrier shall be installed without any gaps and with the sound absorptive side facing the construction activity area. The barrier shall be maintained and any damage that may occur be promptly repaired. The barrier shall remain in place until the completion of outdoor construction requiring use of diesel-powered equipment. **COA NOISE-2**: Noise Reduction Measures. Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, the following noise-reduction measures shall be included in the construction plans or specifications: ▪ The construction contractor shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. ▪ The construction contractor shall place all stationary construction equipment so that the	Less than significant impact

	equipment is as far as reasonably feasible from noise-sensitive receptors and so emitted noise is directed away from noise-sensitive receptors. ▪ The construction contractor shall locate equipment staging in areas that will create the greatest distance between staging area noise sources and noise-sensitive receptors. **COA Noise-3**: Adherence to Noise Restrictions Ordinance. The project shall adhere to all applicable requirements of the Noise Restrictions Ordinance during project construction and operation. A Construction Related Noise Plan is required as part of the Construction Staging Plan and must be reviewed by the Building Division and the Department of Transportation and approved prior to the issuance of a grading permit. This plan should show the location of any construction equipment and how the noise from this equipment will be mitigated by such methods as: temporary noise attenuation barriers; preferential location of equipment; and use of current technology and noise suppression equipment. **MM NOISE-1**: Construction Time Limits. Prior to issuance of grading and/or building permits, contractor specifications shall include a note indicating that noise-generating construction activities shall be limited to between the hours of 7:00 AM and 7:00 PM Monday through Friday and between the hours of 8:00 AM and 5:00 PM Saturday. On Sundays and Federal holidays, no noise-generating construction activities shall be permitted.	
The proposed project would contribute operational (post-construction) noise to the existing environment through (1) the addition of traffic on local streets, (2) on-site stationary sources, and (3) on-site outdoor activities. The primary noise source to the project site and surrounding buildings is traffic on Fair Oaks Avenue. The proposed building would block a substantial portion of the traffic noise to the project site, the existing Green Hotel Apartments, and Castle Green. The resultant traffic noise level at Castle Green and the existing Green Hotel Apartments residences would be less than the existing ambient noise level. Operational noise sources associated with the proposed residential uses would include, but would not be limited to mechanical equipment (e.g., heating, ventilating, and air conditioning [HVAC] units and swimming pool pumps); landscape maintenance equipment; vehicles in the surface parking area; vehicles entering and leaving the subterranean parking area; and outdoor activities at the swimming pool area. The project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	**COA NOISE-3**: Adherence to Noise Restrictions Ordinance. The project shall adhere to all applicable requirements of the Noise Restrictions Ordinance during project construction and operation. A Construction Related Noise Plan is required as part of the Construction Staging Plan and must be reviewed by the Building Division and the Department of Transportation and approved prior to the issuance of a grading permit. This plan should show the location of any construction equipment and how the noise from this equipment will be mitigated by such methods as: temporary noise attenuation barriers; preferential location of equipment; and use of current technology and noise suppression equipment. **COA NOISE-4**: HVAC Noise Levels. Prior to the issuance of building permits, the Applicant shall provide data to the Director of Planning and Community Development demonstrating that the noise level from heating, ventilation, and air conditioning (HVAC) units, swimming pool equipment, and similar mechanical equipment when measured inside any dwelling unit on the same property or 20 feet from the outside of the dwelling unit in which the noise source or sources may be located would be less than 50 dBA. **COA NOISE-5**: Exterior to Interior Noise Reduction. Prior to the issuance of building permits, the applicant shall present data to the Director of Planning and Community Development demonstrating that the exterior-to-interior noise reduction for residential units facing Fair Oaks	Less than significant impact

	Avenue would be at least 24 A-weighted decibels (dBA). **COA NOISE-6:** Noise Notification. Prior to the issuance of a Certificate of Occupancy for the project, the applicant shall present information to the Director of Planning and Community Development demonstrating that appropriate sale or lease transfer documents for residential units include an advisory that the residence is located in the Central District, an area where there is a potential for noise from commercial and nighttime activities. The following language is provided as an example: *All potential buyers and/or renters of residential property in the Green Hotel Apartments, which is in Pasadena's Central District Specific Plan area, are hereby notified that they may be subject to audible noise levels attributed to business and entertainment-related activities common to such areas, including amplified sound, music, delivery vehicles, pedestrian and vehicular traffic, and other urban noise* **MM NOISE 2:** Noise Restrictions within the Common Outdoor Area. Prior to the issuance of an occupancy permit, the Applicant shall provide evidence to the Director of Planning and Community Development demonstrating that the building's Covenants, Conditions and Restrictions (CC&Rs) or equivalent regulations include a prohibition on the use of radios, televisions, "boom boxes", and similar devices in the pool area and other outdoor common areas unless the devices are used with headphones, ear buds, or similar device and that signs with such restrictions are posted at the pool area. **MM NOISE-3**: Pool Hours of Operation. Prior to the issuance of an occupancy permit, the Applicant shall provide evidence to the Director of Planning and Community Development demonstrating that the building's CC&Rs or equivalent regulations include a prohibition on the use of the pool area between 10:00 p.m. and 5:00 a.m. and that signs with pool hours are posted at the pool area.	
The project would generate noise during construction and during operation. However, construction and operational noise would not expose persons or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	**COA NOISE-3**: Adherence to Noise Restrictions Ordinance. The project shall adhere to all applicable requirements of the Noise Restrictions Ordinance during project construction and operation. A Construction Related Noise Plan is required as part of the Construction Staging Plan and must be reviewed by the Building Division and the Department of Transportation and approved prior to the issuance of a grading permit. This plan should show the location of any construction equipment and how the noise from this equipment will be mitigated by such methods as: temporary noise attenuation barriers; preferential location of equipment; and use of current technology and noise suppression equipment.	Less than significant impact
Construction of the proposed project has the potential to generate vibration to the adjacent structures and their occupants. Construction of the proposed project would not require pile driving or blasting, which are generally the sources of the most severe vibration. In addition, vibratory compactors would not be	**MM NOISE-4**: Consult with Structural Engineer and Project Historical Architect. Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, and to the satisfaction of the City of Pasadena, the applicant shall retain a Professional Structural Engineer with experience in structural vibration analysis and monitoring for	Less than significant impact

used during project construction. However, conventional heavy construction equipment would be used for demolition of the existing parking lot and adjacent sidewalks, for excavation of the two levels of subterranean parking, and for export of demolished and excavated materials. Because structural damage considerations require limiting vibration levels to 0.12 ppv in/sec or a similar level, the perception of vibration by persons in the existing Green Hotel Apartments would fall within the barely perceptible to distinctly perceptible range. Given the sensitivity of the surrounding uses, the project has the potential to expose persons and structures to excessive groundborne vibration or groundborne noise levels.	historic buildings and a Project Historical Architect as a team to perform the following tasks: ▪ Review the project plans for demolition and construction; ▪ Survey the project site and the existing Green Hotel Apartment building and the 84 South Fair Oaks Avenue structure, including geological testing, if required; and ▪ Prepare and submit a report to the Director of Planning and Community Development to include, but not be limited to, the following: o Description of existing conditions at the existing Green Hotel Apartment building and the 84 South Fair Oaks Avenue structure; o Vibration level limits based on building conditions, soil conditions, and planned demolition and construction methods to ensure vibration levels would be below 0.12 ppv in/sec, the potential for damage to the existing Green Hotel Apartment building and the 84 South Fair Oaks Avenue structure; o Specific measures to be taken during construction to ensure the specified vibration level limits are not exceeded; and o A monitoring plan to be implemented during demolition and construction that includes post-construction and post-demolition surveys of the existing Green Hotel Apartment building and the 84 South Fair Oaks Avenue structure. o Examples of measures that may be specified for implementation during demolition or construction include, but are not limited to - Prohibition of certain types of impact equipment; - Requirement for lighter tracked or wheeled equipment; - Specifying demolition by non-impact methods, such as sawing concrete; - Phasing operations to avoid simultaneous vibration sources; and - Installation of vibration measuring devices to guide decision making for subsequent activities. **MM NOISE-5**: Post-Construction Survey and Documentation. To the satisfaction of the City of Pasadena, at the conclusion of vibration-causing activities, in the unanticipated event of discovery of vibration-caused damage, the Structural Engineer and the Project Historical Architect shall document any damage to the existing Green Hotel Apartment building and the 84 South Fair Oaks Avenue structure caused by construction of the project and shall recommend necessary repairs. The project applicant shall be responsible for any repairs associated with vibration-caused damage as a result of construction of the project. Any repairs shall be undertaken and completed as required to conform to the Secretary of

	the Interior's Standards for the Treatment of Historic Properties (36 Code of Federal Regulations 68), and shall apply the California Historical Building Code (California Code of Regulations, Title 24, Part 8) and other applicable codes.	
Transportation and Circulation		
The project is consistent with the policies in the Mobility Element of the City's General Plan. However, the project would introduce new vehicle trips onto the Dayton Street segment between Fair Oaks Avenue and Raymond Avenue. The increased number of vehicle trips would result in a significant traffic impact to this street segment. As such, while no Mobility Element inconsistencies would occur, the increased traffic introduced along Dayton Street between Fair Oaks Avenue and Raymond Avenue would constitute a significant impact.	No feasible mitigation.	Significant and unavoidable
The project would generate new vehicle trips, although not to such an extent at designated congestion management program street segments and intersections such that impacts would be significant. As such, the project would not conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.	No mitigation is required.	No impact
The anticipated maximum queue length for the westbound left-turn at Fair Oaks Ave/Dayton Street would not exceed the available storage length of the westbound traffic lane on Dayton Street. Additionally, the project would incorporate regulatory signage so that westbound traffic along Dayton Street would not block the project driveway. Therefore, the project would not result in a safety hazard due to the project's design.	**COA TRANS-1**: Regulatory Signage. Regulatory signage shall be installed at the project driveway's intersection with Dayton Street to prevent motorists from blocking the driveway. This signage shall conform to Pasadena Police Department signage standards for signage installed along driveways with blocked driveways violations and any violations shall be subject to citations by PD.	Less than significant impact
The project would provide emergency access along Fair Oaks Avenue and Dayton Street, and as such, would not result in inadequate emergency access.	No mitigation is required	Less than significant impact
The project would result in an increased number of vehicle trips and would temporarily affect Metro bus stops during construction. However, the project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	**MM TRANS-1**: Coordination with Metro. The construction contractor shall contact and notify Metro Bus Operations Control Special Events Coordinator at 213-922-4632 a minimum of 10 working days prior to any construction activities that may impact Metro bus lines. Additionally, the construction contractor shall contact and include other bus services, such as ARS and Foothill Transit, in construction outreach efforts that may be affected by construction activities. A quarterly compliance report submitted by the construction contractor would satisfy Metro's monitoring requirements. **MM TRANS-2**: Maintain Pedestrian Access. Construction activity shall not be allowed to block or interfere with pedestrian access to the existing transit stop located along Fair Oaks Avenue, near the corner of Fair Oaks Avenue and Dayton Street.	Less than significant impact

ENCLOSURE 2

Mike Salazar, Architect of the Castle Green Architecture and Design Committee for the
Castle Green Homeowners Association

SCEA Project Inappropriateness, Inadequacies and Failings Supplemental Letter.

Central Park Apartments, 86 S. Fair oaks Avenue, Pasadena.
May 5, 2021

This letter is a supplemental letter from the Castle Green Homeowners Association on this 2021 SCEA Project Report's inadequacies, failures and inappropriate application of a diminished SCEA review. Below are some "overarching" inadequacies indicating not only is SCEA inappropriate (See Carstens et. al. letter for the Association, May 6, 2021) for this project, but that SCEA is woefully inadequate to review this project. Several specifics are mentioned that prove the relevance of previously submitted letters & comments, and their relation to the SCEA Project.

An inappropriate application of SCEA under the guise of a Transportation-beneficial project ignores or dismisses glaring defects of the actual project and the overbearing historical impacts. With 88 total units, this project fails to provide an expected larger amount of real *affordable income level housing*, the most basic need and certainly more critical that one of many 'transit' projects.

Less than 10% of these units are in an affordable range. And by seeking a Vested Tract map approval (by a single zoning official, thereby avoiding a Planning Commission review), it is clear that the apartment project will readily be converted to condominiums. On it's face there is certainly no objection to a conversion strategy, but for this Project it is just one more diversion from the overbearing, massive structure that will dominate this national Register parcel, historic buildings and block.

We know the old excuse for avoiding significant affordable housing levels is that "it just won't pencil out." But for long-time owner G&K, with its history of few improvements and spotty maintenance of this recreation/parking parcel (as well as their deteriorating historic building), this isn't an excuse. Yet barely does SCEA mention (other than statistically) this low quantity of affordability. Will this translate when a condo conversion happens?

Overarching Inadequacy 1: Relying on the uncertified and unapproved previous EIR.
The SCEA far-too-often (if not as a basis) erroneously relies on or mimics parts of the mostly inadequate and disputed analyses and conclusions of the previous EIR, and fails to meet CEQA standards for a complex and domineering 2021 Project (Project).

Overarching Inadequacy 2: The 2021 SCEA Project represents a significant increase in most all project metrics (traffic, units, footprint, heights, impacts, etc.), yet the SCEA can obfuscate or ignore the likely increases in impacts. The myriad of mitigation or almost duplication of non-mitigation from its earlier version's EIR raises fundamental questions of the SCEA's applicability to this project, of the analyses that are conducted and the elimination or reduction of areas of impact, controversy and study.

Overarching Inadequacy 3: The 2021 SCEA fails to acknowledge and consider most **cumulative** impacts and project impacts required for study in the previous EIR, Section 3. Its lack of comprehensive inclusion is a deficiency of the SCEA Project. Six or more sections in the previous EIR cover standard and relevant cumulative effects. Yet relatively few areas of the SCEA discuss cumulative impacts let alone recognize possible impacts.

SCEA's MISLEADING and INADEQATE DESCRIPTIONS

A continued inadequacy from the previous EIR, carried much farther (and less adequately handled) is the Project Description, the rather subjective and misleading minimization of the 100+year significant and recognized elevations of the historic Hotel Green buildings *facing the Project site* impacted significantly by this project, and the dismissive descriptions of the National Register project site & parcel as a parking lot, or a parking lot with a billboard.

It is not *adequate* and frankly contrary to CEQA standards to diminish that this site had and retains its original historic recreation purpose. An omission of this fact in the National Register listing is an academic oversight and doesn't alter history or facts. The fact of the matter is this site started as extended park lands (with a singular house dwarfed by Colonel Green in the park), then soon added a sports court (roque or tennis it seems, as a mirror to an new Central Park roque court), and stayed a primary use of this use into the WWII-war years and still partially exists right now, with some remaining 1903-era walkways and trees (partly overlooked in this report as well). In fact, recreation is the *longest-lasting continual use and condition* of this parcel and of the two hotel parcels (also overlooked by this report). Despite adding parking in an expanding fashion since the 40s or 50s (unclear when parking originated), there also were enhanced recreation uses added with a large elliptical swimming pool and shuffleboard to enhance its recreation uses.

Today roughly 20-30% (despite aggressive and possibly unpermitted concrete paving) of this parcel is basically open space/recreation space/event space. Their parking lot, despite its overtake of the majority of space, is usually 30-40% full, and the overall impression from visually looking at this parcel is a very green space, with over 30 trees in place with the historic hotel building both quite visible and not 'hidden' as the report states.

Sadly, these inadequacy comments were similar to those made for the previous EIR, and another reason that all previous comments remain relevant through their resubmission during this SCEA review. For this reason, the entire historic and cultural resources sections are woefully inadequate, just like the previous uncertified EIR.

SPECIFIC SCEA INADEQUACIES

SCEA Sections 4.0, pgs 4.0-8 – 4.0-23. DEIR Sections 3.1 - INADEQUATE VIEW LOCATIONS

The SCEA erroneously relies on or mimics the mostly inadequate and disputed view locations and analyses of the previous EIR, not meeting CEQA requirements. Perhaps no other letter comment from the previous EIR documents sums up the inadequate SCEA VIEW analysis and review better than Pasadena Heritage's March 11, 2014 letter describing the faults with the 2014 "Vantage Points." This is why the Castle Green Homeowners Association is resubmitting all previous EIR Comment Letters (and other related modes of comments). The Association states these quoted comments clearly apply to the 2021 SCEA Project:

View A replicates the Previous EIR's challenged "**Vantage Point 4**." Pasadena Heritage noted, "From Vantage Point 4, the proposed project would greatly alter the existing visually prominent landscaping and would be a significant impact."

View B replicates the Previous EIR's challenged "**Vantage Point 3**." Pasadena Heritage noted, "…clearly shows how the project would block views of the Castle Green and its tree canopy from the west; this would be a significant impact.

View C replicates the Previous EIR's challenged "**Vantage Point 1**." Pasadena Heritage noted, "From Vantage Points **1** and 2, removal of the historic trees would cause substantial damage to scenic resources and would be an additional significant impacts." It should also be noted that because the Project fails to match the 1903 Concept's significant setback from Dayton Street (similar to the Castle Green's 30+ feet setback above the main floor), this view all but blocks 138-year views of the historic DOTY Building, not only from the existing historic buildings on the block, but for all on Dayton street, until they *reach* the Fair Oaks intersection – also a significant impact unrecognized.

View D (Previous EIR Vantage Point 5). This view has little differential from VIEW E, and appears to be a set up in an opening clearance to show parts of the historic Green Hotel Apartments

View E (Previous EIR Vantage Point 6). As noted in VIEW D, this is merely a space waster.

View F replicates the Previous EIR's challenged "Vantage Point 7." Pasadena Heritage noted, "

View G replicates the Previous EIR's challenged "**Vantage Point 2**." Pasadena Heritage noted, "From Vantage Points 1 and **2**, removal of the historic trees would cause substantial damage to scenic resources and would be an additional significant impacts."

View H replicates the Previous EIR's challenged "Vantage Point 8." Pasadena Heritage noted, "

Views not analyzed nor acknowledged in SCEA nor the previous EIR are the historic views to the Vista Del Arroyo former hotel and San Rafael Hills, as well as the Linda Vista Hills. And the SCEA apparently makes not statement of the cumulative loss of views.

And worth noting is that since the SCEA denigrates as not significant the elevations of the historic hotel buildings facing the Project, it diminishes or negates view impacts as noted:

A. The Green Hotel Apartments are already obscured by the trees located on or near the project site as well as within Central Park. In fact, since 2018, the largest tree canopy that existed died, and since 2018 there is a great broad view of the Green Hotel Apartments (and vice versa from the apartments to Central Park), a fact omitted from the SCEA..
B. SCEA admits, "… views of the Green Hotel Apartments and the Castle Green from Central park would be altered. However their primary elevations on East Green Street and South Raymond Avenue would remain unaltered. Here is evidence that the SCEA wrongly dismisses the established elevations historic Hotel Green buildings facing the Project as secondary with no impacts. The Association calls this a significant impact on cultural resources, as these are not secondary elevation. In fact, Design Commissioners asked that all visible facades of the former Hotel Green buildings on this block be designated as primary facades (See FEIR, Section 3.3.3, March 11, 2014 public hearing).
C. SCEA states that CEQA, "…emphasizes evaluation of visual resources that are visible from public places… the project might affect private views,.." But then goes on to say private views, "…are not generally regarded as a significant environmental impact under CEQA. The private views of this National Register property are in fact significantly impacted, and this building's significance should make this evident. SCEA downplays most Aesthetic impacts, and is not appropriate for this project and site. And appropriate CEQA analysis can and must recognize these impacts.
D. The final erroneous assumption in SCEA is, "…the project would not in any way obstruct the views of any of the historic buildings or other scenic resources in the vicinity. False. From the 1887 Doty Building, it's 1898 views of the Castle Green and most of the Green Hotel Apartments are virtually eliminated. From this historic former parking structure on South Raymond Avenue and the former site of the 1894 Hotel Green's outdoor courtyard of west Old Pasadena (and the Doty specifically) is blocked because of no Dayton Street setback that Colonel Green envisioned for the 1903 concept. The Castle Green's aforementioned views of the former Vista del Arroyo hotel and San Rafael hills may also be blocked due to the excessive heights of the SCEA Project, about 16 feet higher than the previous EIR project!

The inappropriateness of the SCEA is summed up on page 4.0-6, stating that because of SB743, being in a TPA, NO AESTHETIC IMPACTS can be considered! This is unacceptable for this significant National Register landmark. So the SCEA concludes there are NO view impacts.

SCEA Section 4.0, Previous EIR Section 3.1 - SUBTANTIAL SHADE SOURCE INTRODUCED

The SCEA Project also impacts the existing historic block by introducing a substantial shade source. The height and scale of the previous EIR project was 75 feet, and was noted that the height and scale of the proposed project would result in new shadows and virtually perpetual shade on the lower floors that would impact the Green Hotel Apartments and Castle Green's historic west (rear) landscaped yard. These previous comments/statements clearly apply.

SCEA MITIGATION MEASURES INSUFFICIENT

PMM CULT-1, Page A-17. The Association strongly disagrees that no mitigation measures are needed, as we believe this project creates significant adverse impacts on the historic block and the existing Hotel Green structures. The contextual setting of these historic buildings is being radically disturbed by this stand-alone domineering 7 story Project, rationalized by cherry picking the historic record and creating a false narrative of the recreation of the early 1903 concepts for a Fair Oaks Avenue wing of the Hotel Green. At best this project is fighting the stately calm of the 120 or so years old historic structures to be the highlight or feature of this historic block, instead of being subservient and complimentary to these most-historic buildings and site. At worst it's a railroading of an angry owner that couldn't care less about history by insisting on a domineering structure that all but hides the historic buildings at the gateway of the Old Pasadena Historic District.

This mitigation calls for preserving the contextual settings, yet the site goes from green open space with parking to a largely built out solo building, pushing to crowd out views of the historic setting and structures and forever altering and overpowering these most historic structures. This shameful SCEA process seems to not recognize obvious impacts and seems to imply that delisting should be the *only* criteria for declaring a significant impact on these majestic structures, and ignores the fact that this project surely does impair them.

No alternative projects are considered in this ill-advised SCEA process, despite the outcry during the previous EIR process for reduced-impact alternatives. Having this SCEA process initially forego our Design Commission's lead role called for in our General Plan and Central District Plan is a travesty at best. Instead SCEA make a political football and a mockery of the necessary environmental review for such a complex and important parcel already on the National Register, sending it to the City Council for "approvals" that circumvent our community standards and guiding documents.

PMM GEO-2, Page A-21. It seems the rational that since the site is not *known* to contain paleontological resources (seemingly mostly because it remains undisturbed) that the site is not expected to yield a unique paleontological resource is just about as lazy as it gets. Why not apply this mitigation measure, since this remains undisturbed land?

PMM HAZ-5, Page A-29. While perhaps beyond or outside the scope of this mitigation measure, it seems that a significantly impacted Dayton Street (with unsignalized intersection not studied in the SCEA at each end) could impede emergency access routes. Since the fire department may not have been given the full range of traffic impacts and vehicle trips added in the vicinity of the S. Fair Oaks fire station, this seems to be an inadequate study.

PMM LU-1, Page A-32. This raises a serious land use issue, with the SCEA Project avoiding any study of and therefore mitigation of the Dayton Street/Fair Oaks Ave. intersection, despite the impact of more than half of the daily 866 new vehicle trips. This LU-1 deals with dividing communities, and making this intersection less safe, with no pedestrian or bicycle improvements, it is effectively separating and isolating the in-town former East Ambassador College village created west of Fair Oaks Avenue, effectively creating a divide. While this intersection is not safe right now, ignoring this intersection and waiting to mitigate once the project's 866 daily trips are mostly added is inadequate.

And this LU-2 says to orient transportation projects (this is what SCEA says this is) to minimize impacts on existing communities by incorporating direct crossings at regular intervals for pedestrian, bicyclists and vehicles. This Project does neither, and identifies no mitigation requirement, making the lack of mitigation inadequate.

Effectively ignoring the impacts of an 83% increase in daily trips on Dayton Street Roadway Segment, and ignoring any responsibility to study, let alone mitigate known issues and barriers to easy access across Fair Oaks, the Project is creating or at minimum making an unsafe barrier even more difficult to cross. And if it is "infeasible" to avoid this reinforcing the barrier that Fair oaks Avenue already is, the provisions are to be part of required mitigation to improve bicycle, pedestrian and vehicle access across improved roadways. This additional lack of mitigation is also inadequate.

PMM LU-2, Page A-32. The example above in LU-1 of further isolating the former East Ambassador College village could apply to the inadequacy of this lack of mitigation. Does a physical barrier have to readily visible? A street may not be a physical (as in touchable) barrier, but if it's difficult at best to cross, then it certainly is a barrier of sorts in the spirit of CEQA (this would go for LU-1 above as well).

Certainly this conflicts with the General Plan, Central District Plan and the Old Pasadena Specific Plan. It is also curious as to why the city would place the only Land Use and Planning mitigation measures LU-1 & 2 under the Connect SoCal measures and not use our General Plan or Central District Plan as the basis for mitigation. This is an example of the SCEA review being inappropriate for this project.

If this intersection and related roadways were properly studied, the 'barrier' of sorts created by almost doubling Dayton Street daily trips with no mitigation, and no mitigation because of no studying the Dayton/Fair Oaks intersection, effectively letting this intersection's deficiencies get worse and less safe, mitigation measures can and should be required to reduce what could be a substantial adverse effect of the project, the project should be modified' to eliminate this conflict. But is avoiding any study an acceptable reason to let these conditions worsen, and/or just another example of the inadequate SCEA study?

PMM NOISE-1, Page 33. There is no study or anticipation of noise from the single driveway between the two historic Hotel Green structures and the oversized Project, creating a 3-sided canyon that could reflect all driveway noise from an additional 866 daily trips. No study, therefore this mitigation is inadequate.

PMM NOISE-2, Page A-36. This Noise & Vibration mitigation measure should also include measures for the Castle Green, without the, it is inadequate. And there seems to be no difference from the previous EIR 3-level depth parking than the SCEA 4-level depth parking (a significant increase and risk)..

PMM PSP-1, Page A-37. This is related to SCEA Section 4.15 Public Services. The impacts here state that no alteration of public facilities will be needed, but since the signalized fire station stop on Fair Oaks Avenue is at the unsignalized and unstudied offset-Dayton Street/Fair Oaks Avenue (DS/FOA) intersection, this should be considered as a possible alteration. By not studying this complex unsignalized intersection, this SCEA has no standing to know if the intersection or this fire signal may be impacted, thus an inadequate determination of impact level (4.15) and mitigation should be included as part of the Project. At very least, a traffic control plan should be part of SCEA and the Project.

PMM TRA-1, Page A-38. Despite SB743, the SCEA application fails because there are significant impacts to Cultural Resources, and SCEA application cannot be used if it conflicts with Historic Resources. The Association disagrees with the Cultural Heritage analysis and conclusions of no significant impacts to the historic block and structures.

Mitigation Measure PMM-TRA-1 is incorrect. The City knows that by the "Outside of CEQA" transportation section, albeit even less than the smaller previous EIR project, that the number of daily trips on the Dayton Street Roadway Segment (DSRS) will significantly impact that Segment. The SCEA also failed to look at the minimum segment/intersections that the previous EIR did, despite knowing that the DSRS impacts far exceed their reasonable standards of increases.

And once again, as with the previous EIR of a smaller project, the SCEA failed to look at the two unsignalized intersections bookending the impacted DSRS. Thus the SCEA declares that no intersections are impacted. This is false and dangerous. The unsignalized Dayton Street/Raymond Ave. (DS/RA) & the Dayton Street /Fair Oaks Ave. (DS/FOA) intersections are likely in need of a project-driven & integrally-designed upgrade/mitigation, not left to fail and then altered at the City's expense. But when it comes to the DS/FOA intersection, it is already a dangerous, unsignalized intersection with a critical offset that the previous EIR may not have truly considered (See 2015 RDEIR Fig3.6-14). There is no correction in the FEIR, and if SCEA used or relied on this previous EIR, there is no mention of this difficult offset unsignalized intersection needing any level of improvement. This clearly demonstrates an inadequacy of the SCEA.

The Association objects to this MM's conclusion that, "Transportation impacts were concluded to be less than significant." We know the DSRS will be overloaded based on the "Outside CEQA" section. We also know the SCEA cannot adequately conclude without documentation that the two unstudied intersections *aren't impacted*. In fact, we raise the concern and legal ruling in the IDS Project where not only was the density & envelope of an oversized building forced to be reduced, but the mere exclusion of an intended crosswalk mitigation from the project resulted in forcing the crosswalk to be integrally designed with the project.

To use the City's own words, the increase in traffic volume on the Dayton Street Roadway Segment (this is for the previous EIR's smaller 64 unit project**) "… would be a significant environmental effect."** Thus, the City *knows* that the SCEA's 84-unit project *will be an even worse "significant" environmental impact.* The Association finds this hard to comprehend, and beyond inadequate for any project.

PMM TRA-2, Page A-39 finds no issues with emergency access. As mentioned in the previous EIR comments, the cursory Fire Department review was inadequate, as it is for the SCEA, to realistically assess the impact of what the SCEA daily trip increase of 83% on the Dayton Street Roadway Segment will mean. As DSRS stands today, it is too narrow at 30 feet in width to accommodate the necessary street parking/loading spaces and two-way traffic. How will the DSRS doubling of daily trips be irrelevant, and still function as a fire department alternate route to the east portions of Pasadena?

This is the ONLY fire department access to the Castle Green by either our Dayton Street rear driveway, or the 20 foot wide emergency gates also on this DSRS? In all the City/SCEA/EIR documents to the fire department, not once is mentioned any of these facts, and certainly not the 83% increase in daily trip traffic. Irregardless of the ability to not consider roadway segment impacts, the City knows the DSRS will be significantly impacted, yet doesn't even require this project to make even the most minor traffic changes until after the problems arise, after construction, especially when ignoring a basic crosswalk cost the city (and IDS project developers) a lot of time and money in the IDS courtroom battle.

How will the signalized fire station lights on southbound Fair Oaks Avenue at the south edge of the DS/FOA not be impacted? With no crosswalks and significantly more daily trips this intersections gets knowingly more unsafe.
And with no bicycle and pedestrian required enhancements, this intersection just gets more unsafe, all with City knowledge.

MM 4.1 Cultural Resources, Page A-49. We disagree as inadequate the conclusion that no significant impacts on the historic block, buildings and site, or that those identified are less than significant. The conclusion in the SCEA that there are no impacts to Cultural Resources is flawed, and such impacts are not dismissed by SB743's overreaching elimination of Aesthetic impacts.

MM 9.1 Noise (and Vibration), Page A-50. The Association finds this MM as inadequate and in fact the entire 9-page 4.13 Noise section, less than 50% of the previous EIR's 20+ pages, for a SCEA project much larger (and deeper), we find the analysis and the mitigation efforts NOI-1 and NOI-2 inadequate and dangerous to the historic Hotel Green structures and 84 S. Fair Oaks as well.

A lone Vibration Receptor #2 is mentioned in regard s to the Castle Green. This is stated to be just forty feet from the project, and therefore about the same distance away from the Castle Green. Given the known seismic tendencies of the Castle Green (and the repaired damage from the Whittier series of quakes, this seems inadequate. In fact, both measures fail to mention and require any mitigation measure for the Castle Green.

Similar concerns must be voiced for **MM 9.3 & 9.4**, as they both rely on NOI-1 & NOI-2 that include no mitigation measures for the Castle Green. It is unclear if MM 9.5 applies to the Castle Green, so this is an inadequate mitigation measure as well.

MM 13.1, Page A-51. This transportation mitigation measure depends on a City update in 2020 of a "Nexus Study" for development impact fees. This update is critical to be completed, given that the SCEA fails to require minimum traffic measures on the Dayton Street Roadway Segment known to be significantly impacted, nor for the two Dayton

Street bookend intersections that aren't even studied, yet remain primitively unsignalized, and unsafe. Unfortunately, this mitigation claims to be not applicable at the project level, which makes this measure inadequate.

It is possible that this project could come in before the completion of the Nexus Study, and avoid what the Association sees as necessary impact payments due to the high likelihood that Dayton Street (and the bookend intersections) will require future mitigation of the known significant traffic increase/impact.

MM Aesthetics, Page A-51 contains standard project mitigation measures to avoid potential new levels of light and glare effects. This includes such mitigation requirements as examining potential light and glare, requiring features to avoid adverse light and glare, limiting reflective and glare-producing materials, requiring nighttime lighting focused down and away from adjacent properties. However, due to SB743, this mitigation measure is deemed "not relevant" to the Project. "The project's aesthetic impacts shall not be considered significant impacts. But does this mean that the analysis is to be omitted, as we don't see these items yet studied or required to be. It is only negating the significant impact, not negating the public's right to know if Aesthetics issues will arise. This leads to an inadequate SCEA.

MM Noise considers that this project will not have a significant noise impacts, yet all 866 daily trips generated from this project will come and go from the singular Dayton Street driveway, within a three-sided enclosed 75-90 foot tall building canyon. How can the noise from the singular driveway not affect the existing historic building occupants?

This is a serious reason to look at alternatives – that are NOT required or presented in the SCEA review. The city knows that while the Green Hotel Apartments (contrary to their required adherence to the Secretary of Interior's Standards for windows/window replacement) may have some level of modern soundproofing, the Castle Green entirely retains historic wood windows with mostly historic single-pane glass.

So despite the Castle Green being more susceptible to project driveway noise of 866 new daily trips, the SCEA anticipates no significant or even non-significant noise impacts, yet we cannot find the analysis of the 3-sided uniform height canyon this oversized project creates. And the mitigation measure states that it is "not anticipated to have a significant noise impact. Yet there is no CEQA definition or standard of how to "not anticipate" an impact without studying the possible impact, which wasn't done, thus making the noise analysis inadequate and the elimination of any mitigation inadequate.

PREVIOUS "COMMENTS" APPLICABILITY

It must also be noted that all previous comments/letters be resubmitted as relevant because the 2021 SCEA Project is a *clearly* larger and more impactful version than the smaller previous EIR project that failed to receive certification and approvals. This is not a new project, but an enlarged and more complex and impactful version of the previous EIR. In fact, the staff and commissioner comments back in the EIR reviews stated it be best that the project return with modifications. This is clearly that project with modifications, and certainly not covering most suggestions. The SCEA application is inappropriate because this really is merely an upsized version of the previous EIR project and fails to respond to larger impacts.

These "Comments" consist of all correspondence letters and comments received in 2013-2019. All EIS, DEIR, RDEIR and FEIR public comment submitted and given by the public as well by the respective governmental body - either the City Council or Design Commissioners - and their respective staff from minutes and audio recordings and when documented in the above noted EIR documents (such as FEIR Sec. 3.3, and other relevant document sections).

In the SCEA the Aesthetics, Cultural Resources, Noise and Vibration, Transportation, Alternatives, Areas of Controversy (from previous EIR, omitted/diminished in SCEA), Other CEQA Considerations (from previous EIR, omitted/diminished in SCEA), and possibly other areas, all continue to be impacted in recognized, similar ways, and likely often more significantly.

"Comments" in the form of Letters and Sections within previous EIR documents that document public meetings:

> **See DEIR, Appendix A**, Letters from 2013 & EIS (in order published); Two Letter dated April 23, 2013; Letter dated April 24, 2013; Letter dated April11, 2013; 2nd Letter dated April 24, 2013; Letter/Petition dated April 23, 2013; Letter dated October 17, 2008; Letter dated October 11, 2010; Letter dated October 25, 2010; Letter dated September 23, 2011; Letter dated October 21, 2010; Letter dated October 25, 2010; Metro Letter dated April 16, 2013; NAHC Letter dated march 27, 2013.
>
> **See FEIR Section 3.3.2,** Letter No. 1, March 11, 2014; Letter No. 2, March 11, 2014; Letter No. 3, March 9, 2014; Letter No. 4, March 10, 2014; Letter No. 5, March 11, 2014; Letter No. 6, March 11, 2014; Letter 7, Jan 26, 2015; Letter 8, March 2, 2015. **FEIR Sec. 3.3.3, 3.3.5** has public and commissioner comments. Unfortunately any City Council reviews and comments do not appear to be made available, which is a deficiency of the EIR and ultimately this SCEA process and a disservice and disadvantage to the public.
>
> Other included Comments from EIR documents may be included.
>
> Not available: minutes and audio recordings from all 2013-2019 hearings, some documentation is provided in various EIR docs. Unfortunately any City Council reviews and comments do not appear to be included in the pervious EIR documents or made available, which is a deficiency of the EIR and ultimately this SCEA process and a disservice and disadvantage to the public.

In the coming month(s), the Castle Green Homeowners Association will provide additional documentation and illustrations to reinforce the above and more reasons that the SCEA process is flawed, and that a Revised EIR process must continue.

Respectfully,

/S/

Mike Salazar
For the Castle Green Homeowners Association

Letter O-3a

Mike Salazar, Architect of the Castle Green Architecture and Design Committee for the
Castle Green Homeowners Association

SCEA Project Inappropriateness, Inadequacies and Failings Supplemental Letter.

Central Park Apartments, 86 S. Fair oaks Avenue, Pasadena.
May 5, 2021

This letter is a supplemental letter from the Castle Green Homeowners Association on this 2021 SCEA Project Report's inadequacies, failures and inappropriate application of a diminished SCEA review. Below are some "overarching" inadequacies indicating not only is SCEA inappropriate (See Carstens et. al. letter for the Association, May 6, 2021) for this project, but that SCEA is woefully inadequate to review this project. Several specifics are mentioned that prove the relevance of previously submitted letters & comments, and their relation to the SCEA Project.

An inappropriate application of SCEA under the guise of a Transportation-beneficial project ignores or dismisses glaring defects of the actual project and the overbearing historical impacts. With 88 total units, this project fails to provide an expected larger amount of real *affordable income level housing*, the most basic need and certainly more critical that one of many 'transit' projects.

Less than 10% of these units are in an affordable range. And by seeking a Vested Tract map approval (by a single zoning official, thereby avoiding a Planning Commission review), it is clear that the apartment project will readily be converted to condominiums. On it's face there is certainly no objection to a conversion strategy, but for this Project it is just one more diversion from the overbearing, massive structure that will dominate this national Register parcel, historic buildings and block.

We know the old excuse for avoiding significant affordable housing levels is that "it just won't pencil out." But for long-time owner G&K, with its history of few improvements and spotty maintenance of this recreation/parking parcel (as well as their deteriorating historic building), this isn't an excuse. Yet barely does SCEA mention (other than statistically) this low quantity of affordability. Will this translate when a condo conversion happens? 1

Overarching Inadequacy 1: Relying on the uncertified and unapproved previous EIR.
The SCEA far-too-often (if not as a basis) erroneously relies on or mimics parts of the mostly inadequate and disputed analyses and conclusions of the previous EIR, and fails to meet CEQA standards for a complex and domineering 2021 Project (Project).

Overarching Inadequacy 2: The 2021 SCEA Project represents a significant increase in most all project metrics (traffic, units, footprint, heights, impacts, etc.), yet the SCEA can obfuscate or ignore the likely increases in impacts. The myriad of mitigation or almost duplication of non-mitigation from its earlier version's EIR raises fundamental questions of the SCEA's applicability to this project, of the analyses that are conducted and the elimination or reduction of areas of impact, controversy and study.

Overarching Inadequacy 3: The 2021 SCEA fails to acknowledge and consider most **cumulative** impacts and project impacts required for study in the previous EIR, Section 3. Its lack of comprehensive inclusion is a deficiency of the SCEA Project. Six or more sections in the previous EIR cover standard and relevant cumulative effects. Yet relatively few areas of the SCEA discuss cumulative impacts let alone recognize possible impacts.

SCEA's MISLEADING and INADEQATE DESCRIPTIONS

A continued inadequacy from the previous EIR, carried much farther (and less adequately handled) is the Project Description, the rather subjective and misleading minimization of the 100+year significant and recognized elevations of the historic Hotel Green buildings *facing the Project site* impacted significantly by this project, and the dismissive descriptions of the National Register project site & parcel as a parking lot, or a parking lot with a billboard. 2

It is not *adequate* and frankly contrary to CEQA standards to diminish that this site had and retains its original historic recreation purpose. An omission of this fact in the National Register listing is an academic oversight and doesn't alter history or facts. The fact of the matter is this site started as extended park lands (with a singular house dwarfed by Colonel Green in the park), then soon added a sports court (roque or tennis it seems, as a mirror to an new Central Park roque court), and stayed a primary use of this use into the WWII-war years and still partially exists right now, with some remaining 1903-era walkways and trees (partly overlooked in this report as well). In fact, recreation is the *longest-lasting continual use and condition* of this parcel and of the two hotel parcels (also overlooked by this report). Despite adding parking in an expanding fashion since the 40s or 50s (unclear when parking originated), there also were enhanced recreation uses added with a large elliptical swimming pool and shuffleboard to enhance its recreation uses. 2

Today roughly 20-30% (despite aggressive and possibly unpermitted concrete paving) of this parcel is basically open space/recreation space/event space. Their parking lot, despite its overtake of the majority of space, is usually 30-40% full, and the overall impression from visually looking at this parcel is a very green space, with over 30 trees in place with the historic hotel building both quite visible and not 'hidden' as the report states.

Sadly, these inadequacy comments were similar to those made for the previous EIR, and another reason that all previous comments remain relevant through their resubmission during this SCEA review. For this reason, the entire historic and cultural resources sections are woefully inadequate, just like the previous uncertified EIR.

SPECIFIC SCEA INADEQUACIES

SCEA Sections 4.0, pgs 4.0-8 – 4.0-23. DEIR Sections 3.1 - INADEQUATE VIEW LOCATIONS
The SCEA erroneously relies on or mimics the mostly inadequate and disputed view locations and analyses of the previous EIR, not meeting CEQA requirements. Perhaps no other letter comment from the previous EIR documents sums up the inadequate SCEA VIEW analysis and review better than Pasadena Heritage's March 11, 2014 letter describing the faults with the 2014 "Vantage Points." This is why the Castle Green Homeowners Association is resubmitting all previous EIR Comment Letters (and other related modes of comments). The Association states these quoted comments clearly apply to the 2021 SCEA Project:

View A replicates the Previous EIR's challenged "**Vantage Point 4**." Pasadena Heritage noted, "From Vantage Point 4, the proposed project would greatly alter the existing visually prominent landscaping and would be a significant impact."

View B replicates the Previous EIR's challenged "**Vantage Point 3**." Pasadena Heritage noted, "…clearly shows how the project would block views of the Castle Green and its tree canopy from the west; this would be a significant impact.

View C replicates the Previous EIR's challenged "**Vantage Point 1**." Pasadena Heritage noted, "From Vantage Points **1** and 2, removal of the historic trees would cause substantial damage to scenic resources and would be an additional significant impacts." It should also be noted that because the Project fails to match the 1903 Concept's significant setback from Dayton Street (similar to the Castle Green's 30+ feet setback above the main floor), this view all but blocks 138-year views of the historic DOTY Building, not only from the existing historic buildings on the block, but for all on Dayton street, until they *reach* the Fair Oaks intersection – also a significant impact unrecognized. 3

View D (Previous EIR Vantage Point 5). This view has little differential from VIEW E, and appears to be a set up in an opening clearance to show parts of the historic Green Hotel Apartments

View E (Previous EIR Vantage Point 6). As noted in VIEW D, this is merely a space waster.

View F replicates the Previous EIR's challenged "Vantage Point 7." Pasadena Heritage noted, "

View G replicates the Previous EIR's challenged "**Vantage Point 2**." Pasadena Heritage noted, "From Vantage Points 1 and **2**, removal of the historic trees would cause substantial damage to scenic resources and would be an additional significant impacts."

View H replicates the Previous EIR's challenged "Vantage Point 8." Pasadena Heritage noted, "

Views not analyzed nor acknowledged in SCEA nor the previous EIR are the historic views to the Vista Del Arroyo former hotel and San Rafael Hills, as well as the Linda Vista Hills. And the SCEA apparently makes not statement of the cumulative loss of views.

And worth noting is that since the SCEA denigrates as not significant the elevations of the historic hotel buildings facing the Project, it diminishes or negates view impacts as noted:

A. The Green Hotel Apartments are already obscured by the trees located on or near the project site as well as within Central Park. In fact, since 2018, the largest tree canopy that existed died, and since 2018 there is a great broad view of the Green Hotel Apartments (and vice versa from the apartments to Central Park), a fact omitted from the SCEA..
B. SCEA admits, "… views of the Green Hotel Apartments and the Castle Green from Central park would be altered. However their primary elevations on East Green Street and South Raymond Avenue would remain unaltered. Here is evidence that the SCEA wrongly dismisses the established elevations historic Hotel Green buildings facing the Project as secondary with no impacts. The Association calls this a significant impact on cultural resources, as these are not secondary elevation. In fact, Design Commissioners asked that all visible facades of the former Hotel Green buildings on this block be designated as primary facades (See FEIR, Section 3.3.3, March 11, 2014 public hearing). 3
C. SCEA states that CEQA, "…emphasizes evaluation of visual resources that are visible from public places… the project might affect private views,.." But then goes on to say private views, "…are not generally regarded as a significant environmental impact under CEQA. The private views of this National Register property are in fact significantly impacted, and this building's significance should make this evident. SCEA downplays most Aesthetic impacts, and is not appropriate for this project and site. And appropriate CEQA analysis can and must recognize these impacts.
D. The final erroneous assumption in SCEA is, "…the project would not in any way obstruct the views of any of the historic buildings or other scenic resources in the vicinity. False. From the 1887 Doty Building, it's 1898 views of the Castle Green and most of the Green Hotel Apartments are virtually eliminated. From this historic former parking structure on South Raymond Avenue and the former site of the 1894 Hotel Green's outdoor courtyard of west Old Pasadena (and the Doty specifically) is blocked because of no Dayton Street setback that Colonel Green envisioned for the 1903 concept. The Castle Green's aforementioned views of the former Vista del Arroyo hotel and San Rafael hills may also be blocked due to the excessive heights of the SCEA Project, about 16 feet higher than the previous EIR project!

The inappropriateness of the SCEA is summed up on page 4.0-6, stating that because of SB743, being in a TPA, NO AESTHETIC IMPACTS can be considered! This is unacceptable for this significant National Register landmark. So the SCEA concludes there are NO view impacts.

SCEA Section 4.0, Previous EIR Section 3.1 - SUBTANTIAL SHADE SOURCE INTRODUCED
The SCEA Project also impacts the existing historic block by introducing a substantial shade source. The height and scale of the previous EIR project was 75 feet, and was noted that the height and scale of the proposed project would result in new shadows and virtually perpetual shade on the lower floors that would impact the Green Hotel Apartments and Castle Green's historic west (rear) landscaped yard. These previous comments/statements clearly apply.

SCEA MITIGATION MEASURES INSUFFICIENT

PMM CULT-1, Page A-17. The Association strongly disagrees that no mitigation measures are needed, as we believe this project creates significant adverse impacts on the historic block and the existing Hotel Green structures. The contextual setting of these historic buildings is being radically disturbed by this stand-alone domineering 7 story Project, rationalized by cherry picking the historic record and creating a false narrative of the recreation of the early 1903 concepts for a Fair Oaks Avenue wing of the Hotel Green. At best this project is fighting the stately calm of the 120 or so years old historic structures to be the highlight or feature of this historic block, instead of being subservient and complimentary to these most-historic buildings and site. At worst it's a railroading of an angry owner that couldn't care less about history by insisting on a domineering structure that all but hides the historic buildings at the gateway of the Old Pasadena Historic District.

This mitigation calls for preserving the contextual settings, yet the site goes from green open space with parking to a largely built out solo building, pushing to crowd out views of the historic setting and structures and forever altering and overpowering these most historic structures. This shameful SCEA process seems to not recognize obvious impacts and seems to imply that delisting should be the *only* criteria for declaring a significant impact on these majestic structures, and ignores the fact that this project surely does impair them. 4

No alternative projects are considered in this ill-advised SCEA process, despite the outcry during the previous EIR process for reduced-impact alternatives. Having this SCEA process initially forego our Design Commission's lead role called for in our General Plan and Central District Plan is a travesty at best. Instead SCEA make a political football and a mockery of the necessary environmental review for such a complex and important parcel already on the National Register, sending it to the City Council for "approvals" that circumvent our community standards and guiding documents.

PMM GEO-2, Page A-21. It seems the rational that since the site is not *known* to contain paleontological resources (seemingly mostly because it remains undisturbed) that the site is not expected to yield a unique paleontological resource is just about as lazy as it gets. Why not apply this mitigation measure, since this remains undisturbed land? 5

PMM HAZ-5, Page A-29. While perhaps beyond or outside the scope of this mitigation measure, it seems that a significantly impacted Dayton Street (with unsignalized intersection not studied in the SCEA at each end) could impede emergency access routes. Since the fire department may not have been given the full range of traffic impacts and vehicle trips added in the vicinity of the S. Fair Oaks fire station, this seems to be an inadequate study. 6

PMM LU-1, Page A-32. This raises a serious land use issue, with the SCEA Project avoiding any study of and therefore mitigation of the Dayton Street/Fair Oaks Ave. intersection, despite the impact of more than half of the daily 866 new vehicle trips. This LU-1 deals with dividing communities, and making this intersection less safe, with no pedestrian or bicycle improvements, it is effectively separating and isolating the in-town former East Ambassador College village created west of Fair Oaks Avenue, effectively creating a divide. While this intersection is not safe right now, ignoring this intersection and waiting to mitigate once the project's 866 daily trips are mostly added is inadequate.

And this LU-2 says to orient transportation projects (this is what SCEA says this is) to minimize impacts on existing communities by incorporating direct crossings at regular intervals for pedestrian, bicyclists and vehicles. This Project does neither, and identifies no mitigation requirement, making the lack of mitigation inadequate. 7

Effectively ignoring the impacts of an 83% increase in daily trips on Dayton Street Roadway Segment, and ignoring any responsibility to study, let alone mitigate known issues and barriers to easy access across Fair Oaks, the Project is creating or at minimum making an unsafe barrier even more difficult to cross. And if it is "infeasible" to avoid this reinforcing the barrier that Fair oaks Avenue already is, the provisions are to be part of required mitigation to improve bicycle, pedestrian and vehicle access across improved roadways. This additional lack of mitigation is also inadequate.

PMM LU-2, Page A-32. The example above in LU-1 of further isolating the former East Ambassador College village could apply to the inadequacy of this lack of mitigation. Does a physical barrier have to readily visible? A street may not be a physical (as in touchable) barrier, but if it's difficult at best to cross, then it certainly is a barrier of sorts in the spirit of CEQA (this would go for LU-1 above as well).

Certainly this conflicts with the General Plan, Central District Plan and the Old Pasadena Specific Plan. It is also curious as to why the city would place the only Land Use and Planning mitigation measures LU-1 & 2 under the Connect SoCal measures and not use our General Plan or Central District Plan as the basis for mitigation. This is an example of the SCEA review being inappropriate for this project. 8

If this intersection and related roadways were properly studied, the 'barrier' of sorts created by almost doubling Dayton Street daily trips with no mitigation, and no mitigation because of no studying the Dayton/Fair Oaks intersection, effectively letting this intersection's deficiencies get worse and less safe, mitigation measures can and should be required to reduce what could be a substantial adverse effect of the project, the project should be modified' to eliminate this conflict. But is avoiding any study an acceptable reason to let these conditions worsen, and/or just another example of the inadequate SCEA study?

PMM NOISE-1, Page 33. There is no study or anticipation of noise from the single driveway between the two historic Hotel Green structures and the oversized Project, creating a 3-sided canyon that could reflect all driveway noise from an additional 866 daily trips. No study, therefore this mitigation is inadequate. 9

PMM NOISE-2, Page A-36. This Noise & Vibration mitigation measure should also include measures for the Castle Green, without the, it is inadequate. And there seems to be no difference from the previous EIR 3-level depth parking than the SCEA 4-level depth parking (a significant increase and risk).. 10

PMM PSP-1, Page A-37. This is related to SCEA Section 4.15 Public Services. The impacts here state that no alteration of public facilities will be needed, but since the signalized fire station stop on Fair Oaks Avenue is at the unsignalized and unstudied offset-Dayton Street/Fair Oaks Avenue (DS/FOA) intersection, this should be considered as a possible alteration. By not studying this complex unsignalized intersection, this SCEA has no standing to know if the intersection or this fire signal may be impacted, thus an inadequate determination of impact level (4.15) and mitigation should be included as part of the Project. At very least, a traffic control plan should be part of SCEA and the Project. 11

PMM TRA-1, Page A-38. Despite SB743, the SCEA application fails because there are significant impacts to Cultural Resources, and SCEA application cannot be used if it conflicts with Historic Resources. The Association disagrees with the Cultural Heritage analysis and conclusions of no significant impacts to the historic block and structures. 12

Mitigation Measure PMM-TRA-1 is incorrect. The City knows that by the "Outside of CEQA" transportation section, albeit even less than the smaller previous EIR project, that the number of daily trips on the Dayton Street Roadway Segment (DSRS) will significantly impact that Segment. The SCEA also failed to look at the minimum segment/intersections that the previous EIR did, despite knowing that the DSRS impacts far exceed their reasonable standards of increases. 13

And once again, as with the previous EIR of a smaller project, the SCEA failed to look at the two unsignalized intersections bookending the impacted DSRS. Thus the SCEA declares that no intersections are impacted. This is false and dangerous. The unsignalized Dayton Street/Raymond Ave. (DS/RA) & the Dayton Street /Fair Oaks Ave. (DS/FOA) intersections are likely in need of a project-driven & integrally-designed upgrade/mitigation, not left to fail and then altered at the City's expense. But when it comes to the DS/FOA intersection, it is already a dangerous, unsignalized intersection with a critical offset that the previous EIR may not have truly considered (See 2015 RDEIR Fig3.6-14). There is no correction in the FEIR, and if SCEA used or relied on this previous EIR, there is no mention of this difficult offset unsignalized intersection needing any level of improvement. This clearly demonstrates an inadequacy of the SCEA.

The Association objects to this MM's conclusion that, "Transportation impacts were concluded to be less than significant." We know the DSRS will be overloaded based on the "Outside CEQA" section. We also know the SCEA cannot adequately conclude without documentation that the two unstudied intersections *aren't impacted*. In fact, we raise the concern and legal ruling in the IDS Project where not only was the density & envelope of an oversized building forced to be reduced, but the mere exclusion of an intended crosswalk mitigation from the project resulted in forcing the crosswalk to be integrally designed with the project.

13

To use the City's own words, the increase in traffic volume on the Dayton Street Roadway Segment (this is for the previous EIR's smaller 64 unit project**) "… would be a significant environmental effect."** Thus, the City *knows* that the SCEA's 84-unit project *will be an even worse "significant" environmental impact.* The Association finds this hard to comprehend, and beyond inadequate for any project.

PMM TRA-2, Page A-39 finds no issues with emergency access. As mentioned in the previous EIR comments, the cursory Fire Department review was inadequate, as it is for the SCEA, to realistically assess the impact of what the SCEA daily trip increase of 83% on the Dayton Street Roadway Segment will mean. As DSRS stands today, it is too narrow at 30 feet in width to accommodate the necessary street parking/loading spaces and two-way traffic. How will the DSRS doubling of daily trips be irrelevant, and still function as a fire department alternate route to the east portions of Pasadena?

This is the ONLY fire department access to the Castle Green by either our Dayton Street rear driveway, or the 20 foot wide emergency gates also on this DSRS? In all the City/SCEA/EIR documents to the fire department, not once is mentioned any of these facts, and certainly not the 83% increase in daily trip traffic. Irregardless of the ability to not consider roadway segment impacts, the City knows the DSRS will be significantly impacted, yet doesn't even require this project to make even the most minor traffic changes until after the problems arise, after construction, especially when ignoring a basic crosswalk cost the city (and IDS project developers) a lot of time and money in the IDS courtroom battle.

14

How will the signalized fire station lights on southbound Fair Oaks Avenue at the south edge of the DS/FOA not be impacted? With no crosswalks and significantly more daily trips this intersections gets knowingly more unsafe.
And with no bicycle and pedestrian required enhancements, this intersection just gets more unsafe, all with City knowledge.

MM 4.1 Cultural Resources, Page A-49. We disagree as inadequate the conclusion that no significant impacts on the historic block, buildings and site, or that those identified are less than significant. The conclusion in the SCEA that there are no impacts to Cultural Resources is flawed, and such impacts are not dismissed by SB743's overreaching elimination of Aesthetic impacts.

15

MM 9.1 Noise (and Vibration), Page A-50. The Association finds this MM as inadequate and in fact the entire 9-page 4.13 Noise section, less than 50% of the previous EIR's 20+ pages, for a SCEA project much larger (and deeper), we find the analysis and the mitigation efforts NOI-1 and NOI-2 inadequate and dangerous to the historic Hotel Green structures and 84 S. Fair Oaks as well.

A lone Vibration Receptor #2 is mentioned in regard s to the Castle Green. This is stated to be just forty feet from the project, and therefore about the same distance away from the Castle Green. Given the known seismic tendencies of the Castle Green (and the repaired damage from the Whittier series of quakes, this seems inadequate. In fact, both measures fail to mention and require any mitigation measure for the Castle Green.

16

Similar concerns must be voiced for **MM 9.3 & 9.4**, as they both rely on NOI-1 & NOI-2 that include no mitigation measures for the Castle Green. It is unclear if MM 9.5 applies to the Castle Green, so this is an inadequate mitigation measure as well.

MM 13.1, Page A-51. This transportation mitigation measure depends on a City update in 2020 of a "Nexus Study" for development impact fees. This update is critical to be completed, given that the SCEA fails to require minimum traffic measures on the Dayton Street Roadway Segment known to be significantly impacted, nor for the two Dayton

17

Street bookend intersections that aren't even studied, yet remain primitively unsignalized, and unsafe. Unfortunately, this mitigation claims to be not applicable at the project level, which makes this measure inadequate.

17

It is possible that this project could come in before the completion of the Nexus Study, and avoid what the Association sees as necessary impact payments due to the high likelihood that Dayton Street (and the bookend intersections) will require future mitigation of the known significant traffic increase/impact.

MM Aesthetics, Page A-51 contains standard project mitigation measures to avoid potential new levels of light and glare effects. This includes such mitigation requirements as examining potential light and glare, requiring features to avoid adverse light and glare, limiting reflective and glare-producing materials, requiring nighttime lighting focused down and away from adjacent properties. However, due to SB743, this mitigation measure is deemed "not relevant" to the Project. "The project's aesthetic impacts shall not be considered significant impacts. But does this mean that the analysis is to be omitted, as we don't see these items yet studied or required to be. It is only negating the significant impact, not negating the public's right to know if Aesthetics issues will arise. This leads to an inadequate SCEA.

18

MM Noise considers that this project will not have a significant noise impacts, yet all 866 daily trips generated from this project will come and go from the singular Dayton Street driveway, within a three-sided enclosed 75-90 foot tall building canyon. How can the noise from the singular driveway not affect the existing historic building occupants?

This is a serious reason to look at alternatives – that are NOT required or presented in the SCEA review. The city knows that while the Green Hotel Apartments (contrary to their required adherence to the Secretary of Interior's Standards for windows/window replacement) may have some level of modern soundproofing, the Castle Green entirely retains historic wood windows with mostly historic single-pane glass.

19

So despite the Castle Green being more susceptible to project driveway noise of 866 new daily trips, the SCEA anticipates no significant or even non-significant noise impacts, yet we cannot find the analysis of the 3-sided uniform height canyon this oversized project creates. And the mitigation measure states that it is "not anticipated to have a significant noise impact. Yet there is no CEQA definition or standard of how to "not anticipate" an impact without studying the possible impact, which wasn't done, thus making the noise analysis inadequate and the elimination of any mitigation inadequate.

PREVIOUS "COMMENTS" APPLICABILITY

It must also be noted that all previous comments/letters be resubmitted as relevant because the 2021 SCEA Project is a *clearly* larger and more impactful version than the smaller previous EIR project that failed to receive certification and approvals. This is not a new project, but an enlarged and more complex and impactful version of the previous EIR. In fact, the staff and commissioner comments back in the EIR reviews stated it be best that the project return with modifications. This is clearly that project with modifications, and certainly not covering most suggestions. The SCEA application is inappropriate because this really is merely an upsized version of the previous EIR project and fails to respond to larger impacts.

20

These "Comments" consist of all correspondence letters and comments received in 2013-2019. All EIS, DEIR, RDEIR and FEIR public comment submitted and given by the public as well by the respective governmental body - either the City Council or Design Commissioners - and their respective staff from minutes and audio recordings and when documented in the above noted EIR documents (such as FEIR Sec. 3.3, and other relevant document sections).

In the SCEA the Aesthetics, Cultural Resources, Noise and Vibration, Transportation, Alternatives, Areas of Controversy (from previous EIR, omitted/diminished in SCEA), Other CEQA Considerations (from previous EIR, omitted/diminished in SCEA), and possibly other areas, all continue to be impacted in recognized, similar ways, and likely often more significantly.

"Comments" in the form of Letters and Sections within previous EIR documents that document public meetings:

> **See DEIR, Appendix A**, Letters from 2013 & EIS (in order published); Two Letter dated April 23, 2013; Letter dated April 24, 2013; Letter dated April11, 2013; 2nd Letter dated April 24, 2013; Letter/Petition dated April 23, 2013; Letter dated October 17, 2008; Letter dated October 11, 2010; Letter dated October 25, 2010; Letter dated September 23, 2011; Letter dated October 21, 2010; Letter dated October 25, 2010; Metro Letter dated April 16, 2013; NAHC Letter dated march 27, 2013.
>
> **See FEIR Section 3.3.2,** Letter No. 1, March 11, 2014; Letter No. 2, March 11, 2014; Letter No. 3, March 9, 2014; Letter No. 4, March 10, 2014; Letter No. 5, March 11, 2014; Letter No. 6, March 11, 2014; Letter 7, Jan 26, 2015; Letter 8, March 2, 2015. **FEIR Sec. 3.3.3, 3.3.5** has public and commissioner comments. Unfortunately any City Council reviews and comments do not appear to be made available, which is a deficiency of the EIR and ultimately this SCEA process and a disservice and disadvantage to the public. 20
>
> Other included Comments from EIR documents may be included.
>
> Not available: minutes and audio recordings from all 2013-2019 hearings, some documentation is provided in various EIR docs. Unfortunately any City Council reviews and comments do not appear to be included in the pervious EIR documents or made available, which is a deficiency of the EIR and ultimately this SCEA process and a disservice and disadvantage to the public.

In the coming month(s), the Castle Green Homeowners Association will provide additional documentation and illustrations to reinforce the above and more reasons that the SCEA process is flawed, and that a Revised EIR process must continue. 21

Respectfully,

/S/

Mike Salazar
For the Castle Green Homeowners Association

Letter O-5

The following tenets (tenants) at the Green Hotel Apartments (Senior Housing) oppose the building of the Central Park Apartments project at 86 S. Fair Oaks Avenue, Pasadena, California, for the following reasons:

1. The fenced in courtyard and parking lot is our safe place to exercise during the covid 19 pandemic. Also, before covid 19, while walking around Old Town some of the tenets (tenants) were assaulted by young adults .
2. The fenced in courtyard and parking lot gives us a safe place to get Vitamin D from the sun which is necessary for heart and bone health.
3. The fenced in courtyard and parking lot gives us a safe place to sit and enjoy nature.
4. The noise from the construction will disrupt our daily lives in our apartments.
6. The tenets (tenants) on the south side of the building will not be able to get sun light in their apartments.
7. The view from some of the apartments on the south side of the building will be blocked after the construction is complete.

1

Name	Apt. #	Phone #
Christina Thom	219	626 49-7005
Mrs. Thelma Alvarado	501	(626) 577-8824
Rachel P. Peña	524	626. 568. 9208
Eufracia L Berpal	504	(323) 574-3515
Edward J. Earnshaw	502	626. 491. 3750
Henry Chang	527	626 396 1443
Lai Lai Lok	506	818 568. 8780
Rosa Iglesias	526	626-792-9961
NORRIS NY	508	626-889-0517
S. Lim Jr	525	626-792. 8449
Jerome Atkins	510	626-4216550
Pao Z Tan	505	626-586-2813
Pin Z Yang	514	626-586-2813
Vickie Gamboa	511	626 322 8148
Rosario J. Nava	515	626-689-8031
Lorna Gumogda	516	626 314-2450
Caroline Shiao	517	626 259 0577
PRIMO T. PEÑA JR	524	626 568-9208
Mercedes Reynoso	212	510-305-6186
Neil Bates	221	626-509-9515
Francisca Sq	626	1310-704-8279
Lazara Santos	405	626-396-1994
Alfredo Santos	405	626-396-1994
alex wang	304	310 880 7769
Fely Javier	410	213 590 5440

Letter O-5

The following tenets at the Green Hotel Apartments (Senior Housing) oppose the building of the Central Park Apartments project at 86 S. Fair Oaks Avenue, Pasadena, California, for the following reasons:

1. The fenced in courtyard and parking lot is our safe place to exercise during the covid 19 pandemic. Also, before covid 19, while walking around Old Town some of the tenets were assaulted by young adults .

2. The fenced in courtyard and parking lot gives us a safe place to get Vitamin D from the sun which is necessary for heart and bone health.

3. The fenced in courtyard and parking lot gives us a safe place to sit and enjoy nature.

4. The noise from the construction will disrupt our daily lives in our apartments.

6. The tenets on the south side of the building will not be able to get sun light in their apartments.

7. The view from some of the apartments on the south side of the building will be blocked after the construction is complete.

1

Name	Apt.#	Phone #
Jimmy L. DeVilla Cruz	414	626.405.8154
Felix Amurao	417	626) 405-8147
Amparo G. de la Cruz	414	626 405-8154
Dan Gertz	610	626.371.4993
Laura Cleretra	509	714) 943-6522
Sarjani Lajanto	415	626-537-6494
Paulus Wibowo	415	626-537-6494
Zhaohui Chen	424	626-~~5~~329-4467
William Ferrick	325	626-449-0272
Anthony W. Cain	325	626-449-0272
Maria Andasol	311	323 906 5241
Helen Lloyd	317	(213) 361-7597
Lisa Montijo	316	626) 793-6941
Meizhu Wu	323	626-329-8618
Adolph Cable	318	no telephone
Dave Rovine	309	(626) 449-4826
Kenneth Keith	211	None
Dino Thon	219	626 449-7005
Dorothy Malley	615	626-399-3363
Cynthia A. Kelly	627	626-795-2813
Reginald Lloyd	601	626 360 8502
Nestor Edwards	304	626-795-0230
N Sandiago	203	626-491-1565
Emerito & Ester Tadeo	422	323-742-7607

Letter O-5

The following tenets at the Green Hotel Apartments (Senior Housing) oppose the building of the Central Park Apartments project at 86 S. Fair Oaks Avenue, Pasadena, California, for the following reasons:

1. The fenced in courtyard and parking lot is our safe place to exercise during the covid 19 pandemic. Also, before covid 19, while walking around Old Town some of the tenets were assaulted by young adults .
2. The fenced in courtyard and parking lot gives us a safe place to get Vitamin D from the sun which is necessary for heart and bone health.
3. The fenced in courtyard and parking lot gives us a safe place to sit and enjoy nature.
4. The noise from the construction will disrupt our daily lives in our apartments.
6. The tenets on the south side of the building will not be able to get sun light in their apartments.
7. The view from some of the apartments on the south side of the building will be blocked after the construction is complete.

1

Name	Apt.#	Phone #
[illegible]	406	626-676-0527
[illegible]	"	" - 399-9118
ZONG DING ZHANG	#424	626-584-1278
ZHENG PING WANG	423	929-351-1031
BING CHU	416	626-360-9171
DORIS WONG	427	626-234-7710
HEIDI WU	404	(626) 376-8912
GUO LIAN SHAN	520	(626) 217-8246
ZHENG YU MI	620	(626) 340-1231
Chan Kam Shun	207	(626) 599-8994
LI-TZU YU	209	(626) 676-6142
Ming Wah Wi Chun	227	(626) 551-1469
Zhen, Yan Ding	208	(323) 317-7215
[illegible]	210	626-899-5600
HOA LU	314	626-405-2989
Nian Lin Guo & Rua Zhen Fen	628	626-365-6986
[illegible] Cai	611	626-782-8078
Mei Ying Du	625	626-782-8078
[illegible] Fei ~~609~~ #	609	626-758-7061
[illegible]	619	626 215-7993
Agm Akubilo	607	626 624-0967
[illegible]	606	626-396-7029
Anton G DeShaze	528	6265100899
Michael Griffith	518	626-584-1606
[illegible]	419	626-683-0759

Letter O-5

The following tenets at the Green Hotel Apartments (Senior Housing) oppose the building of the Central Park Apartments project at 86 S. Fair Oaks Avenue, Pasadena, California, for the following reasons:

1. The fenced in courtyard and parking lot is our safe place to exercise during the covid 19 pandemic. Also, before covid 19, while walking around Old Town some of the tenets were assaulted by young adults .

2. The fenced in courtyard and parking lot gives us a safe place to get Vitamin D from the sun which is necessary for heart and bone health. 1

3. The fenced in courtyard and parking lot gives us a safe place to sit and enjoy nature.

4. The noise from the construction will disrupt our daily lives in our apartments.

6. The tenets on the south side of the building will not be able to get sun light in their apartments.

7. The view from some of the apartments on the south side of the building will be blocked after the construction is complete.

Name	Apt.#	Phone #
Linda McWilliams	223	323-470-9368
Sophia Cao	401	626-856-0168
Ning AMY BARNHART } same	228	626-679-3105
[illegible]	308	626 399 6018
Celia Posada		
Steven Smith	315	(626) 676 1857
Yan Shen	320	626 267 3487
David Franco	608	562 632 6629
EMCEY MOPTEZUMA	612	626) 943 0820
[illegible]	622	(626) 354-887
[illegible] (Montezuma)	523	626. 639. 7616

4 pages collected by Concerned Volunteers:

Green Hotel Apartments	Name	Unit #	Telephone #
Address: 50 East Green St	Thelma Alvarado	Unit 501	626. 577. 8824
2021 Pasadena, Ca. 91105	Judy Desormeaux	Unit 409	626. 676. 0571
Letters: April 5 Rachel P. Peña	Song Ding Zhang	Unit 424	626. 584. 1378
" 15 Peter Hartgens	Rachel P. Pena	Unit 524	626. 568. 9208
" 26 Thelma Arevalo			
" 23 Kenneth Keith			
" 24 Judy Desormeaux			
" 28 Cynthia Kelly			
" 30 Lisa Montijo			
" 30 Song Ding Zhang			

April 30, 2021

By: Rachel P. Peña
626. 568. 9208

Letter O-6

PASADENA HERITAGE
PRESERVATION | ADVOCACY | EDUCATION

651 SOUTH ST. JOHN AVENUE
PASADENA, CALIFORNIA 91105-2913

P 626.441.6333 F 626.441.2917
WWW.PASADENAHERITAGE.ORG

May 6, 2021

Kevin Johnson, Senior Planner
Planning & Community Development Department
Planning Division, Design & Historic Preservation Section
175 North Garfield Avenue
Pasadena, California, 91101

Re: Central Park Apartments – COMMENTS ON THE DRAFT SCEA

Dear Kevin Johnson,

Pasadena Heritage has reviewed the Draft SCEA and the Appendices of interest to us. Our primary concern are the adjacent historic resources, notably Castle Green (of which we hold a preservation easement) and Hotel Green, but also the Doty Block (an important African American site) and Central Park. We do not believe that there will be a direct negative impact on any of these sites, but we are concerned about construction vibrations, obscured views and increased traffic on Dayton Street. 1

We support the proposed mitigations measures that will limit construction vibrations: "MM Noise-1: Consult with Structural Engineer and Project Historical Architect" and "MM Noise-2: Post Construction Survey and Documentation." It is worrying that that the vibration sensors in the Hotel Green and 84 S. Fair Oaks Ave. tripped the threshold, but the mitigation measures appear to be adequate and are definitely prudent. We request that monitoring of the Castle Green be added to the list even though sensors there did not trip, just in an abundance of caution, and that any post construction inspection or repair requirements also include the Castle Green, the oldest of the nearby buildngs. 2

We believe the most serious risk of vibration would come from excavation and construction of the underground parking structure. We request that alternatives be considered, including reducing on-site parking either through an Affordable Housing Concession Menu reduction option or by providing parking off-site. Reducing the subterranean garage from four levels as proposed to two or three would cause less vibration risk and in a shorter time span. 3

Reducing parking would also reduce the vehicular trips generated from the building, and reduce traffic along Dayton Street. There are safety concerns associated with so much additional traffic next to Central Park, and all strategies should be considered, especially given the location of the popular playground.

Finally, we note that there is some impact to views of Castle Green and Central Park from Dayton St. or S. Fair Oaks Ave. We suggest studying if stepping back the new building above the first story would provide better views from these vantage points, similar to how Castle Green steps back above its larger base. 4

We thank you for receiving our comments concerns and suggestions, ask that they be considered in the preparation of the final SCEA and hope they can be addressed as the project review continues. 5

Sincerely,

Susan N. Mossman
Executive Director

Andrew Salimian
Preservation Director

Letter O-7

TERESA GRIMES | Historic Preservation

Teresa.Grimes@icloud.com
323-868-2391

May 5, 2021

Kevin Johnson, Senior Planner
City of Pasadena, Planning & Community Development Department
Design & Historic Preservation Section
175 N. Garfield Avenue
Pasadena, CA 91101
Attn: Kevin Johnson, Senior Planner

Re: Central Park Apartments, Supplemental Analysis

Dear Mr. Johnson:

In September 2019 I prepared the Historical Resource Technical Report (GPA Consulting Report) for the Central Park Apartments Project (Project). This report is included as Attachment A to this letter. I've also included my resume as Attachment B. With this letter I'm providing supplemental analysis regarding the thresholds for impacts on historical resources as defined by the California Environmental Quality Act (CEQA) and how those thresholds apply to the Project. 1

THRESHOLDS FOR IMPACTS ON HISTORICAL RESOURCES

CEQA requires that the direct, indirect, and cumulative impacts of proposed actions be assessed and disclosed. The State CEQA Guidelines set the standard for determining the significance of impacts on historical resources in Title 14 California Code of Regulations Section 15064.5(b), which states:

> A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

The Project Site (86 S. Fair Oaks Avenue) is located within the boundaries of two historical resources, the Hotel Green and the Old Pasadena Historic District. The Hotel Green is individually listed in the National Register of Historic Places (National Register) and locally designated as a Historic Monument. The Hotel Green includes two adjoining buildings: the Castle Green and Green Hotel Apartments. The Old Pasadena Historic District is listed in the National Register. Properties and historic districts listed in the National Register are automatically included in the California Register of Historical Resources (California Register). Thus, the Hotel Green and Old Pasadena Historic District are also listed in the California Register and are historical resources as defined by CEQA.

Title 14 California Code of Regulations Section 15064.5(b)(1) further clarifies "substantial adverse change" as follows:

> Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

Title 14 California Code of Regulations Section 15064.5(b)(2)(A) in turn explains that an historical resource is "materially impaired" when a project:

> Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources;

As a property conveys its significance as a historical resource through its physical characteristics, the test for determining whether or not a proposed project will have a significant impact on an identified historical resource is whether or not the project will alter in an adverse manner the integrity of the historical resource such that it would no longer be eligible for listing in the National Register, California Register, or other landmark programs such as the list of Pasadena Historic Monuments.

Integrity is defined in *National Register Bulletin #15* as "the ability of a property to convey its significance."[1] Within the concept of integrity, the National Register recognizes the following seven aspects or qualities that in various combinations define integrity: feeling, association, workmanship, location, design, setting, and materials. Integrity is based on significance: why, where, and when a property is important. Thus, the significance of a property must be fully established before the integrity is analyzed.

The first step in assessing integrity is determining the essential physical features that must be present for a property to convey its significance. All properties change over time and it is not necessary for a property to be unaltered from its original construction to retain integrity. However, it must remain sufficiently intact to communicate its historic identity. The essential physical features are those features that define both why a property is significant and when it was significant. Thus, determining the period of significance is the second step in assessing integrity.

The period of significance is the length of time when a property was associated with important events, activities, or persons, or attained the characteristics which qualify it for designation. A period of significance usually begins with the date when significant activities or events began

[1] *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation* (Washington D.C.: National Park Service, Department of the Interior, 1997), 44-45.

giving the property its historic significance; this is often a date of construction or a date of an event (i.e., a battle, opening of a business, establishment of a settlement, etc.).

In the case of architecturally significant properties, the period of significance is normally the date of construction. A property important for illustrating a particular style must retain most of the physical features that constitute that style. Thus, integrity of design, workmanship and materials are the most critical aspects of integrity in this instance.[2] Alternatively, a property can illustrate a style regardless of its location or setting. Therefore, integrity of location and setting are not critical aspects of integrity of architecturally significant properties.

For historically significant properties, the period of significance is usually measured by the length of the association with the important events, activities, or persons. Integrity of location and association are the most critical aspects of integrity for a property that was the site of an historic event. A property missing original design features could still be eligible so long as it expresses it function and configuration. The basic test for determining the integrity of a property associated with an important person or event is whether a historical contemporary would recognize the property as it exists today.

While some factors of integrity are more important than others, depending on the property, a majority of the seven recognized factors should be retained. Integrity and condition are not the same. A property can be in poor condition yet retain integrity; however, a property in poor condition may lack integrity of materials and workmanship if the features are deteriorated.

INTEGRITY ASSESSMENT OF OLD PASADENA HISTORIC DISTRICT AND GREEN HOTEL

For purposes of the Sustainable Communities Environmental Assessment under consideration by the City of Pasadena, the impacts of the proposed development at 86 S. Fair Oaks Avenue (the "Project") were assessed within the *86 South Fair Oaks Avenue Historical Resources Technical Report*, October 2020, prepared by Historic Resources Group (HRG). The analysis completed by HRG concludes that the Project will not cause a substantial adverse change in the significance of a historical resource pursuant to Title 14 California Code of Regulations Section 15064.5. To assist City decisionmakers, the following is a point-by-point analysis of potential project impacts on the Old Pasadena Historic District and Green Hotel historical resources.

This analysis provides the following: a summary of significance, a summary of current integrity, and an analysis of integrity after the completion of the Project. Both designated historical resources currently retain sufficient integrity to convey their significance. The purpose of this supplemental material is to analyze whether, upon completion of the Project, the resources will continue to retain sufficient integrity to convey their significance and be eligible for listing in the National Register, California Register, and as Pasadena Historic Monuments, such that their significance will not be materially impaired. Both resources' current integrity and conceptual integrity are provided side-by-side, for comparison.

[2] Ibid, 48.

TABLE 1: OLD PASADENA HISTORIC DISTRICT
National Register listed in 1983 and updated in 2008 California Register listed in 1992
SUMMARY OF SIGNIFICANCE
For a property to qualify for listing in the National Register, it must meet one of four (A, B, C and D) criteria for significance. The Old Pasadena Historic District is listed under Criteria A and C.
Criterion A: *Property is associated with events that have made a significant contribution to the broad patterns of our history.* As the historic commercial center of Pasadena, the Historic District documents the economic development of the city and its various phases of growth from the 1880s to the 1930s. The Historic District is significant at the local level under Criterion A in the area of commerce. ***Criterion C:*** *Property embodies the distinctive characteristics of a type, period, or method of construction, and represents the work of a master(s), and represents a significant and distinguishable entity whose components lack individual distinction.* While the Historic District is visually cohesive, it consists of buildings constructed over the course of a relatively broad period of time and designed for a variety of uses representing a range of architectural styles and the work of many prominent regional architects. The Historic District is architecturally significant as the largest intact assemblage of commercial buildings in Pasadena and imparts a strong sense of past time and place. It is significant at the local level under Criterion C in the area of architecture. **Period of Significance:** 1886 to 1936 **Areas of Significance:** Commerce and Architecture **Contributing Buildings:** 154 **Contributing Sites:** 1 **Noncontributing Buildings:** 42[3] **Vacant and Parking Lots:** 8 (not counted as noncontributing)[4]

[3] The 2008 update to the National Register listing refers to 40 noncontributing buildings. Subsequent to that update, two new buildings have been constructed.

[4] The 2008 update to the National Register listing refers to 10 vacant and parking lots. Subsequent to that update, two vacant and parking lots have been developed.

ASSESSMENT OF INTEGRITY – CURRENT AND CONCEPTUAL	
For a property to qualify for listing in the National Register, it must retain sufficient integrity to convey its significance. There are seven aspects that in various combinations define integrity: Location, Design, Setting Materials, Workmanship, Feeling, and Association.	
Location *is the place where the historic property was constructed or the place where the historic event occurred.*	
Current	Conceptual
The Old Pasadena Historic District retains integrity of location. The Historic District has not been moved as a whole and the contributing resources remain in their original locations.	The Project would not result in the relocation of any contributing resources within the Historic District. Additionally, the Project would not cause an alteration to the boundary of the Historic District. Therefore, the integrity of location would be unaffected by the Project.
Design *is the combination of elements that create the form, plan, space, structure, and style of a property.*	
Current	Conceptual
The Old Pasadena Historic District retains integrity of design. It was not developed according to a plan, but rather evolved over decades. The development pattern is characterized by continuous street walls but the buildings range in size and scale and a variety of styles are present, reflective of a period of significance that spans almost 50 years. Buildings within the Historic District are one to eight stories in height. The majority of contributing buildings retain their form, plan, and style, and in this way the Historic District retains its historic character as a whole.	As the Project Site is a vacant lot mostly used for surface parking, it was not counted as a contributing or noncontributing resource. Therefore, the Project would not result in the alteration of any contributing resources within the Historic District. Furthermore, the new building would be compatible with the size, scale, and style of the adjacent contributing resources. The new building would not be substantially taller than other buildings in the Historic District; it is shorter than the Hotel Green. At its highest point, the Project's maximum roof height is 90 feet, which is approximately 21 feet shorter than the maximum roof height of the tallest portions of the adjacent Green Hotel Apartments (111 feet) and 15 feet shorter than the tallest portions of the Castle Green (105 feet). While the new building would introduce a new visual element within the Historic District, the pattern of development would be maintained. Therefore, the integrity of design would be unaffected by the Project.

Setting *is the physical environment of an historic property, constituting topographic features, vegetation, manmade features, and relationships between buildings or open space.*	
Current	Conceptual
The Old Pasadena Historic District retains integrity of setting. The contributing resources possess the same spatial relationships with each other as existed historically. The features of the setting include the configuration of streets, alleys, and sidewalks. While the streetscape improvements generally post-date the period of significance, they are respectful of the historic character of the Historic District.	The Project would not result in alterations to the topography, natural or manmade streetscape improvements, or relationships between any contributing resources within the Historic District, nor would it alter the context of the Historic District, which includes 154 contributing buildings. Introducing one new building will not alter the relationship or configuration of the Historic District. While the new building would introduce a new visual element within the Historic District, the relationship among the contributing resources would not be changed. Furthermore, the new building would not block important views of contributing buildings. Therefore, the integrity of setting would be unaffected by the Project.
Materials *are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form an historic property.*	
Current	Conceptual
The Old Pasadena Historic District retains integrity of materials. The contributing resources are substantially unaltered from the period of significance and many buildings have been rehabilitated in compliance with the Standards since the Historic District was listed. Typical exterior materials consist of stucco, brick, and stone wall cladding, red clay roof tiles, and decorative details of wood, terra cotta, and tile. Alterations to the contributing buildings have been in keeping with this palette of materials and materials beyond repair have been replaced in kind.	The integrity of materials would be unaffected by the Project. As the Project Site is a vacant lot mostly used for surface parking, it was not counted as a contributing or noncontributing resource. Therefore, the Project would not involve the alteration of any contributing resources within the Historic District and would not result in the destruction of any historic materials. Damage to adjacent contributing buildings from vibration as a result of Project construction activities is not anticipated but would be monitored. Any unanticipated damage to historic materials would be repaired.

Workmanship *is the physical evidence of the crafts of a particular culture, people, or artisan during any given period in history or pre-history.*	
Current	Conceptual
The Old Pasadena Historic District retains integrity of workmanship. The contributing resources are substantially unaltered from the period of significance and many buildings have been rehabilitated in compliance with the Standards since the Historic District was listed. The buildings display examples of both vernacular construction techniques and plain finishes as well as skilled craftsmanship and ornamental detailing.	The integrity of workmanship would be unaffected by the Project. As the Project Site is a vacant lot mostly used for surface parking, it was not counted as a contributing or noncontributing resource. Therefore, the Project would not involve the alteration of any contributing resources within the Historic District and would not result in the destruction of any evidence of skilled construction techniques or building practices. Furthermore, while damage to adjacent contributing buildings from vibration as a result of Project construction activities is not anticipated, it would be monitored. Any unanticipated damage to historic workmanship would be repaired.]
Feeling *is a property's expression of the aesthetic or historical sense of a particular period of time.*	
Current	Conceptual
The Old Pasadena Historic District retains integrity of feeling. When listed, the Historic District contained approximately 80% contributing and 20% noncontributing resources. Through its significant concentration of contributing resources and retention of integrity of design, materials, workmanship, and setting, it conveys a strong sense of time and place from the period of significance.	The integrity of feeling would be unaffected by the Project. The new building would not significantly alter the ratio of contributing to noncontributing resources within the Historic District. Furthermore, the new building would be compatible with the aesthetics of the Historic District in its size, scale, and design with the adjacent contributing buildings and would maintain the historic character of the Historic District as a whole. The Historic District would continue to feel like the commercial center of Pasadena during the early twentieth century.

Association *is the direct link between an important historic event or person and a historic property.*	
Current	Conceptual
The Old Pasadena Historic District retains integrity of association. It is the place where Pasadena's commercial center developed and is sufficiently intact to convey that relationship to an observer.	The integrity of association would be unaffected by the Project. The new building would not have any impact on the Historic District's ability to convey its historic function as the commercial center of Pasadena. Along Fair Oaks Avenue, the Project includes ground floor commercial uses and establishes a front setback that is visually consistent with the proximate contributing resources oriented to Fair Oaks Avenue.
CONCLUSION	
The Historic District would retain all seven aspects of integrity and would continue to be eligible for the National Register under Criteria A and C upon Project completion. Therefore, the Project would not materially impair the significance of the Historic District and it would have no impact on the historical resource.	

TABLE 2: HOTEL GREEN	
National Register listed in 1982 California Register listed in 1992 Pasadena Historic Monument designated 1997	
SUMMARY OF SIGNIFICANCE	
For a property to qualify for listing in the National Register, it must meet one of four (A, B, C and D) criteria for significance. The Hotel Green is listed under Criteria A and C.	
Criterion A: *Property is associated with events that have made a significant contribution to the broad patterns of our history.* The Hotel Green (as represented in the remaining portion now called the Castle Green) is one of the few surviving late nineteenth century hotels in California. The hotel played a key role in the early history of Pasadena, helping to cultivate its social, cultural, and economic development. The property is significant at the state level under Criterion A in the area of commerce. ***Criterion C:*** *Property embodies the distinctive characteristics of a type, period, or method of construction and represents the work of a master.* The Hotel Green is also a significant example of Late Victorian era architecture with Spanish, Mexican, and Moorish influences. The building was designed by the master architect Frederick L. Roehrig. The commission contributed to Roehrig's growing reputation in Southern California. The property is significant at the local level under Criterion C in the area of architecture. **Period of Significance:** 1887 to 1926[5] **Areas of Significance:** Commerce and Architecture	
ASSESSMENT OF INTEGRITY – CURRENT AND CONCEPTUAL	
Location *is the place where the historic property was constructed or the place where the historic event occurred.*	
Current	Conceptual
The Hotel Green retains integrity of location. The listing included the entire block, which is comprised of the Project Site and three	The Project would not result in the relocation of the Hotel Green or any of its significant components or essential

[5] Although the HRG analysis describes the period of significance as concluding in 1924, the Castle Green was officially organized as a cooperative apartment building in 1926, ending its use as a hotel.

buildings: the Castle Green, Green Hotel Apartments (incorporating the Wooster Block), and 84 S. Fair Oaks Avenue.[6] The buildings remain in their original locations.	character-defining features. Therefore the integrity of location would be unaffected by the Project.
Design *is the combination of elements that create the form, plan, space, structure, and style of a property.*	
Current	Conceptual
The Hotel Green retains integrity of design. The remaining portion of the Hotel Green comprises the Project Site and two buildings (the Castle Green and Green Hotel Apartments) constructed in phases and designed in what has been described as an eclectic blend of Spanish, Mexican, and Moorish influences. The Castle Green is irregular in form but has a long north-south orientation with a primary elevation facing Raymond Avenue. It is set back from Raymond Avenue by approximately 100 feet and from Dayton Street by approximately 30 feet. The Green Hotel Apartments incorporated the Wooster Block and is generally rectangular in form with a semi-circular room on the south. It has an east-west orientation and a primary elevation facing Green Street. There is no setback from the sidewalk. Within in the L-shape created by the junction between these two buildings are a surface parking lot, an advertising billboard, and landscaping (the Project Site).	The integrity of design would be unaffected by the Project. The Project Site is not a character-defining feature because the improvements postdate the period of significance for the property. Therefore the removal of the improvements on the Project Site would not alter the form, plan, space, structure, or style of the property. Furthermore, the design cues for the new building are taken from the original concept for the Hotel Green developed by Roehrig in 1903. The Project would complete the U-shaped plan envisioned by Roehrig and would be divided from the Castle Green by a landscaped courtyard. The height of the Project would be lower than the Green Hotel Apartments and Castle Green. At its highest point, the Project reaches 90 feet – 15 feet shorter than the maximum height of the Castle Green and 21 feet shorter than the maximum height of the Green Hotel apartments. Each elevation of the new building would be a fully articulated design and a carefully considered relationship to the Hotel Green, including the Dayton Avenue colonnade which has a maximum height of 36 feet. In addition to the large ground level courtyard, and landscaped pedestrian paths, the new building would feature a series of balconies and roof decks that reinforce the history of outdoor living

[6] The building at 84 S. Fair Oaks Avenue was not discussed in the Hotel Green nomination form and was not historically associated with the Hotel Green. The building is included as a contributor to the Old Pasadena Historic District.

	on the property. The roof would include a variety of shapes that would be fit with tiles on the pitched areas, like the Hotel Green.
Setting *is the physical environment of an historic property, constituting topographic features, vegetation, manmade features, and relationships between buildings or open space.*	
Current	Conceptual
The integrity of setting of the Hotel Green has been diminished by past alterations. The character-defining features of the setting include the relatively flat topography with a minor decline in grade from north to south, the lack of setback on the north along Green Street, the approximately 100-foot setback on the east along Raymond Avenue, and the landscaping within the eastern setback. The historic character on the west along Fair Oaks Avenue and on the south along Dayton Street has been diminished by a series of alterations that have resulted in the existing condition of the Project Site. During the period of significance, this space included a residence, a tennis court, and landscaping. The existing features in this space include a surface parking lot, billboard, and landscape features that are not related to the Hotel Green. Although trees and other vegetation exists that date to the period of significance, they are remnants and do not reflect any significant designed landscape. This space (the Project Site) was not identified as significant in the nomination form and is not intact from the period of significance. Therefore it is not a character-defining feature of the setting of the property. Furthermore, the space was the proposed location for an additional wing to the Hotel Green that would have extended from south elevation of the Wooster Block along Fair Oaks Avenue.	The Project would not result in alterations to topographic features, vegetation, manmade features, or relationships between buildings or open space that characterize the Hotel Green. Because the existing improvements on the Project Site postdate the period of significance for the property, they are not character-defining features. While the new building would introduce a new visual element to the property, the relationship between the significant components and essential character-defining features would not be changed. In connection with the Project, multiple replacement trees will be added to the site consistent with City requirements, resulting in a net gain of 17 trees on the site and a total of 38 proposed trees, including mature and relocated trees within the courtyard area. Renderings from 1903 convey an intention to fill the Project Site with a large extension of the Hotel Green oriented to Fair Oaks Avenue with a colonnade along Dayton Street, completing a U-shaped complex. The Project location and massing are drawn from those renderings and reflect that relationship. Furthermore, the important views of the Castle Green are the street-facing elevations along Raymond Avenue and Dayton Street, while the important view of the Green Hotel Apartments is the street-facing elevation along Green Street. The

	new building would not block or alter any of these views. As reflected in visual simulations prepared in connection with the Sustainable Communities Environmental Assessment, views of the secondary or lesser exteriors of the Castle Green and Green Hotel Apartments from other vantage points, including Central Park, are largely the same in the with and without Project conditions. Therefore, although the Project includes construction of a building where no building currently exists, the character of the Project Site has already changed considerably since the period of significance. The integrity of setting would not be further affected by the Project.
Materials *are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form an historic property.*	
Current	Conceptual
The Hotel Green retains integrity of materials. The primary historic materials of the Castle Green include coarsely textured stucco walls, wood windows and doors, metal roof tiles, iron balconies, and terra cotta ornamentation. The primary historic materials of the Green Hotel Apartments include rusticated stone at the corner, textured stucco walls, wood windows and doors, and ceramic roof tiles. Since it was listed, alterations to the Hotel Green have been executed in compliance with the Standards.	The integrity of materials would be unaffected by the Project. The Project Site is not a character-defining feature because the improvements postdate the period of significance for the property. Therefore the removal of the improvements on the Project Site would not result in the destruction of any historic materials. Damage to adjacent contributing buildings from vibration as a result of Project construction activities is not anticipated but would be monitored. Any unanticipated damage to historic materials would be repaired. Additionally, the new building's materials would have the same visual qualities as the historic materials of the Hotel Green but would be wholly modern and therefore differentiated as new. Instead of roughly textured stucco, the new building would be sheathed in smooth or lightly textured

	cement plaster. The rusticated stone remaining from the original construction of the Green Hotel Apartments would be expressed as cast stone panels on the base of the new building. The new building would have energy efficient casement windows and storefront systems with a profile similar to wood casements on adjacent buildings and painted an accent color drawn from the Hotel Green color palette.
Workmanship *is the physical evidence of the crafts of a particular culture, people, or artisan during any given period in history or pre-history.*	
Current	Conceptual
The Hotel Green retains integrity of workmanship. The Castle Green and Green Hotel Apartments display examples of both vernacular construction techniques and plain finishes as well as skilled craftsmanship and ornamental detailing. The nomination form notes the terra cotta ornamentation on the pedestrian bridge pavilion as the most notable example of workmanship. Since it was listed, alterations to the Hotel Green have been executed in compliance with the Standards.	The integrity of workmanship would be unaffected by the Project. The Project Site is not a character-defining feature because the improvements postdate the period of significance for the property. Therefore the removal of the improvements on the Project Site would not result in the destruction of any evidence of skilled construction techniques or building practices. Damage to adjacent contributing buildings from vibration as a result of Project construction activities is not anticipated but would be monitored. The construction activities would be adjacent to the secondary elevations of the contributing buildings, which are not notable for their workmanship. Any unanticipated damage to historic workmanship would be repaired.
Feeling *is a property's expression of the aesthetic or historical sense of a particular period of time.*	
Current	Conceptual
The Hotel Green retains integrity of feeling. Through its integrity of design, materials, workmanship, and setting, it conveys a strong sense of time and place from the period of significance.	The integrity of feeling would be unaffected by the Project. The new building would be compatible with the aesthetics of the Hotel Green in its size, scale, and design and would maintain the historic character of the property. The Hotel Green would continue

	to feel like a resort hotel during the early twentieth century. The Project Site is also located along the secondary exteriors of the Green Hotel Apartments and Castle Green, and given the scale of the Project, the improvements are only partially visible from portions of Green Street and Raymond Avenue.
Association *is the direct link between an important historic event or person and a historic property.*	
Current	Conceptual
The Hotel Green retains integrity of association. During the 1890s, the Hotel Green, including buildings that have been demolished, functioned a resort hotel and social and cultural center for Pasadena. The remaining buildings are sufficiently intact to convey that relationship to an observer.	The integrity of association would be unaffected by the Project. The new building would not have any impact on the property's ability to convey its historic function as a resort hotel.
CONCLUSION	
The Hotel Green would retain all seven aspects of integrity and would continue to be eligible for the National Register under Criteria A and C and as a Pasadena Historic Monument upon Project completion. Therefore, the Project would not materially impair the significance of the Hotel Green and it would have no impact on the historical resource.	

COMPLIANCE WITH SECRETARY OF THE INTERIOR'S STANDARDS

The GPA Consulting Report also included an evaluation of the Project for compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards). Compliance with the Standards does not necessarily determine whether a project would result in an adverse change in the significance of a historical resource. Rather, a project in compliance would have a less than significant impact as the Standards are designed to maintain the integrity of historic properties.[7]

The Standards were issued by the National Park Service and are accompanied by Guidelines for four types of treatments: Preservation, Rehabilitation, Restoration, and Reconstruction. It is important to note that the Standards are not intended to be prescriptive, but instead provide general guidance. They are intended to be flexible and adaptable to specific project conditions to balance continuity and change, while retaining materials and features to the maximum extent feasible. Their interpretation requires exercising professional judgment and balancing the various opportunities and constraints of any given project. Not every Standard necessarily applies to every aspect of a project, nor is it necessary to comply with every Standard to achieve compliance.

Though none of the four treatments as a whole applies specifically to new construction in the vicinity of historical resources, Standards #9 and #10 of the Standards for Rehabilitation provide relevant guidance for such projects. Thus, the Project's relationship with the Hotel Green is analyzed below for compliance with Standards #9 and #10.

Standard #9 states: "New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment."

The proposed Project is compatible with the Hotel Green in terms of historic materials, features, size, scale and proportion, and massing. The primary historic materials of the Castle Green include coarsely textured stucco walls, wood windows and doors, metal roof tiles, iron balconies, and terra cotta ornamentation. The primary historic materials of the Green Hotel Apartments include rusticated stone at the corner, textured stucco walls, wood windows and doors, and ceramic roof tiles. The new building's materials would have the same visual qualities as the historic materials but would be wholly modern and therefore differentiated as new. Instead of roughly textured stucco, the new building would be sheathed in smooth or lightly textured cement plaster. The rusticated stone remaining from the original construction of the Wooster Block would be expressed as cast stone panels on the base of the new building. The new building would have energy efficient casement windows and storefront systems, with a

[7] Title 14 California Code of Regulations § 15126.4(b).

profile similar to wood casements on adjacent buildings and painted an accent color drawn from the Hotel Green color palette.

As stated above, the size and scale of the new building would be compatible with the Hotel Green because it would be approximately the same height. The massing is similar to the wing that was planned for the complex, but never executed. The footprint of the new building is slightly wider on the south in accordance with the current zoning code, but still maintains the central landscaped courtyard. Although the historic courtyard is divided between two property owners, the landscape design visually reunites the two spaces. The fenestration pattern of the new building is also similar to the Hotel Green in the arrangement and proportion of the openings. The new building incorporates features from the Hotel Green such as arched openings, roof brackets, and balconies, but simplified for a more contemporary appearance. The Project complies with Standard #9 because the new building would stand on its own as a contemporary yet traditional work of architecture, while complementing the Hotel Green. The Project would not impact the integrity of the Hotel Green to the degree that it would no longer be eligible as both a contributor to the Historic District and as an individual historical resource.

Standard #10 states: "New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired."

The Project complies with Standard #10. The new building is not physically connected to the Castle Green or Green Hotel Apartments, or for that matter the building at 84 S. Fair Oaks Avenue that is part of the Old Pasadena Historic District designation, but not part of the Green Hotel designation. If the new building were removed in the future, the adjacent contributing buildings would not be materially affected. The essential form and integrity of the Hotel Green and its environment would be unimpaired.

The Project would comply with Standards #9 and #10 and would not diminish the integrity of the Hotel Green. The Project would not result in a substantial adverse change to the Hotel Green. It would remain eligible for listing in the National and California Registers and for designation as a Historic Monument.

CONCLUSION

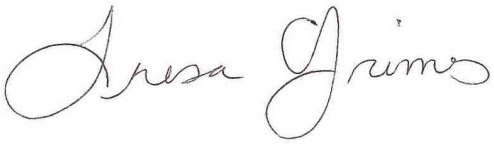
This point-by-point analysis of potential Project impacts is intended to provide supplemental information to City decisionmakers considering the Project's impacts on historical resources in Title 14 California Code of Regulations Section 15064.5(b). This analysis is consistent with the content and conclusions set forth in the attached report prepared by GPA Consulting as well as the 86 South Fair Oaks Avenue Historic Resources Technical Report, October 2020, prepared by HRG. The HRG report concluded that the Project would have no impact on the identified historical resources, because the Project would not materially impair the overall integrity of the Hotel Green or Old Pasadena Historic District. The existing improvements on the Project Site do not contribute to the significance of the Hotel Green or Old Pasadena Historic District.

2

Therefore, the demolition of the existing improvements would not reduce the integrity of these historical resources to the degree that they would no longer be eligible for listing under national, state, or local landmark or historic district programs. The Project would introduce a new visual element within the boundaries of the Hotel Green and Old Pasadena Historic District; however, the new building would be physically separated from the contributing buildings on the Project Site and in the vicinity, and it has been designed and would be constructed in a manner that is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

2

Sincerely,



Teresa Grimes, Principal

ATTACHMENT A

Central Park Apartments
86 S. Fair Oaks Boulevard
Pasadena, California



Historical Resource Technical Report

Prepared by:

CONSULTING
GPA

September 2019

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

1. INTRODUCTION 1

1.1 Purpose and Qualifications 1

1.2 Methodology 2

2. REGULATORY FRAMEWORK 3

2.1 National Register of Historic Places 3

2.2 California Register of Historical Resources 5

2.3 Pasadena Historic Preservation Ordinance 7

3. ENVIRONMENTAL SETTING 8

3.1 History and Description of the Project Site and Vicinity 8

4. PROJECT IMPACTS 19

4.1 Determining the Significance of Impacts on Historical Resources 19

4.2 Secretary of the Interior's Standards 19

4.3 Project Description 20

4.4 Analysis of Project Impacts 21

5. CONCLUSIONS 29

6. SOURCES 30

APPENDIX A – Résumés

APPENDIX B – National Register of Historic Places Nominations

EXECUTIVE SUMMARY

The purpose of this report is to analyze whether or not a proposed development project (the Project) would impact any historical resources subject to the California Environmental Quality Act (CEQA). The Project involves one parcel located at 86 S. Fair Oaks Avenue in the City of Pasadena. The parcel is occupied by a surface parking lot, an advertising billboard, and landscaping. The Project would involve the demolition of the existing improvements and the construction of a new six-story plus mezzanine mixed-use building above four levels of subterranean parking. GPA Consulting (GPA) was retained to identify historical resources on and in the vicinity of the Project site, to assess any potential impacts the Project may have on the identified historical resources, and to recommend mitigation measures, as appropriate.

GPA concluded that the Project site is located within the boundaries of the property known as the Hotel Green, which is individually listed in the National Register of Historic Places and locally designated as a Historic Monument. The Hotel Green includes two buildings, the Castle Green and Green Hotel Apartments. In addition, the Project site is located within the boundaries of the Old Pasadena Historic District, which is listed in the National Register of Historic Places. Properties and historic districts listed in the National Register of Historic Places are automatically included in the California Register of Historical Resources. Thus, the Hotel Green and Old Pasadena Historic District are also listed in the California Register of Historical Resources and are historical resources defined by CEQA. GPA did not identify any potential historical resources in the vicinity of the Project site that have not already been listed or evaluated.

The threshold for determining significant impacts on historical resources in the State CEQA Guidelines is whether the proposed project would cause a substantial adverse change, which is defined as demolition, destruction, relocation, or alteration of the resource or its immediate vicinity such that the historical resource is materially impaired. GPA concluded that the Project would have no impact on the identified historical resources, because the Project would not materially impair the overall integrity of the Hotel Green or Old Pasadena Historic District. The existing improvements on the Project site do not contribute to the significance of the Hotel Green or Old Pasadena Historic District. Therefore, the demolition of the existing improvements would not reduce the integrity of these historical resources to the degree that they would no longer be eligible for listing under national, state, or local landmark or historic district programs. The Project would introduce a new visual element within the boundaries of the Hotel Green and Old Pasadena Historic District; however, the new building would be physically separated from the contributing buildings on the Project site and in the vicinity and it has been designed and will be constructed in a manner that is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. As the Project would have no impact on historical resources, no mitigation is recommended or required.

1. INTRODUCTION

1.1 Purpose and Qualifications

The purpose of this report is to analyze whether or not a proposed development project (the Project) would impact historical resources. The Project involves one parcel located at 86 S. Fair Oaks Avenue in the City of Pasadena (see Figure 1). The parcel is mostly occupied by a surface parking lot. The Project would involve the construction of a six-story plus mezzanine mixed-use building comprising approximately 11,617 square feet of ground-floor commercial space including four work/live units and 84 residential units above four levels of subterranean parking with approximately 195 parking spaces.



Figure 1: Project site indicated with dashed line. Base image courtesy of Google Maps.

GPA Consulting (GPA) was retained to identify historical resources on and in the vicinity of the Project site, to assess any potential impacts the Project may have on the identified historical resources, and to recommend mitigation measures, as warranted, for compliance with the California Environmental Quality Act (CEQA). Teresa Grimes was responsible for the preparation of this report. She fulfills the qualifications for historic preservation professionals outlined in Title 36 of the Code of Federal Regulations, Part 61. Her résumé is attached in Appendix A.

1.2 Methodology

To identify historical resources and assess potential project impacts, GPA performed the following tasks:

1. Conducted a field inspection of the Project site and vicinity to determine what areas might be impacted by the Project. For the purposes of this report, the study area was identified as the block on which the Project site is located as well as the properties to the south and west. Historical resources beyond these perimeters were not included in the study area because the Project would have no potential to impact them as they are visually and physically separated from the Project site by intervening buildings.

2. Collected and reviewed existing information on the Project site and properties in the vicinity to identify listed and previously evaluated historical resources. This research revealed that the Project site is located within the boundaries of the property known as the Hotel Green, which is individually listed in the National Register of Historic Places and locally designated as a Historic Monument. In addition, the Project site is located within the boundaries of the Old Pasadena Historic District, which is listed in the National Register of Historic Places. GPA did not identify any potential historical resources in the vicinity of the Project site that have not already been listed or evaluated.

3. Conducted selective research to fill gaps in the existing information, which included the National Register of Historic Places nomination forms for the Hotel Green and Old Pasadena Historic District (see Appendix B). This research included a review of Sanborn Fire Insurance maps, historic aerial photographs, and local newspaper articles.

4. Reviewed and analyzed the Updated Concept Design Review Submittal prepared by Architectural Resources Group to determine if the Project would have an impact on the identified historical resources.

2. REGULATORY FRAMEWORK

Generally, a lead agency must consider a property a historical resource under CEQA if it is eligible for listing in the California Register of Historical Resources (California Register). The California Register is modeled after the National Register of Historic Places (National Register). Furthermore, a property is presumed to be historically significant if it is listed in a local register of historical resources or has been identified as historically significant in a historic resources survey (provided certain criteria and requirements are satisfied) unless a preponderance of evidence demonstrates that the property is not historically or culturally significant.[1] The National Register, California Register, and local designation programs are discussed below.

2.1 National Register of Historic Places

The National Register is "an authoritative guide to be used by federal, state, and local governments, private groups, and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment."[2]

Criteria

To be eligible for listing in the National Register, a property must be at least 50 years of age (unless the property is of "exceptional importance") and possess significance in American history and culture, architecture, or archaeology. A property of potential significance must meet one or more of the following four established criteria:[3]

A. Associated with events that have made a significant contribution to the broad patterns of our history; or

B. Associated with the lives of persons significant in our past; or

C. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Yield, or may be likely to yield, information important in prehistory or history.

Context

To be eligible for listing in the National Register, a property must be significant within a historic context. *National Register Bulletin #15* states that the significance of a historic property can be judged only when it is evaluated within its historic context. Historic contexts are "those patterns, themes, or trends in history by which a specific...property or site is understood and its meaning...is made clear."[4] A property must represent an important aspect of the area's history or prehistory and possess the requisite integrity to qualify for the National Register.

[1] Public Resources Code §5024.1 and 14 California Code of Regulations §4850 & §15064.5(a)(2).
[2] Title 36 Code of Federal Regulations Part 60.2.
[3] Title 36 Code of Federal Regulations Part 60.4.
[4] *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation* (Washington D.C.: National Park Service, Department of the Interior, 1997), 7-8.

Integrity

In addition to possessing significance within a historic context, to be eligible for listing in the National Register a property must have integrity. Integrity is defined in *National Register Bulletin #15* as "the ability of a property to convey its significance."[5] Within the concept of integrity, the National Register recognizes the following seven aspects or qualities that in various combinations define integrity: feeling, association, workmanship, location, design, setting, and materials. Integrity is based on significance: why, where, and when a property is important. Thus, the significance of the property must be fully established before the integrity is analyzed.

Historic Districts

The National Register includes significant properties, which are classified as buildings, sites, districts, structures, or objects. A historic district "derives its importance from being a unified entity, even though it is often composed of a variety of resources. The identity of a district results from the interrelationship of its resources, which can be an arrangement of historically or functionally related properties."[6]

A district is defined as a geographically definable area of land containing a significant concentration of buildings, sites, structures, or objects united by past events or aesthetically by plan or physical development.[7] A district's significance and historic integrity should help determine the boundaries. Other factors include:

- Visual barriers that mark a change in the historic character of the area or that break the continuity of the district, such as new construction, highways, or development of a different character;
- Visual changes in the character of the area due to different architectural styles, types, or periods, or to a decline in the concentration of contributing resources;
- Boundaries at a specific time in history, such as the original city limits or the legally recorded boundaries of a housing subdivision, estate, or ranch; and
- Clearly differentiated patterns of historical development, such as commercial versus residential or industrial.[8]

Within historic districts, properties are identified as contributing and noncontributing. A contributing building, site, structure, or object adds to the historic associations, historic architectural qualities, or archeological values for which a district is significant because:

- It was present during the period of significance, relates to the significance of the district, and retains its physical integrity; or
- It independently meets the criterion for listing in the National Register.[9]

[5] *National Register Bulletin #15*, 44-45.
[6] Ibid, 5.
[7] Title 36 Code of Federal Regulations Part 60.3(d).
[8] *National Register Bulletin #21: Defining Boundaries for National Register Properties Form* (Washington D.C.: U.S. Department of the Interior, 1997), 12.
[9] *National Register Bulletin #16: How to Complete the National Register Registration Form* (Washington D.C.: U.S. Department of the Interior, 1997), 16.

2.2 California Register of Historical Resources

In 1992, Governor Wilson signed Assembly Bill 2881 into law establishing the California Register. The California Register is an authoritative guide used by state and local agencies, private groups, and citizens to identify historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse impacts.[10]

The California Register consists of properties that are listed automatically as well as those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed in the National Register and those formally Determined Eligible for the National Register;
- State Historical Landmarks from No. 0770 onward; and
- Those California Points of Historical Interest that have been evaluated by the State Office of Historic Preservation (SOHP) and have been recommended to the State Historical Resources Commission for inclusion on the California Register.[11]

Criteria and Integrity

For those properties not automatically listed, the criteria for eligibility of listing in the California Register are based upon National Register criteria, but are identified as 1-4 instead of A-D. To be eligible for listing in the California Register, a property generally must be at least 50 years of age and must possess significance at the local, state, or national level, under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2. It is associated with the lives of persons important to local, California, or national history; or
3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important in the prehistory or history of the local area, California, or the nation.

Properties eligible for listing in the California Register may include buildings, sites, structures, objects, and historic districts. A property less than 50 years of age may be eligible if it can be demonstrated that sufficient time has passed to understand its historical importance. While the enabling legislation for the California Register is less rigorous with regard to the issue of integrity, there is the expectation that properties reflect their appearance during their period of significance.[12]

[10] Public Resources Code §5024.1 (a).
[11] Public Resources Code §5024.1 (d).
[12] Public Resources Code §4852.

The California Register may also include properties identified during historic resource surveys. However, the survey must meet all of the following criteria:[13]

1. The survey has been or will be included in the State Historic Resources Inventory;
2. The survey and the survey documentation were prepared in accordance with office [SOHP] procedures and requirements;
3. The resource is evaluated and determined by the office [SOHP] to have a significance rating of Category 1 to 5 on a DPR Form 523; and
4. If the survey is five or more years old at the time of its nomination for inclusion in the California Register, the survey is updated to identify historical resources that have become eligible or ineligible due to changed circumstances or further documentation and those that have been demolished or altered in a manner that substantially diminishes the significance of the resource.

SOHP Survey Methodology

The evaluation instructions and classification system prescribed by the SOHP in its *Instructions for Recording Historical Resources* provide a Status Code for use in classifying potential historical resources. In 2003, the Status Codes were revised to address the California Register. These Status Codes are used statewide in the preparation of historical resource surveys and evaluation reports. The first code is a number that indicates the general category of evaluation. The second code is a letter that indicates whether the property is separately eligible (S), eligible as part of a district (D), or both (B). There is sometimes a third code that describes some of the circumstances or conditions of the evaluation. The general evaluation categories are as follows:

1. Listed in the National Register or the California Register.
2. Determined eligible for listing in the National Register or the California Register.
3. Appears eligible for listing in the National Register or the California Register through survey evaluation.
4. Appears eligible for listing in the National Register or the California Register through other evaluation.
5. Recognized as historically significant by local government.
6. Not eligible for listing or designation as specified.
7. Not evaluated or needs re-evaluation.

The specific Status Codes referred to in this report are as follows:

1S Individual property listed in the National Register by the Keeper. Listed in the California Register.

1D Contributor to a district or multiple resource property listed in the National Register by the Keeper. Listed in the California Register.

[13] Public Resources Code §5024.1.

5S1 Individual property that is listed or designated locally.

2.3 Pasadena Historic Preservation Ordinance

The City of Pasadena's Historic Preservation Ordinance is codified in Chapter 17.62 of the Pasadena Zoning Code. It includes criteria for Landmarks, Historic Monuments, Historic Signs, Landmark Trees, and Landmark Districts. As previously stated, the Hotel Green is a designated Historic Monument. The criteria for the designation of Historic Monuments are outlined in Section 17.62.040 as follows:

1. A Historic Monument shall include all historic resources previously designated as historic treasures before adoption of this Chapter, historic resources that are listed in the National Register at the State-wide or Federal level of significance (including National Historic Landmarks) and any historic resource that is significant at a regional, State, or Federal level, and is an exemplary representation of a particular type of historic resource and meets one or more of the following criteria:

    a. It is associated with events that have made a significant contribution to the broad patterns of the history of the region, State, or nation.

    b. It is associated with the lives of persons who are significant in the history of the region, State, or nation.

    c. It is exceptional in the embodiment of the distinctive characteristics of a type, architectural style, period, or method of construction; or that is an exceptional representation of the work of an architect, designer, engineer, or builder whose work is significant to the region, State, or nation; or possesses high artistic values of regional, State-wide, or national significance.

    d. It has yielded, or may be likely to yield, information important in prehistory or history of the region, State, or nation.

2. A Historic Monument designation may include significant public or semi-public interior spaces and features.

In addition to these criteria, the City's ordinance states that the seven aspects of integrity defined by *National Register of Historic Places Bulletin #15* shall be applied when determining Historic Monument eligibility.

3. ENVIRONMENTAL SETTING

3.1 History and Description of the Project Site and Vicinity

Old Pasadena Historic District[14]

The Project site is located within the boundaries of the Old Pasadena Historic District, which was listed to the National Register in 1983. Properties that are listed in the National Register are automatically listed in the California Register. Thus, the Historic District is also listed in the California Register. The Historic District is significant at the local level under National and California Register Criteria A/1 and C/3. As the historic core of Pasadena, the Historic District documents the economic development of the city and its various phases of growth between 1886 and 1936. The Historic District also contains an important record of the evolution of architectural design in Southern California as well as the work of many prominent regional architects.

While the Historic District is visually cohesive, it consists of buildings constructed over the course of a relatively broad period of time and designed for a variety of uses representing a range of architectural styles. Historically, the Santa Fe Train Station and Hotel Green anchored the center of the Historic District. Though predominately commercial in character, the Historic District contains a few residential buildings, several churches, and the aforementioned Central Park. Architectural styles found within the Historic District include late nineteenth and early twentieth century revivals such as Spanish Colonial Revival as well as idioms from the modern movement such as Art Deco. Building heights within the Historic District range from one to eight stories with larger, high style buildings on the major arteries of Fair Oaks Avenue, Raymond Avenue, and Colorado Boulevard and the smaller, vernacular buildings concentrated on the side streets of Union, Green, and Holly.

The National Register nomination was updated in 2008, to document the changes to contributing and noncontributing resources and to adjust the boundaries. In 2008, there were 154 contributing buildings, 1 contributing site, and 40 noncontributing buildings within the Historic District. There are four contributing resources in the vicinity of the Project site listed below and shown in Figure 3.

1. Central Park
2. Doty Block
3. 84 S. Fair Oaks Avenue
4. Hotel Green

[14] Teresa Grimes, "National Register of Historic Places Nomination: Old Pasadena Historic District (Boundary Increase/Decrease/Additional Information), Pasadena," 2007.

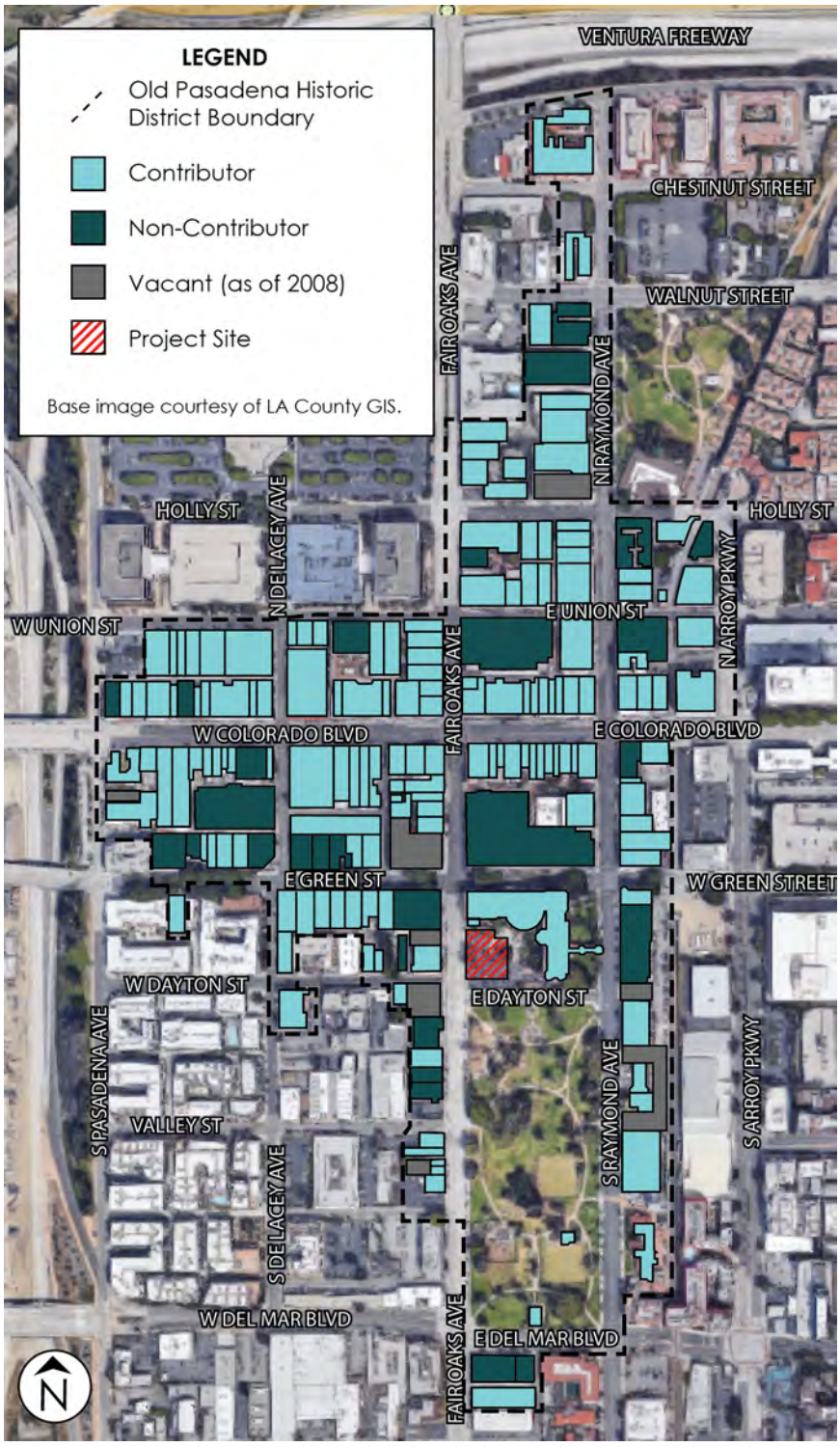


Figure 2: Old Pasadena National Register Historic District. Project site outlined in red. Base image courtesy of Google Maps.



Figure 3: Contributors in the vicinity of the Project site are numbered and shaded orange. Approximate Project site outlined in red. Base image courtesy of Google Maps.



1. Central Park

Central Park is located south of the Project site. It is one of the oldest parks in the City of Pasadena, having been purchased in 1902. The park consists of lawns, winding paths, mature trees, and a few small buildings, and once served as a recreation area for guests of the Hotel Green. The park was originally designed by Thomas Chisolm. While it was redesigned in 1927 by Cook & Hall and Ralph Cornell, the original configuration of the paths still exists.[15]



2. Doty Block

The Doty Block is west of the Project site, across S. Fair Oaks Avenue. It is a three-story brick building that was constructed in 1887 for James E. Doty, who owned the largest carriage business in the San Gabriel Valley. The Doty Block was one of the "most substantial" early brick buildings in Pasadena. Original features that were removed in 1924 include a corner tower and projecting bays. In 1998, the building was rehabilitated, including the replacement of damaged brick and the storefronts, apart from the original cast iron columns.[16]



3. 84 S. Fair Oaks Avenue

84 S. Fair Oaks Avenue is directly south of the Wooster Block and north of the Project site. It is a one-story vernacular commercial building clad in stucco with a single storefront and clay tile along the roofline. It was identified as a contributing building separately from the Hotel Green in the Old Pasadena Historic District National Register nomination, and does not appear to have been specifically addressed in the Hotel Green National Register nomination, although it is within the boundary of the individual listing from 1982.[17]

[15] Ibid.
[16] Ibid.
[17] Ibid; Gadski, Clark, and Graydon.

Hotel Green

The Hotel Green was listed in the National Register in 1982 and designated a Historic Monument in 1997. Properties that are listed in the National Register are automatically listed in the California Register. Thus, the Hotel Green is also listed in the California Register. The Hotel Green is significant at the state level under National and California Register Criteria A/1 and C/3. The Hotel Green (as represented in the remaining portion now called the Castle Green and Green Hotel Apartments) is one of the few surviving nineteenth century hotels in California. The hotel was a key factor in the early history of Pasadena, helping to cultivate its development. The design is a significant example of Late Victorian era architecture with Moorish and Spanish influences. The entire block bounded by Raymond Avenue on the east, Green Street on the north, Fair Oaks Avenue on the west, and Dayton Street on the south are included within the National and California Register listings and Historic Monument designation (see Figure 4).[18] The block includes three buildings, the Castle Green, Green Hotel Apartments, 84 S. Fair Oaks Avenue[19] as well as the Project site.

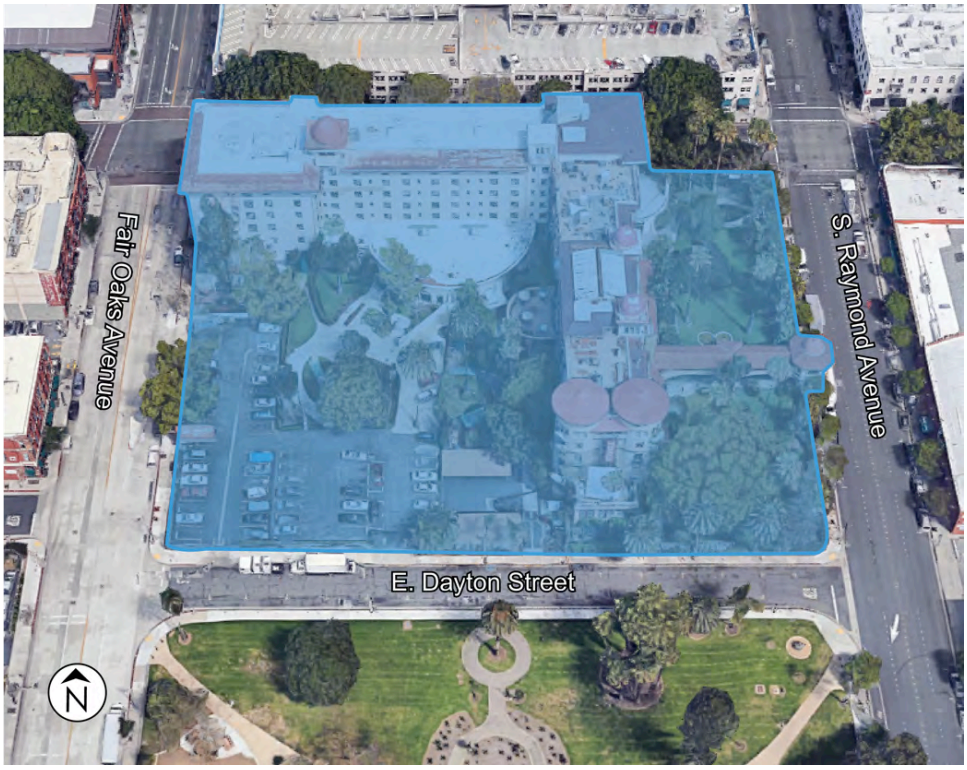


Figure 4: The Hotel Green as indicated on the 1979 National Register nomination form. Base image courtesy of Google Maps.

[18] City of Pasadena, "California Historical Resources Inventory Database," accessed November 13, 2018, http://pasadena.cfwebtools.com.
[19] Although the building is not specifically addressed in the 1982 Hotel Green National Register nomination, it is within the boundary,

The Hotel Green was developed by Colonel George C. Green who made his fortune in patent medicine after moving to Pasadena and saw the city's potential as a resort location.[20] In 1891, he purchased the Webster Hotel, which was located on the eastside of Raymond Avenue. The hotel was such a success that Col. Green decided to construct an addition to the north in 1893. When the addition was completed in 1894, the entire property was renamed the Hotel Green. Neither the Webster Hotel nor the Hotel Green Addition remains.[21]

The remaining portion of the Hotel Green comprises the Project site and two buildings (Castle Green and Green Hotel Apartments) constructed in phases and designed in what has been described as an eclectic blend of Spanish, Mexican, and Moorish influences. In order to further expand the hotel, in 1895 Col. Green acquired the Wooster Block at the southeast corner of S. Fair Oaks Avenue and Green Street. Constructed in 1887, the building had served as Throop College (later renamed the California Institute of Technology). In May of 1887, construction began on an annex (historically referred to as the Central Building or Annex and currently as the Castle Green) designed by architect Frederick L. Roehrig; it was completed in 1898 and featured a distinctive elevated pedestrian bridge across Raymond Avenue, which no longer exists. Roehrig designed a final expansion (then called the Western Building or Annex and now the Green Hotel Apartments) that was completed in 1903 and incorporated the Wooster Block at the property's northwest corner.[22] An additional wing, conceived but never constructed, would have connected with the south elevation of the Wooster Block creating a U-shaped building with a landscaped central courtyard and arcade along Dayton Street (see Figure 5). The wing would have featured stores along S. Fair Oaks Avenue and Dayton Street, balconies along the tops of the stores, and a tower like element on the south elevation to counterbalance the Caste Green.



Figure 5: Artist's rendering of the Hotel Green including the wing in the lower left hand corner that was never built (Pasadena Museum of History, 1903)

In 1914, Daniel L. Linnard purchased the Hotel Green. Unable to maintain the hotel, which had grown to over 400 rooms, Linnard sold the portion east of Raymond, which was renamed the Pasadena Hotel. In 1929, the bridge spanning Raymond Avenue was removed, followed by the

[20] Mary Ellen Gadski, Alson Clark, and Genevieve Graydon, "National Register of Historic Places Nomination: Hotel Green, Pasadena," 1979.
[21] The one-story building at 80-82 S. Raymond Avenue is all that remains of the Webster Hotel. The upper stories were demolished in 1935.
[22] Ibid.; Architectural Resources Group, *Central Park Apartments, 86 S. Fair Oaks, Pasadena, CA, Concept Design Review,* May 16, 2018.

removal of the Pasadena Hotel in 1935, save for a small portion at the southeast corner of Raymond Avenue and Green Street. Meanwhile, the ownership of the portion of the hotel west of Raymond was divided between the wing that is now known as the Castle Green and the wing including the Wooster Block that is now known as the Green Hotel Apartments. The period of significance for the Hotel Green is 1887, the date the Wooster Block was constructed, through 1926, the date the Castle Green ceased operation as a hotel and organized as a co-operative apartment house. The phases of the Hotel Green construction are summarized in the tables and figures on the following pages.

TABLE 1: Phases of Construction[23]		
Year Completed	**Historic Name**	**Extant?**
1887	**Wooster Block**	**Yes**
c. 1890	**Webster Hotel (later Hotel Green)**	**No**
1894	**Hotel Green Addition**	**No**
1898	**Central Building or Annex (later Castle Green)**	**Yes**
1904	**Western Building or Annex (later Green Hotel Apartments)**	**Yes**

[23] Ibid.

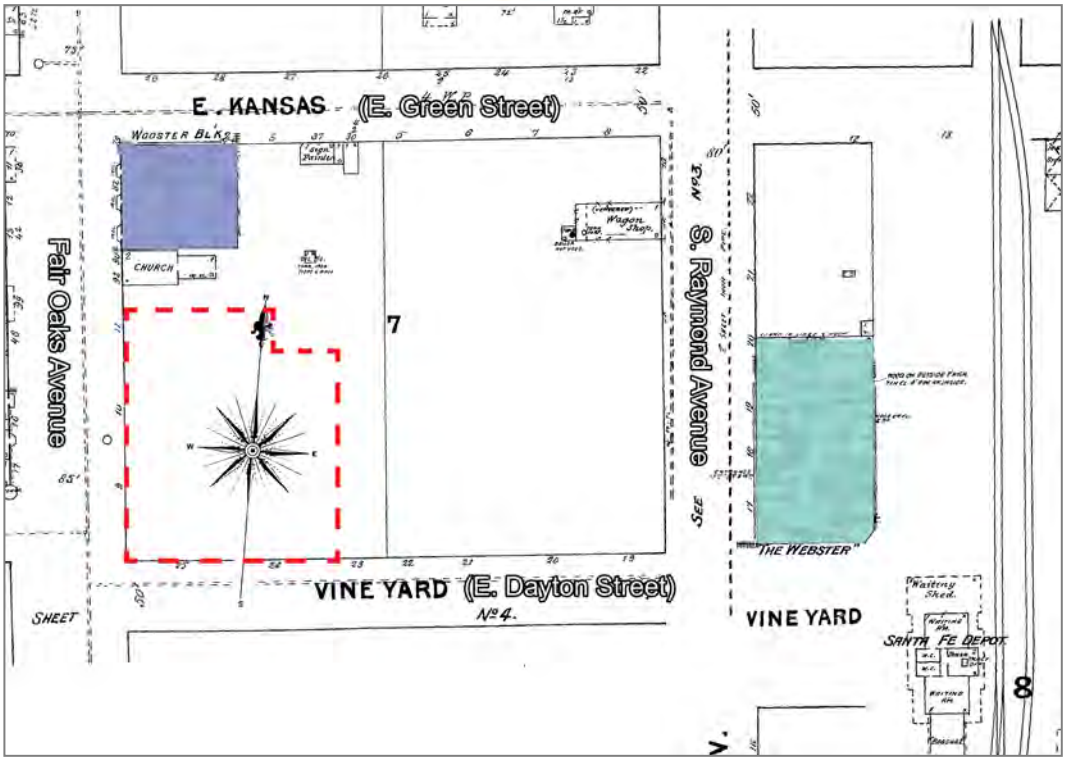


Figure 6: 1890 Sanborn Map, Sheets 3 and 5. Approximate Project site outlined in red.

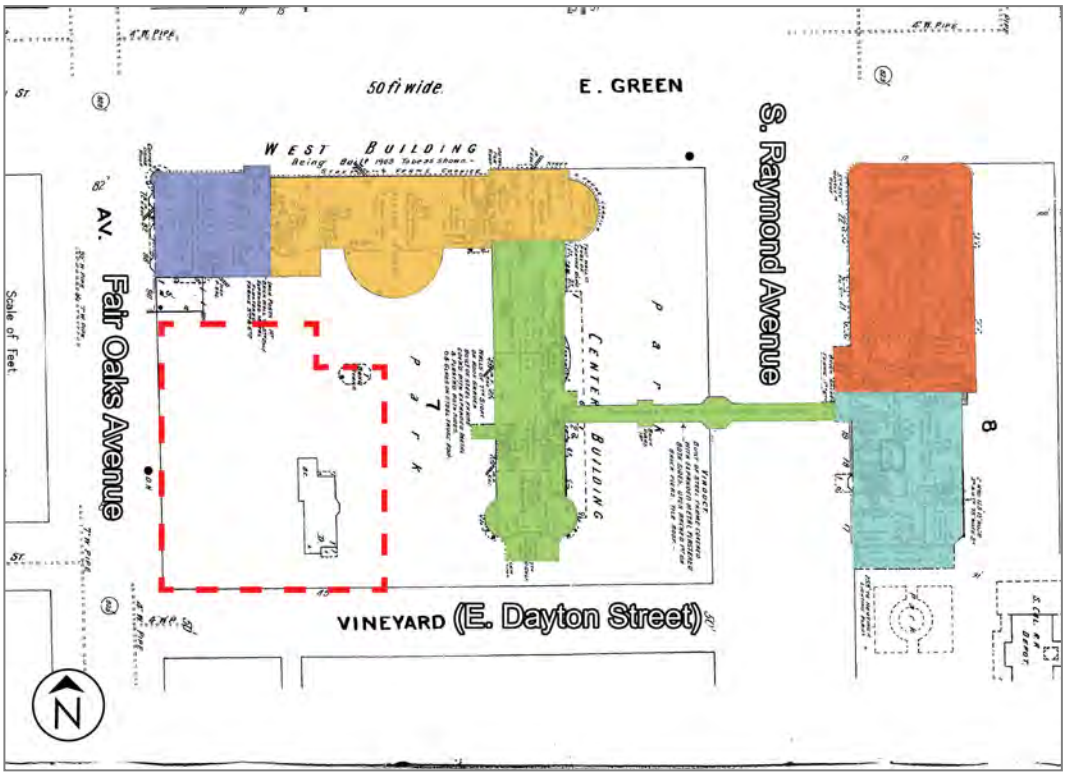


Figure 7: 1910 Sanborn Map, Vol. 2, Sheet 28. Approximate Project site outlined in red.

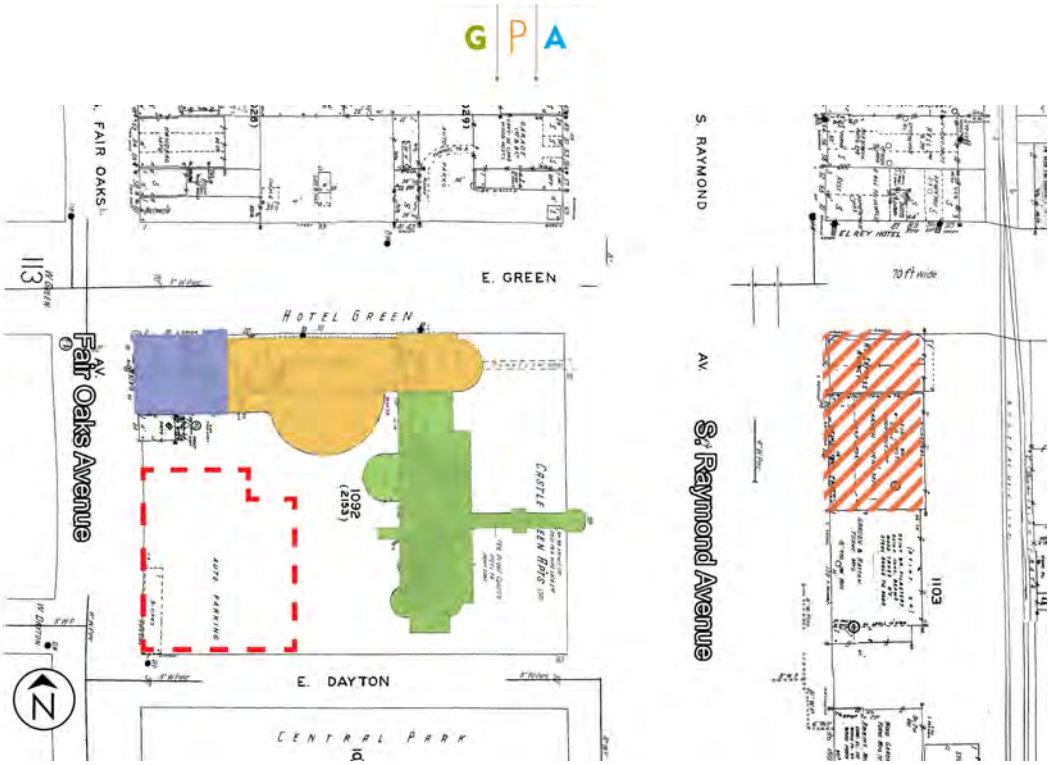


Figure 8: 1951 Sanborn Map, Vol. 1, Sheet 117. Approximate Project site outlined in red.

Project Site

The Project site is a 32,362 square foot corner parcel with frontage on S. Fair Oaks Avenue on the west and Dayton Street on the south. The flat parcel is currently improved with a surface parking lot, an advertising billboard, and landscaping. As previously stated, the Project site is located within the boundaries of the Old Pasadena Historic District and Hotel Green. In the Old Pasadena Historic District nomination, it is not counted as a contributing or noncontributing resource. In the Hotel Green nomination it is described as having "...parking lots, garages, and other service facilities."[24]



Figure 9: The Project site, looking northeast from across S. Fair Oaks Avenue (GPA, 2018)

The first building to be constructed on the Project site appears to have been a one-story grocery store.[25] By 1888, it had been removed and the Project site remained vacant until 1903 when Col. Green constructed a one-story residence for his daughter Lotta.[26] The Project site was the proposed location for an additional wing to the Hotel Green that would have extended from south elevation of the Wooster Block along Fair Oaks Avenue. The wing was not constructed and the area is indicated as a "park" on the 1910 Sanborn map (see Figure 7). Historic photographs document that it was landscaped in a manner much like Central Park to the south with curving paths and trees. Around 1914, a tennis court was added in the southwest corner of the Project site. The residence was removed sometime between 1931 and 1951. The 1951 Sanborn map indicates that the area was used as a parking lot. A swimming pool was added near the outdoor dining terrace of the Green Hotel Apartments in 1953, but it was in-filled and paved over in the early 1970s. The oval shape remains and is currently covered with grass and a shuffle board court.

[24] Gadski, Clark, and Graydon, Item 7, Page 1.
[25] Ibid; "Patent medicine" is a commercial product sold without a prescription; Sanborn Fire Insurance Company, 1887, Sheet 1.
[26] "Hotel Green Bungalow" drawing archived at Pasadena Museum of History Research Library and Archives.

There are also mature trees on the Project site. Some may be remnants from an early landscape plan that appears in historic photographs, but not longer remains intact.



Figure 10: The Project site, looking north from fence on Dayton Street (GPA, 2018)



Figure 11: The Project site, looking southeast from fence on Fair Oaks (GPA, 2018)

4. PROJECT IMPACTS

4.1 Determining the Significance of Impacts on Historical Resources

CEQA requires that the direct, indirect, and cumulative impacts of proposed actions be assessed and disclosed. The State CEQA Guidelines set the standard for determining the significance of impacts to historical resources in Title 14 California Code of Regulations Section 15064.5(b), which states:

> A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

Title 14 California Code of Regulations Section 15064.5(b)(1) further clarifies "substantial adverse change" as follows:

> Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

Title 14 California Code of Regulations Section 15064.5(b)(2)(A) in turn explains that a historical resource is "materially impaired" when a project:

> Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources;

As such, the test for determining whether or not a proposed Project will have a significant impact on an identified historical resource is whether or not the Project will alter in an adverse manner the physical integrity of the historical resource such that it would no longer be eligible for listing in the National or California Registers or other landmark programs such as Pasadena Historic Monuments.

4.2 Secretary of the Interior's Standards

Projects that may affect historical resources are considered to have a less than significant impact if they are consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards).[27] Projects with no other potential impacts qualify for a Class 31 exemption under CEQA if they meet the Standards.[28] The Standards were issued by the National Park Service, and are accompanied by Guidelines for four types of treatments for historical resources: Preservation, Rehabilitation, Restoration, and Reconstruction. Though none of the four treatments as a whole applies specifically to new construction in the vicinity of historical resources, Standards #9 and #10 of the Standards for Rehabilitation provide relevant guidance for such projects.

The Standards for Rehabilitation are as follows:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.

[27] 14 CCR § 15126.4(b).
[28] 14 CCR § 15331.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

4. Changes to a property that have acquired significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

It is important to note that the Standards are not intended to be prescriptive, but instead provide general guidance. They are intended to be flexible and adaptable to specific project conditions to balance continuity and change, while retaining materials and features to the maximum extent feasible. Their interpretation requires exercising professional judgment and balancing the various opportunities and constraints of any given project. Not every Standard necessarily applies to every aspect of a project, nor is it necessary to comply with every Standard to achieve compliance.

4.3 Project Description

The proposed Project would involve the demolition of the existing surface parking lot, advertising billboard, and landscaping and the construction of a six-story plus mezzanine mixed-use building containing a total gross floor area of approximately 93,355. The new building would comprise approximately 11,617 square feet of ground floor commercial space including four work/live units, 84 residential units including eight for very low-income residents, and four levels of subterranean parking with 195 parking spaces. In accordance with the Central District Specific Plan, the ground floor along Fair Oaks would be occupied by approximately 6,192 square feet of retail and/or food uses, extending the existing Old Pasadena retail district southward to create a link with Central

Park. The four work/live units, approximately 1,300 square feet each, would line the ground floor along Dayton Street, facing Central Park. The subterranean parking would include spaces for the Green Hotel Apartments, which currently utilizes the surface parking located on the Project site.



Figure 12: Artist's rendering of proposed project, Dayton Street elevation, looking northeast (ARG, 2019)

The design cues for the proposed Project are taken from the original concept for the Hotel Green developed by Frederick L. Roehrig in 1903, but conform with the current zoning code and development standards. The Project would complete the U-shaped plan envisioned by Roehrig and would be divided from the Castle Green by a landscaped courtyard. The height of the Project would be lower than the historic components of the Hotel Green, i.e., the Green Hotel Apartments and Castle Green. Each elevation of the new building would be a fully articulated design and a carefully considered relationship to the Hotel Green, Central Park, and Old Pasadena Historic District. In addition to the large ground level courtyard, the new building would feature a series of balconies and roof decks that reinforce the history of outdoor living on the site. The roof would include a variety of shapes that would be fit with tiles on the pitched areas. Although the plans are still conceptual, the material palette that would include cast stone for the building base and ornamental features such as the balconies and tower cornice, painted plaster for the upper floors, clay roof tiles, and aluminum frame windows and storefronts.

4.4 Analysis of Project Impacts

The proposed Project does not involve the demolition, destruction, or relocation of any historical resources. While the Project site is located within the boundaries of the Hotel Green National and California Register listings and Historic Monument designation, the surface parking lot and advertising billboard post date of the period of significance, which culminates in 1926. While there are some mature trees that appear to date from the period of significance, the landscape design that they were associated with is essentially gone.[29] It has been repeatedly altered and is not a character-defining feature of the Hotel Green. The existing condition does not reflect the landscape design from the period of significance (1887 - 1926). There is one Canary Island date palm with an estimated year of 1908 and one Camphor tree with an estimated year of 1913. Otherwise, the trees appear to have been planted between 1928 and 2002. The Canary Island date palm would be relocated within the Project site, while the Camphor tree will be removed. This aspect of the Project would have no impact on the Hotel Green because it would not result in a substantial adverse change in the eligibility of the Hotel Green as a historical resource. The

[29] Jan C. Scow Consulting Arborists, LLC, "Tree Aging for 86 S. Fair Oaks," June 3, 2013.

integrity of the Hotel Green would not be diminished by the demolition of the existing improvements and relocation and removal of trees on the Project site. It would remain eligible for listing in the National or California Registers and designation as a Historic Monument. Furthermore, consistent with City requirements and as reflected in the Project landscape plan, multiple replacement trees will be added to the site consistent with City requirements, resulting in a net gain of 19 trees on the site and a total of 38 proposed trees.

The Old Pasadena National Register nomination did not count surface parking lots, such as the Project site, as contributing or noncontributing resources. Furthermore, the surface parking lot and advertising billboard post date of the period of significance for the Historic District (1886 - 1936). Thus, the demolition of the existing improvements on the Project site would have no impact on the Historic District. This aspect of the Project would not impair the integrity of the Historic District. It would remain eligible for listing in the National or California Registers.

The Project would also involve the construction of a new building on the site. The new construction would result in an alteration within the boundaries of the Old Pasadena Historic District and Hotel Green. Whether the alteration would result in an impact on these historical resources as defined by CEQA is analyzed below.

Old Pasadena Historic District

In analyzing the potential impacts of the Project on the Historic District, the central question is whether the new building would affect the integrity of the Historic District to the degree that it would no longer be eligible for listing in the National and California Registers. Such an effect would only occur if the Historic District no longer retained sufficient integrity to convey its significance as the historic commercial center of Pasadena after the completion of the Project.

According to *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation*, there are seven aspects of integrity: feeling, association, workmanship, location, design, setting, and materials. When assessing the integrity of a historic district, *National Register Bulletin #15* advises the following, "the relationships among the district's components must be substantially unchanged since the period of significance**."**[30] Meaning, a historic district must retain integrity of setting and feeling overall. Setting refers to the character of the place in which the historical resource is situated. Feeling refers to how the historical resource expresses a particular period of time.

While *National Register Bulletin #15* does not directly address the impact of new construction on the setting or feeling of a historic district, it provides direction in assessing the impact of non-contributing buildings on the physical integrity of a listed historic district, as follows:

> When evaluating the impact of intrusions upon the district's integrity, take into consideration the relative number, size, scale, design, and location of the components that do not contribute to the significance. A district is not eligible if it contains so many alterations or new intrusions that it no longer conveys the sense of historic environment.[31]

[30] *National Register Bulletin #15,* 46.
[31] *National Register Bulletin #15,* 46.

As a result, the following analysis considers whether the Project would directly or indirectly affect the Historic District's integrity of setting and feeling in terms of the relative number, size, scale, design, and location of the new noncontributing building.

Relative Number

When the nomination for the National Register Historic District was updated in 2008, it included 154 contributing buildings, 1 contributing site, and 40 noncontributing buildings. The Historic District has changed since it was listed in 1983 and updated in 2008, and it will continue to change in the future as new buildings are constructed on the remaining surface parking lots, as existing noncontributing buildings are redeveloped, and as contributing buildings are rehabilitated and restored. Since 2008, two new buildings (see Figures 13 and 14) have been constructed increasing the number of noncontributing buildings from 40 to 42. 49 S. Fair Oaks Avenue replaced the surface parking lot at Assessor Parcel Number 5713-007-025 and 125 N. Raymond Avenue replaced the surface parking lots at Assessor Parcel Numbers 5723-021-019 and 5723-021-020.



Figure 13: 49 S. Fair Oaks Avenue, noncontributing building at corner of Green Street constructed in 2014 (GPA 2018)



Figure 14: 125 N. Raymond Avenue, noncontributing building at corner of Holly Street constructed in 2012 (GPA 2018)

The new building on the Project site would increase the number of noncontributing buildings within the Historic District from 42 to 43. As the number of contributing resources (154 buildings and 1 site) would remain unchanged at 155, the relative increase would represent a small fraction in the ratio of contributing to noncontributing resources. The percentage of noncontributing buildings would change from 20.5% to 22%. Therefore, the Project would not affect the integrity of setting or feeling of the Historic District because it would not significantly increase the relative number of noncontributing buildings.

Size, Scale, and Design

Size, scale, and design are often important factors in historic districts. For example, the vast majority of the buildings in the Spring Street Financial District in Downtown Los Angeles are Beaux-Arts in style and 12 stories in height. Another example is the Carroll Avenue Historic District in Angelino Heights where most of the buildings are two-story, late Victorian era houses. As discussed in the National Register nomination and analyzed below, the Old Pasadena Historic District is not a collection of buildings unified by size, scale, or design. Although the majority of buildings within the Old Pasadena Historic District are two-stories in height, there are a few eight-story buildings and a number of one-story buildings. The taller buildings include the Castle Green and Green Hotel Apartments, located on the same block as the Project site. Taller buildings also include the

three noncontributing buildings at the intersection of S. Fair Oaks Avenue and Green Street, just northwest of the Project site. At eight stories in height, the tallest buildings in the Historic District are the contributors at 26-30 and 91-93 N. Raymond Avenue (see Figures 15 and 16).



Figure 15: 26-30 N. Raymond Avenue, contributing building constructed in 1913 (GPA 2018)



Figure 16: 91-93 N. Raymond Avenue, contributing building constructed in 1914 (GPA 2018)

The new building is compatible in size and scale with the range of building heights in the Historic District. The Project site shares the block with the Castle Green and Green Hotel Apartments but the new building would not be as tall. The Castle Green ranges from six to seven stories with a maximum height of approximately 105 feet, while the Green Hotel Apartments is seven stories with a maximum height of approximately 111 feet. The majority of the new building would be six stories with a base allowable height of 75 feet. The penthouse mezzanine level, approximately 1,202 square feet in gross floor area, rises to approximately 84 feet in height. The tallest portion of the building would be at the corner of Fair Oaks and Dayton, which would reach 90 feet in height at the crest of the roof (see Figure 17).

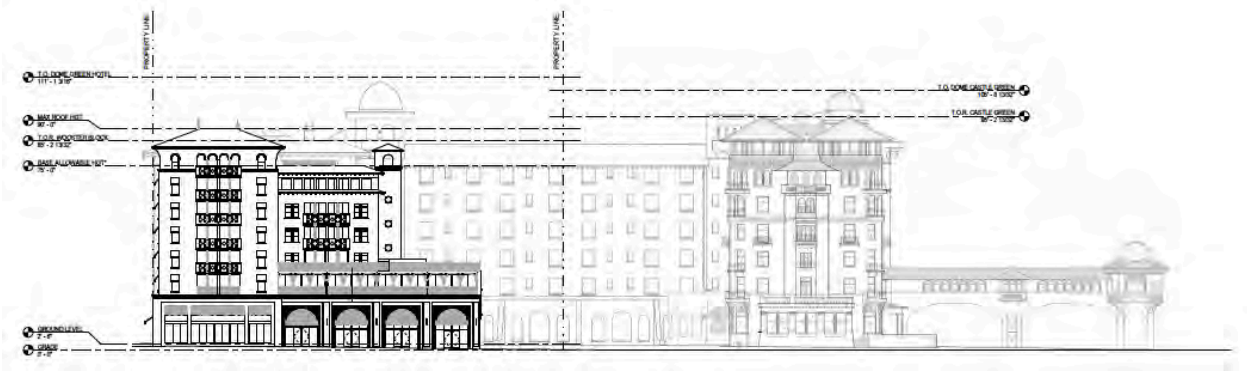


Figure 17: Artist's rendering of south elevation of proposed project in relationship to the Castle Green to the right and Green Hotel Apartments in the background (ARG 2019)

The new building would be substantially taller than the contributing building at 84 S. Fair Oaks Avenue, which is only one-story in height. However, the new building is physical separated from 84 S. Fair Oaks Avenue by ten-foot setback. The base of the new building, which would be reinforced by a different material than the one used on the upper stories, is also similar to the height of 84 S. Fair Oaks Avenue, creating a strong visual connection with the adjacent commercial storefront. Furthermore, 84 S. Fair Oaks Avenue has been historically situated next to

another much taller building, the Wooster Block, which was later incorporated into the Green Hotel Apartments (see Figures 18 and 19).



Figure 18: 84 S. Fair Oaks Avenue with the Wooster Block on the left and the Project site on the right (GPA, 2018)



Figure 19: Artist's rendering of proposed project, S. Fair Oaks Avenue elevation, looking southeast. The contributing building at 84 S. Fair Oaks Avenue is in the lower left hand corner of the illustration (ARG, 2019)



Figure 20: Castle Green, south and west facades (GPA 2018)

Regarding design, while the new building would be identifiable as new construction, it picks up on the architectural vocabulary of the Castle Green and Green Hotel Apartments. The overall massing, elevations, and roof shapes were inspired by the wing that was planned for the complex, but never executed. First and foremost, the footprint of the new building maintains the courtyard that was planned, which continues the open space across from Central Park. Like the Castle Green and Green Hotel Apartments, the new building would have solid wall construction with punched openings. The base of the new building is a continuation of the datum line established by the adjacent historic buildings on the block. The fenestration pattern on the new building is stacked vertically and the openings are recessed and appropriately proportioned. Arched openings are used for the main entrance on S. Fair Oaks Avenue, along the storefronts on Dayton Street, and at selected locations on the upper stories in another nod to the adjacent historic buildings. Likewise, balconies and hipped roofs are features used judiciously in the new building that have been borrowed from the Castle Green and Green Hotel Apartments. The Project would not affect the integrity of feeling and setting of the Historic District because the new building is compatible with the primary contributing buildings on the block (the Castle Green and Green Hotel Apartments) in terms of its size, scale, and design.

The other contributing building in the vicinity of the Project site is the Doty Block. The size, scale, and design of the new building would have no affect on the ability of the Doty Block to convey its significance as a contributor to the Historic District. Buildings designed in a variety of architectural styles already characterize the Historic District. As the new building would be across S. Fair Oaks Avenue, a major thoroughfare, it would not be appropriate to take design cues from the Doty Block.

Location

The boundary of the Historic District is irregular in shape, generally extending in a north south direction between Fair Oaks and Raymond Avenues and in an east west direction along Colorado Boulevard and Green Street (see Figure 2). The Project site is located in the approximate midpoint of the Historic District, across from Central Park, a contributing site. The location is not inappropriate for new construction because another wing to the Hotel Green complex was intended for the Project site. Furthermore, the visual association that once existed between the Project site and Central Park has been lost. The historic landscape from the Hotel Green period of significance (1894 - 1924) is no longer discernable as a result of alterations to the Project site discussed above.

While the new building would introduce a new visual element within the Historic District, the relationship among the contributing resources would not be substantially changed. The new building would not obstruct important views from within the Historic District or disrupt historic development patterns. Existing views of the south facade of the Green Hotel Apartments and west

facade of the Castle Green would be obscured from S. Fair Oaks by the new building. However, the landscaped space east of the new building would provide a buffer between the new building and the Castle Green, and the two facades would remain visible from Dayton Street and Central Park beyond. Therefore, the Project would not affect the integrity of feeling or setting of the Historic District because of an inappropriate location.

Summary

The proposed Project would not diminish the Historic District's integrity of feeling or setting. It would not have a significant impact on the relative number of noncontributing buildings. It would be compatible in terms of size, scale, and design with the contributing buildings on the block. Although the Project site is located in the approximate midpoint of the Historic District, it has no potential to intrude on important view corridors or interfere with historic patterns of development. The Project would not result in a substantial adverse change to the contributing resources in the vicinity, which would remain intact and visible. Additionally, the Project would not result in a substantial adverse change to the Old Pasadena Historic District as a whole. It would remain eligible for listing in the National and California Register.

Hotel Green

The analysis for determining impacts of adjacent new construction on individual historical resources, such as the Hotel Green, is similar to that described above. The primary issue is whether the integrity of setting and feeling would be so diminished by the new construction that the Hotel Green (Castle Green and Green Hotel Apartments) would no longer qualify as a historical resource. Standards #9 and #10 are also relevant to the analysis of potential impacts on the Hotel Green as an individual historical resource. Thus, compliance with Standards #9 and #10 is analyzed below.

Standard #9 states: "New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment."

The proposed Project is compatible with the Hotel Green in terms of historic materials, features, size, scale and proportion, and massing. The primary historic materials of the Castle Green include coarsely textured stucco walls, wood windows and doors, metal roof tiles, iron balconies, and terra cotta ornamentation. The primary historic materials of the Green Hotel Apartments include rusticated stone at the corner, textured stucco walls, wood windows and doors, and ceramic roof tiles. The new building's materials would have the same visual qualities as the historic materials but would be wholly modern and therefore differentiated as new. Instead of roughly textured stucco, the new building would be sheathed in smooth or lightly textured cement plaster. The rusticated stone remaining from the original construction of the Wooster Block would be expressed as cast stone units with a light sand finish on the base of the new building. The new building would have aluminum windows and doors, but they would have a similar profile as wood casements and painted an accent color drawn from the Hotel Green color palette.

As stated above, the size and scale of the new building would be compatible with the Hotel Green because it would be approximately the same height. The massing is similar to the wing that was planned for the complex, but never executed. The footprint of the new building is slightly wider on

the south in accordance with the current zoning code, but still maintains the central landscaped courtyard. Although the historic courtyard is divided between two property owners, the landscape design visually reunites the two spaces. The fenestration pattern of the new building is also similar to the Hotel Green in the arrangement and proportion of the openings. The new building incorporates features from the Hotel Green such as arched openings, roof brackets, and balconies, but with a more contemporary flair. The Project complies with Standard #9 because the new building would stand on its own as a contemporary yet traditional work of architecture, while complementing the Hotel Green. The Project would not impact the integrity of the Hotel Green to the degree that it would no longer be eligible as both a contributor to the Historic District and as an individual historical resource.

Standard #10 states: "New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired."

The Project complies with Standard #10. The new building is not physically connected to the Castle Green or Green Hotel Apartments, or for that matter the building at 84 S. Fair Oaks Avenue. If the new building were removed in the future, the adjacent contributing buildings would not be materially affected. The essential form and integrity of the Hotel Green and its environment would be unimpaired.

The Project would comply with Standards #9 and #10 and would not diminish the integrity of the Hotel Green. The Project would not result in a substantial adverse change to the Hotel Green. It would remain eligible for listing in the National and California Registers and for designation as a Historic Monument.

With regard to the potential for construction impacts on the Hotel Green, none are anticipated according to the Geotechnical Engineering Investigation prepared by Geotechnologies, Inc. July 2019. The Castle Green would be more than 80 feet from the subterranean excavation for the Green Hotel Apartments, which is beyond the influence area. Furthermore, soldier piles will be drilled and designed to accommodate the surcharge loads from the Green Hotel Apartments, so no additional stress or pressure on the Castle Green or Green Hotel Apartments is anticipated. Construction-generated vibration is not a factor because drills as opposed to vibratory pile drivers will be used to construct the soldier piles. Thus, construction vibration monitoring is not required or recommended.

5. CONCLUSIONS

The Project site is within the boundaries of two historical resources as defined by CEQA, the Old Pasadena Historic District and Hotel Green. The Project involves two activities that were analyzed for potential impacts on the identified historical resources, demolition and new construction. The demolition of the existing improvements on the Project site would not result in a substantial adverse change to either historical resource. The improvements do not contribute to the significance of the Hotel Green or the Historic District. The Project does not propose any physical alterations to any of the contributing buildings in the Historic District, including the Hotel Green. However, the Project would alter the immediate surroundings of Hotel Green because it would involve the construction of a new six-story plus mezzanine mixed-use building. As the new building complies with Standards #9 and #10 it is compatible with, but distinguishable from the Hotel Green. The new building would not reduce the integrity of the Hotel Green or Historic District to the degree they would be materially impaired. They would both continue to convey the significance that justified their inclusion in the national, state, and local registers of historical resources. As the Project would have no significant adverse impacts on historical resources, no mitigation is recommended or required.

6. SOURCES

Architectural Resources Group. *Central Park Apartments, 86 S. Fair Oaks, Pasadena, CA, Updated Concept Design Review Submittal.*

California Code of Regulations, California Office of Administrative Law, State of California Government.

City of Pasadena. "California Historical Resources Inventory Database." Accessed November 13, 2018. http://pasadena.cfwebtools.com.

Code of Federal Regulations, Title 36: Parks, Forests, and Public Property. Office of the Federal Register, National Archives and Records Administration, United States Government.

Gadski, Mary Ellen, Alson Clark, and Genevieve Graydon. "National Register of Historic Places Nomination: Hotel Green, Pasadena." 1979.

Grimes, Teresa. "National Register of Historic Places Nomination: Old Pasadena Historic District (Boundary Increase/Decrease/Additional Information), Pasadena." 2007.

National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation. Washington D.C.: National Park Service, 2002,

National Register Bulletin #16: How to Complete the National Register Registration Form. Washington D.C.: National Park Service, 1997.

National Register Bulletin #21: Defining Boundaries for National Register Properties Form. Washington D.C.: U.S. Department of the Interior, 1997.

Sanborn Map Company. *Pasadena*, Various Dates. Accessed November 13, 2018, http://sanborn.umi.com.ezproxy.lapl.org/splash.html.

Appendix A - Résumés



TERESA GRIMES is a Principal Architectural Historian at GPA with over 25 years of experience in the field of historic preservation. She is widely recognized as an expert in the identification and evaluation of historical resources having successfully prepared dozens of landmark and historic district applications for a wide variety of property types. Teresa graduated from the University of California with a Master of Arts in Architecture, and has worked in the private, public, and non-profit sectors. She has led the GPA Historic Preservation team since 2009, skillfully supervising a wide array of projects throughout California. Teresa has extensive experience in the preparation of environmental compliance documents in accordance with the California Environmental Quality Act for projects involving major landmarks as well as coordinated and reviewed documents for smaller-scale commercial, institutional, and residential property types throughout Los Angeles County. Teresa also participated in SurveyLA, the citywide historic resource survey of Los Angeles, from its inception, contributing to multiple sections of the citywide context statement and coordinating community plan area historic resources surveys.

Educational Background:

- M.A., Architecture, University of California, Los Angeles, 1992
- B.A., Political Science, University of California, Los Angeles, 1986

Professional Experience:

- GPA Consulting, Principal Architectural Historian, 2009-Present
- Christopher A. Joseph & Associates, Senior Architectural Historian, 2006-2009
- Teresa Grimes/Historic Preservation, Principal, 1999-2005, 1993-1994, 1991-1992
- Historic Resources Group, Architectural Historian, 1994-1998
- Getty Conservation Institute, Research Associate, 1992-1993
- Los Angeles Conservancy, Preservation Officer, 1988-1991

Qualifications:

- Meets the Secretary of the Interior's Professional Qualifications Standards for history and architectural history pursuant to the Code of Federal Regulations, 36 CFR Part 61, Appendix A.

Professional Activities:

- Pasadena Heritage Board Member, 2008-2012
- West Hollywood Cultural Heritage Advisory Board Member, 1990-1994

Selected Projects:

- Los Angeles County Museum of Art Master Plan, Los Angeles County, CEQA Historical Resource Report, 2018-2019
- Vine/Afton/DeLongpre, Los Angeles CEQA Historical Resource Report, 2018-2019
- Times Mirror Square, Los Angeles, CEQA Historical Resource Report, 2018-2019
- Figueroa & Flower, Los Angeles, CEQA Historical Resource Report, 2017-2019
- 913 S. Figueroa, Los Angeles, CEQA Historical Resource Report, 2017
- Olympic & Hill, Los Angeles, CEQA Historical Resource Report, 2017
- City of Hope Master Plan, Duarte, CEQA Historical Resource Report, 2015-2016
- Farmers Insurance Building, Los Angeles, CEQA Historical Resource Report, 2016
- John Anson Ford Theatres, Los Angeles County, CEQA Historical Resource Report, 2011-2015
- LA Biomed Master Plan, Torrance, CEQA Historical Resource Report, 2014
- May Company, Laurel Plaza, Los Angeles, CEQA Historical Resource Report, 2014
- United Artist Theater, Los Angeles, CEQA Historical Resource Report, 2013
- Claremont Graduate University Master Plan, CEQA Historical Resource Report, 2013
- Hillcrest Motors Building, Hollywood, CEQA Historical Resource Report, 2013
- Max Factor Building, Hollywood, CEQA Historical Resource Report, 2012

Appendix B - National Register of Historic Places Nominations

Form No. 10-300 REV. (9/77)

Renotification/80 Amendments

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

MAR 22 1979

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

OHP

FOR NPS USE ONLY
RECEIVED SEP 26 1979
DATE ENTERED MAR 23 1982

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC
Hotel Green

AND/OR COMMON
Castle Green Apartments

2 LOCATION

STREET & NUMBER
99 South Raymond Avenue — NOT FOR PUBLICATION

CITY, TOWN
Pasadena — VICINITY OF

CONGRESSIONAL DISTRICT
22nd. District

STATE
California

CODE
06

COUNTY
Los Angeles

CODE
037

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	__PUBLIC	X OCCUPIED	__AGRICULTURE	__MUSEUM
X BUILDING(S)	X PRIVATE	__UNOCCUPIED	__COMMERCIAL	__PARK
__STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	X PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	X YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	__BEING CONSIDERED	__YES: UNRESTRICTED	__INDUSTRIAL	__TRANSPORTATION
		__NO	__MILITARY	__OTHER:

4 OWNER OF PROPERTY

NAME
See continuation sheet 1 for a list of the beneficial owners

STREET & NUMBER

CITY, TOWN — STATE

__ VICINITY OF

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.
Office of County Recorder of Los Angeles, California

STREET & NUMBER
227 North Broadway

CITY, TOWN
Los Angeles

STATE
California

6 REPRESENTATION IN EXISTING SURVEYS

TITLE
Pasadena's Architectural and Historical Inventory, Survey Area 7

DATE
October 29, 1978 — __FEDERAL __STATE __COUNTY X LOCAL

DEPOSITORY FOR SURVEY RECORDS
Pasadena Cultural Heritage Commission, City Hall

CITY, TOWN
100 North Garfield Avenue
Pasadena

STATE
CA 91109

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
__EXCELLENT	__DETERIORATED	__UNALTERED	XORIGINAL SITE
XGOOD	__RUINS	XALTERED	__MOVED DATE_____
__FAIR	__UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The building known as Castle Green is sited with its long axis running north/south and its main facade parallel to Raymond Avenue. It is set back approximately 100 feet from Raymond Avenue and 30 feet from Dayton Street, affording ample space for a fine garden consisting of lawns, shrubs, pathways, a pool with fountain, and mature plantings of magnolias, bananas, varieties of palms and other trees. To the south of Dayton Street, there is a large public park of nearly ten acres. Thus, while located in the urban context of downtown Pasadena, the Castle Green enjoys an oasis of surrounding greenery. On its north side, the 1903 expansion of the Hotel Green (now a H.U.D. housing facility for senior citizens) adjoins the Castle Green. Within the L created by this junction of two buildings are located parking lots, garages, and other service facilities.

The Castle Green is a six-storey, flat-roofed building with various architectural features that rise to a seventh storey and create a varied and picturesque roofline. It is a steel-framed, brick structure, finished with rough-cast stucco (probably hand-troweled) of a dull brown color. Above the sixth storey perimeter of the building is a gently sloping shed roof of red, Spanish-style, semi-cylindrical ceramic tile. The eave overhang of approximately thirty inches is carried by 4x6" rafters, band-sawn at their ends. Each rafter tail is completely sheathed with copper, and the underside of the eaves is plastered.

The large scale of the building is relieved by a great variety of treatments in its massing, fenestration and exterior ornamentation. The central section of the main facade rises to a seventh storey penthouse that formerly accommodated a ballroom. The loggia of this top storey is flanked by two square towers with flat roofs, from which domes rise. These domes on plain drums are roofed with metal sheets in a manner reminiscent of Islamic domes. The eaves of the flat roofs are carried on 4x6" rafters, exposed from below, to which a fascia board, ornamented by simple, square openings, has been applied. The open gallery of the loggia is carried slightly forward by a cantilevered, concrete balcony of extremely simple design, which is repeated in the two flanking towers. Access to the tower balconies is provided by means of three simply arched windows divided by slender columns, which echo the design of the loggia. Above the towers' windows is an elaborate plaster ornamentation executed in a diapered pattern. Within the diamond shapes created by the diagonals is a fleur-de-lis type design.

The fifth and sixth storeys of the central section of the main facade are also tripartite in design. Below the loggia, the

FHR-8-300A
(11/78)

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR HCRS USE ONLY
RECEIVED FEB 8 1982
DATE ENTERED

CONTINUATION SHEET ITEM NUMBER 4 PAGE 1

George Holtz; 14702 Gledhill, Panorama City, CA 94102
Harry Creekmore; 99 S. Raymond, #107, Pasadena, CA 91105
Robert & Phyllis Hull; 99 S. Raymond, #201, Pasadena, CA 91105
Mrs. B. Suter; 99 S. Raymond, #202, Pasadena, CA 91105
J. Shapiro; 1500 N. Delta, S. San Gabriel, CA 91177
Mrs. Alice Angel; 99 S. Raymond, #204, Pasadena, CA 91105
Doris Young & Rosaline Carrol; 99 S. Raymond, #203, Pasadena, CA 91105
Virginia Morrison; 99 S. Raymond, #303, Pasadena, CA 91105
L. Coon; 99 S. Raymond, #207, Pasadena,CA 91105
Tom Carpenter; 99 S. Raymond, #208, Pasadena, CA 91105
Hermione Poirier; 99 S. Raymond, #210, Pasadena, CA 91105
Royal Dean; 234 S. Westgate, Los Angeles, CA 90049
Gertrude Flinn; 2301 James, Topeka, Kansas 66614
Christena Andreson; 1675 E. Orange Grove Blvd., Pasadena, CA 91104
Stella Salveson; 99 S. Raymond, #305, Pasadena, CA 91105
Genevieve Graydon; 99 S. Raymond, #308, Pasadena, CA 91105
Buelah Liggett; 5648 Berkshire Dr., Los Angeles, CA 90032
Virginia Dwyer; 11479 Rose Avenue, Los Angeles, CA 90066
Mrs. Williamette Foster; 99 S. Raymond, #401, Pasadena, CA 91105
Herb Winters; 3938 Cumberland, Los Angeles, CA 90027
Mrs. Rudd Brown; 702 E. California Blvd., Pasadena, CA 91106
W.V. Rader; 99 S. Raymond Ave., Pasadena, CA 91105
Grace Parker; 99 S. Raymond Ave., #405-06, Pasadena, CA 91105
Edna Graham; 99 S. Raymond Ave., #410, Pasadena, CA 91105
Adelle Shinn; 99 S. Raymond Ave., #501, Pasadena, CA 91105
Denise Forbush; 125 Cambou Drive, San Francisco, CA 94132
Ann Marie Duffy; 370 Arroyo Terrace, Pasadena, CA 91103
Edna Graham & Helen Lambert; 99 S. Raymond, #410, Pasadena, CA 91105
Laura Throckmorton; 99 S. Raymond, #506, Pasadena, CA 91105
Mildred Killam; 99 S. Raymond, #508, Pasadena, CA 91105
Olive Tosch; 99 S. Raymond, #509, Pasadena, CA 91105
Marian Nelson; 99 S. Raymond, #510, Pasadena, CA 91105
R. Snider; 6348 Spar Way, Magalia, CA 95954
Robert McKee; 99 S. Raymond, #603, Pasadena, CA 91105
Grace Cassidy; 753 W. Duarte Rd., Arcadia, CA 91009
Robert Hopper; 99 S. Raymond, #605, Pasadena, CA 91105
Ann Garbarine; 99 S. Raymond, #607, Pasadena, CA 91105
E. Mercanet; 6353 Hesperia Ave., Reseda, CA 91335
T. Kendrick; 1005 E. Parkman, Altadena, CA 91001
Doris Faust; 99 S. Raymond, #610, Pasadena, CA 91105
Green Hotel Apartments; 15233 Ventura Blvd., #816, Sherman Oaks, CA 91403

sixth floor's elevation is composed of three bays, each divided into three windows with plaster ornamentation between. The fifth storey exhibits three loggias, each tripartite, with slender columns that exhibit capitals in floral patterns. These arches, like those of the seventh storey towers, are "Moorish" in design, in that the spring line of the horseshoe arch occurs considerably above the capital. Much of the mid-Eastern character that the architect intended for his design is derived from this simple stylistic device. Further linking the design of the fifth and sixth storeys are the richly ornamented spandrels between the two storeys' windows.

Between the fourth and fifth storeys, a cornice-like string course occurs and extends around the entire building. Deep, stepped corbels are surmounted by delicate mouldings. This string course demarcates two zones of the exterior: below this line, fenestration consists of simple, rectangular openings and no ornamentation occurs. There are several French doors with simple iron balconies.

A verandah, which was considered a necessary feature of a nineteenth century hotel, was built at ground level along the center of the main facade. Its shed roof was covered in the same Spanish-style red tile. Contrasting strongly with the described slender columns that divide window arches, the Doric columns of the verandah are of heavy proportion with pronounced entasis.

Extending from the center of the main elevation to the west curb of Raymond Avenue is the remaining section of an enclosed pedestrian bridge that once spanned the street and linked the two buildings of the Hotel Green complex. Only two spans still remain, and the truncated bridge now terminates with what formerly served as a central observation pavilion. The elevated bridge allowed guests to cross between the two buildings at the second storey level. The structure now serves as a pleasant, arcaded marquee sheltering the front entranceway to the Castle Green. Between the flattened arches, the paired piers that support the bridge have pairs of buttresses that lend character to the design. The enclosed walk-way above (now used as an architectural office) is lighted by continuous bands of arched windows, between which are slender columns of the same type employed in the main facade. The terminal pavilion, which is octagonal in plan, has a hipped, tile roof from

which a metal-clad dome with finial rises. This picturesque roof is reminiscent of those of Turkish kiosks.

Terra cotta ornament embellishes the spandrels of the octagonal bridge pavilion, its eaves and the surrounds of its main windows. This ornament is perhaps the most notable feature of the exterior design. Interlocking circular and elliptical motifs are combined with graceful, linear patterns based on plant forms. These designs do not appear to have been taken from the standard pattern books of the late nineteenth century on ornament, but rather may be considered as original contributions of the architect. This ornament strongly suggests the influence of architect Louis Sullivan, whose work may have inspired other architectural features of the building, such as the tower domes and the loggia balcony.

The south facade of the Castle Green undoubtedly was considered as important to the design impact of the building as was its main facade. Perhaps the most prominent feature of the building were the two seven-storey towers, semi-circular in plan, that are attached to the two corners of the south end. The close placement of these two towers, which are separated by a single bay, calls to mind the towers of numerous medieval castles and fortifications of Europe. This factor is probably responsible for the popular name "Castle Green," by which the building is now known. Above the main six-storey block of the building, the towers are capped by gently sloping conical roofs of red ceramic tile. The roofs are carried on a series of cast-concrete columns with "Moorish" capitals that exhibit leaf-pattern ornament. The open galleries, which add charm to roof-top promenades, actually disguise the presence of the original seventh storey water holding tanks. Below the galleries, the same type of noteworthy ornament as described above occurs. At ground level, a one-storey, glass-enclosed sun porch projects from the south facade. The flat roof deck is surrounded by a low balustrade of concrete, pierced by openings of an Islamic pattern.

The original north facade of the building now forms a party wall with the 1903 addition to the former Hotel Green complex. Because there were no towers originally built at the north end of the building, it appears that eventual expansion from this end of the

hotel was previewed as early as 1898. Photographs of the building before 1903 show the north end to have been rectangular in form. Like the other facades, the north facade exhibited arched windows above the cornice-like string course and plain rectangular openings below. The design of the 1903 addition contrasts strongly with the imaginative and eclectic style of the Castle Green. Deliberately designed to be "twentieth century in type of architecture" (according to a 1902 account), the later wing has no arched windows, galleries, balconies or other features similar to those of the 1898 building.

Despite the hotel's conversion into apartments over fifty years ago, the interiors of the Castle Green still retain much of their late nineteenth century character. The public rooms of the ground floor remain nearly in their original condition, only minor, decorative changes having been made during the twentieth century. The building's main entrance leads to the large lobby and stairhall to the second floor. Among the notable architectural features of this space are: the mosaic tile of the main floor and stair landings, the wide flights of marble steps, the intricately ornate cast-iron stair balustrade and newel, and the wainscoting and wall treatments of simulated onyx. (Throughout the building, slate has been marbleized to achieve the wax-like luster of the stone onyx.) Just north of the entrance is a cage elevator of late nineteenth century manufacture. This ornate metal lift, with its distinctive grills and screens, still communicates with all seven storeys and terminates at the penthouse, formerly used as a ballroom. The transom over the wide entranceway to the south parlors is an ornate metalwork screen that repeats an important decorative element of the lobby.

The room known as the main salon is the largest of the south parlors. Perhaps its most distinctive feature is its coffered ceiling, the reveals of which have been decorated with a colorful, low-relief ornament. The main salon extends into the space of the southeast tower, and the unusual plan of the room is reflected in the semi-circular line of the coffered ceiling. An immense fireplace in the character of a baronial hall comprises the west wall of the room. The mantle shelf has been placed at an exaggerated height; above it, a mirror has been set within an overmantel

of the coffered hardwood panels. Double doors south of the fireplace lead to the glass-enclosed sun porch. This room has been uniformly painted white, masking much of its former character. The capitals of the piers between the windows, which are very similar to capitals in the main salon and lobby, are noteworthy.

The suite of three rooms to the west of the main parlor are the most interesting and unusual of the entire building, and of these, the "Moorish parlor" (historic and present name) is by far the most significant. Craftsmanship, rich surface decoration, and opulence of material distinguish this exotic room, which appears to have survived intact. The focal point of the room is the fireplace wall, set at a diagonal between the wide entranceways to the main salon and the card room. A colorful, mosaic tile fireplace surround (of exaggerated height) is composed of chevron patterns, bordered by a contrasting chain pattern. Gilded elements highlight the design. A wood mantel shelf is again placed high on the wall, this time in simulated suspension from chains above. The tile work is surrounded by intricate woodwork and applied carvings in varied motifs such as elliptical sunbursts, plant forms and guilloche bands. The window treatment in the Moorish parlor is very unusual and evocative of Islamic architecture. The upper part of the window is accented by a bead-like screen, above which is a frieze of applied decoration that resembles mosques in section and horseshoe arches on columns. Also of interest in this room are the transom screens, in which a simply turned spindle is alternated to create a distinctive effect. The two other rooms of this suite repeat many of the themes presented in the Moorish parlor. Of special note are the ogive arch forms of the window screens in the card room.

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR HCRS USE ONLY
RECEIVED
DATE ENTERED

Although the hotel's interior was completely gutted during the recent rennovation, the building's exterior remains essentially unchanged. Technically, the building survives as a group of three adjoining although architecturally distinct sections: 1) a north-east corner block, constructed in 1903, 2) a middle section to the west constructed in the same year and 3) the older Wooster Block, forming the west corner, dating from 1887. The entire building is of steel frame construction and covered with a cement plastered finish. The north-east block, a full seven stories in height, is the tallest of the building's sections. It is covered by a low hip roof of asphalt shingles with corbelled supporting brackets. Window and door openings of the block's lower five stories are austere and with little detailing. Paired sixth story windows, more reflective of the older Castle Green, are smaller and crowned by round arches. Eliptically shaped attic story windows are curiously reminiscent of those used by Louis Sullivan in some of his early commercial buildings, as is their surrounding ornamentation. Prominant on the block's east facade is the one-story semi-circular projection of what was originally one of the hotel's lounges. The projection is flat roofed with buttressed walls. A large buttressed brick chimney appears on its eastern-most point. The south facade of the corner block is separated from the Castle Green by a narrow air space.

The north facade of the six-story middle section is covered by a very low shed roof of asphalt shingles carried on 4" x 6 rafters. Window and door openings are of the same austere detail as noted in eastern block although circular headed windows are used on the first floor. Sixth-story windows are marked by the addition of fancyfull semi-circular iron balconies. The south facade, with a shed roof of ceramic tile, is dominated by the one-story semi-circular projection of what was originally the hotel's dining room and by square towers at each of the sections' ends. The larger western tower is articulated by paired arched openings and covered by a metal dome. The eastern tower includes triparte arched openings and a simple flat roof.

The older six-story Wooster Block stands most distinct from the later building. The building's wealth of detail, almost Romanesque in feeling, is handled in an individual way. The building is again covered by a low shed roof of ceramic tile carried on projecting rafters. Walls are articulated by numerous bays and arches. The west facade includes three two-story bays on the 2nd and 3rd stories. The The middle bay is semi-circular, the end bays slanted. The bays are crowned by a decorative connecting iron balcony. A slanted bay on the same story appears on the north facade of the building over its eastern

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR HCRS USE ONLY
RECEIVED DEC 19 1980
DATE ENTERED

most entrance. A semi-circular tower, rising the building's full height, marks the north-west corner and entrance. Adding to the building's south facade is a small concrete balcony on the fifth floor with corbelled supporting brackets. Four octagonal columns support its overhanging tile roof. The building's first story of store fronts on the north and east facades is articulated by simulated rusticated stone work, as is the northeast tower to the third story. Romanesque arches appear over the building's north entrances.

AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW

[redacted]	__ARCHEOLOGY-PREHISTORIC	__COMMUNITY PLANNING	X LANDSCAPE ARCHITECTURE	__RELIGION
[redacted]9	__ARCHEOLOGY-HISTORIC	__CONSERVATION	__LAW	__SCIENCE
[redacted]99	__AGRICULTURE	__ECONOMICS	__LITERATURE	__SCULPTURE
[redacted]1699	X ARCHITECTURE	__EDUCATION	__MILITARY	__SOCIAL/HUMANITARIAN
[redacted]0-1799	__ART	__ENGINEERING	__MUSIC	__THEATER
[redacted]00-1899	__COMMERCE	X EXPLORATION/SETTLEMENT	__PHILOSOPHY	__TRANSPORTATION
[redacted]900-	__COMMUNICATIONS	__INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)
		__INVENTION		

SPECIFIC DATES opening: Jan. 16, 1899 BUILDER/ARCHITECT Frederick L. Roehrig

STATEMENT OF SIGNIFICANCE

Called by local historian Henry Markham Page "the first fine hotel in Pasadena" and estimated to have been one of the largest resort hotels in California in its time, the Hotel Green, as represented by the section now known as Castle Green, is one of the few grand nineteenth century hotels in the state to survive to the present day. As a contributing factor toward the settlement of Pasadena in the 1890s and early 1900s, the hotel also fostered the social, cultural and economic development of the city. The design of the building, which is a unique, imaginative blend of eclectic styles, should be considered as a significant statement in the architectural history of southern California.

The history of the Castle Green building began a decade before its construction. In 1887, Pasadena developer Edward C. Webster began building a hotel at the southeast corner of Raymond Avenue and Green Street (then Kansas Street). To promote the successful establishment of this new business venture, Webster erected a passenger terminal nearby for the Santa Fe Railroad. His donation of the building and lot to the railroad company was contingent upon their relocation to this new depot. With this move, Webster was assured that the proximity between hotel and rail station (and the obvious convenience that this afforded guests) would encourage the growth of his planned resort. However, Webster overextended his ventures, and when forced into insolvency, his unfinished hotel became the property of his friend and creditor, Colonel George G. Green.

Green had first come to Pasadena in the late 1880s to escape the winter climate of his home town, Woodbury, New Jersey. Having made his fortune in the patent medicine business, Green was quick to realize the potential to attract other wealthy Eastern health seekers to the mild weather of southern California. He invested a large sum to complete the hotel that Webster had started, and within a few years, it had gained the reputation of being one of the finest hotels in southern California. From its early years, it was considered a luxury hotel in the sense that it was well-furnished and well-equipped to cater to the needs of wealthy guests.

In February 1893, work was begun on an addition to the south of

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Pasadena Daily News, May 6, November 15 and December 29, January 17, 1899; January 1, 1903. Pasadena, California: Beautiful (Pasadena, CA: Star Publishing Co., [1902]). J.W. Pasadena, California: Historical and Personal (Pasadena, CA: Pu[illegible] by the author, 1917). Henry Markam Page, Pasadena: Its Early Years (Los Angeles, CA: L.L. Morrison, 1964).

10 GEOGRAPHICAL DATA

UTM NOT VERIFIED

ACREAGE OF NOMINATED PROPERTY 2.74 acres

QUADRANGLE NAME Pasadena, California QUADRANGLE SCALE 1: 24 000

UTM REFERENCES

	ZONE	EASTING	NORTHING
A	11	394100	3778540
B			
C			
D			
E			
F			
G			
H			

VERBAL BOUNDARY DESCRIPTION

See continuation sheet 11 for the legal description

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

Nominated by: Genevieve Graydon

NAME / TITLE 794-0410

Mary Ellen Gadski, with the assistance of Alson Clark

ORGANIZATION: Pasadena Heritage

DATE: March 20, 1979

STREET & NUMBER: 54 West Colorado Boulevard

TELEPHONE: (213) 793-~~4378~~ changed 0617

CITY OR TOWN: Pasadena

STATE: CA 91105

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL ___ STATE ___ LOCAL X

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE Kenneth Allen

TITLE DATE 9/13/79

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER.

Ivan A Barbe DATE March 23, 1982

for KEEPER OF THE NATIONAL REGISTER

ATTEST: DATE

CHIEF OF REGISTRATION

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR HCRS USE ONLY
RECEIVED SEP 2 6 1979
DATE ENTERED

the hotel, which approximately doubled its original size. (Green had been planning this expansion for some time, but had waited until the completion of the city sewer system to proceed.) The Los Angeles architectural team of Strange and Carnicle designed a facade that reflected "Spanish, Moorish and Mexican styles," according to a contemporary newspaper account. Its eclectic architectural style was greatly admired by the public and contributed to its appeal as a resort hotel. Winter visitors journeying to a semi-tropical climate apparently found the fanciful mingling of styles to be appropriate to their surroundings. The newly expanded, two-hundred-room hotel was opened in early 1894.

During the 1890s, the Hotel Green became a social and cultural center for Pasadena. Many balls and receptions for distinguished visitors to the city took place at the hotel, which was held in high esteem and was considered to be a civic showcase. The Valley Hunt Club began its annual ball here, and "society," as modeled on Eastern traditions, began to flourish. The hotel was also beginning to make a large contribution to the economic development of Pasadena. Many tourists attracted to the Hotel Green decided to become residents of the city, either on a permanent, year-round basis or during the winter months. Thus, home building was fostered, and many new businesses were established to meet the demands of a growing population. During the season of November 1897 to May 1898, it was estimated that the Hotel Green's guests, numbering nearly 3,000, had spent approximately $150,000 during their local stay. The injection of this large amount of money into a community of less than 10,000 people was a tremendous financial boon to Pasadena. Colonel Green and his manager, brother-in-law J. H. Holmes, also took active, personal roles in promoting the development of Pasadena, since the success of the hotel was so intricately linked with that of its community. They gave both moral and financial encouragement to civic projects such as grading roads and publicizing the city's attributes.

Because of the tremendous demand for rooms (many guests reserved their lodgings a year in advance), Green planned to further expand his hotel through the construction of "The Annex," later to be known as the Castle Green. Colonel Green owned the parcel of land directly opposite his hotel on the west side of Raymond Avenue. In May 1897, the building contract for the annex was awarded, and work commenced soon thereafter. Although a significant part of the construction had been completed by mid-1898, the grand opening of the new annex was delayed until January 16, 1899 for the occasion of G. G. Green's birthday. The opening was hailed by the local press as "the most brilliant social event of the season" and was attended by 1,000 guests.

The architect of the new building, Frederick L. Roehrig, followed Strange and Carnicle's combination of eclectic styles so that the annex would bear some relationship to the existing hotel. Architectural elements of California's colonial antecedents were combined imaginatively with selected images from Islamic architecture. As one of Roehrig's earlier works in a long career that extended to mid-1930s, the annex represents a pastiche of his personal architectural ideas, in tune with the historic eclecticism of the late nineteenth century.

The siting of the new annex proved to create an important attribute for both the hotel complex and the city of Pasadena. The building was set back approximately one hundred feet from Raymond Avenue, allowing an ample site for a garden. The original hotel had been built directly on the street line. The new garden thus served as a landscape feature for the two facing buildings of the hotel. Local historian Page related that the newly landscaped site was the only park in Pasadena at that time. Further enhancing the expanded hotel was an elevated pedestrian bridge, 200 feet long by 14 feet wide, which ingeniously solved the problem of communication between the two buildings across Raymond Street. The bridge served as both an important social promenade and a lounge for guests.

The interior appointments of the new annex caused a local newspaper reporter to comment on the "lavish expenditure of money" that distinguished the building from "the usual run of hotels." Colonel Green indeed had invested a greater percentage of his money toward the interior enrichment of the annex than he had done for the earlier buildings. Nearly the entire ground floor was devoted to public spaces, which included: a large lobby, drawing rooms, a sun porch, a billiards hall, a gentleman's writing room, and most distinctive of all, a suite of "Moorish" rooms. Atop the building, a large ballroom was located in the seventh storey penthouse. The open roof gardens that flanked the ballroom provided an excellent vantage point from which to enjoy a view of the San Gabriel Mountains to the north. In the basement, a bowling alley catered to the recreational interests of guests. In contrast to many resort hotels of the era, not all attention was lavished on the public areas at the expense of the private rooms. Individual suites were of generous proportions and included individual closets, baths and lavatories. Furnishings were selected by manager Holmes, who toured the eastern United States for that purpose.

The early years of the twentieth century marked the heyday of the

Hotel Green. To further attract guests, the hotel owner developed a golf course with clubhouse that was easily accessible by means of an electric car line that ran on Raymond Avenue. The hotel was especially popular on New Year's Day due to its location along the former route of the Tournament of Roses parade. Because the parade passed directly under the pedestrian bridge on Raymond Avenue, this became one of the most desirable viewing points in town. A holiday edition of the January 1, 1903 Pasadena Daily News proudly claimed that: "The Hotel Green has a world-wide reputation and is without doubt the most superb hostelry in the west." By this time, work had begun on yet another expansion of the hotel. Along Green Street, a building was connected at a right angle to the Castle Green and was adjoined to another existing building that was refurbished, the Wooster Block. Architect Frederick L. Roehrig again designed this new building, which was intended to be a more "modern" architectural statement. Ambitious plans were made for another wing along Fair Oaks Avenue that would have created a U-plan structure with a central courtyard. Financial limitations curtailed this expansion.

In 1914, the Hotel Green was purchased by Daniel M. Linnard. As the vacationing patterns of Americans eventually changed with the advent of the automobile and less dependence upon public transportation, the hotel began to lose the great popularity it had enjoyed. The establishment of over four hundred rooms could no longer be managed on a profitable basis. Around 1920, the portion of the hotel east of Raymond Avenue was sold; this was renamed the Pasadena Hotel and later became the Park View. In 1929, the portion of the elevated bridge over Raymond Avenue was regarded as an impediment to traffic circulation and was torn down. The Hotel Green building on the east side of Raymond Avenue, which had been housing various civic offices, was demolished in 1935. Only a one-storey segment at the southeast corner of Green and Raymond now remains.

The 1897-1898 annex had come under separate management in the mid-1920s and officially was organized as the Castle Green apartments in 1926. The establishment of a co-operative apartment house was an unusual venture for its time. Under a special trust arrangement with the Security Pacific National Bank (then Security Trust and Savings Bank), those who purchased individual apartments were beneficial owners, rather than owners in fee. The conversion of the hotel into an apartment house was made feasible by the high quality of the building's initial construction and the existing proportions of the large suites. There are now fifty-three apartments in the building, approximately half of them owner-occupied.

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR HCRS USE ONLY
RECEIVED SEP 26 1979
DATE ENTERED

In recent years, the nearby film industry has taken advantage of Castle Green's distinctive architecture. Scenes from dozens of movies have been filmed here, perhaps most notable among them being the box-office hit, "The Sting." Interiors have been used as sets for scenes taking place in such disparate locations as Russian hotels and United States embassies.

Although architecturally and physically distinct from the Castle Green, the later annex to it, now called the Hotel Green, is closely associated with the hotel's and Pasadena's history. In February 1903, Col. Green announced his intention to expand his by-now famous hotel to provide even more luxurious accommodations for the wintering of Pasadena's wealthy Eastern visitors. The so-called north annex would stretch some 200 feet along Kansas Street (now Green Street) and embrace an existing structure, the Wooster Block, located at the south-east corner of Kansas and Fair Oaks Avenue. Noteworthy for its having once contained Throop College, predessor of the prestigious California Institute of Technology, the Wooster Block (c. 1887) had been purchased by Green in 1895, intending to transform it into a part of his hotel.

For his architect, Col. Green again employed the talents of Frederick L. Roehrig, desiring that his new hotel present a more "modern" architectural statement. Construction of the annex was begun immediately after Green's announcement with the razing of a group of buildings along Kansas Street to the east of the Wooster Block. Construction progressed rapidly, and the new hotel festively opened on January 1, 1904. Containing some 176 lavishly appointed rooms, each with bath, and large public rooms similarly furnished, the new hotel was a handsome addition to Pasadena's fine hotels and enjoyed many years of popularity while at the same time promoting the growth of Pasadena itself. In the 1920's however, as the popularity of the hotel began to decline, the building fell into a state of disrepair, leading Pasadena City Planners in 1971 to recommend its destruction. The building was saved when purchased by Goldrich, Kest and Stein in 1972, who, with the aid of a H.U.D. grant, transformed the hotel into an apartment residence for senior citizens, that being its present use.

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

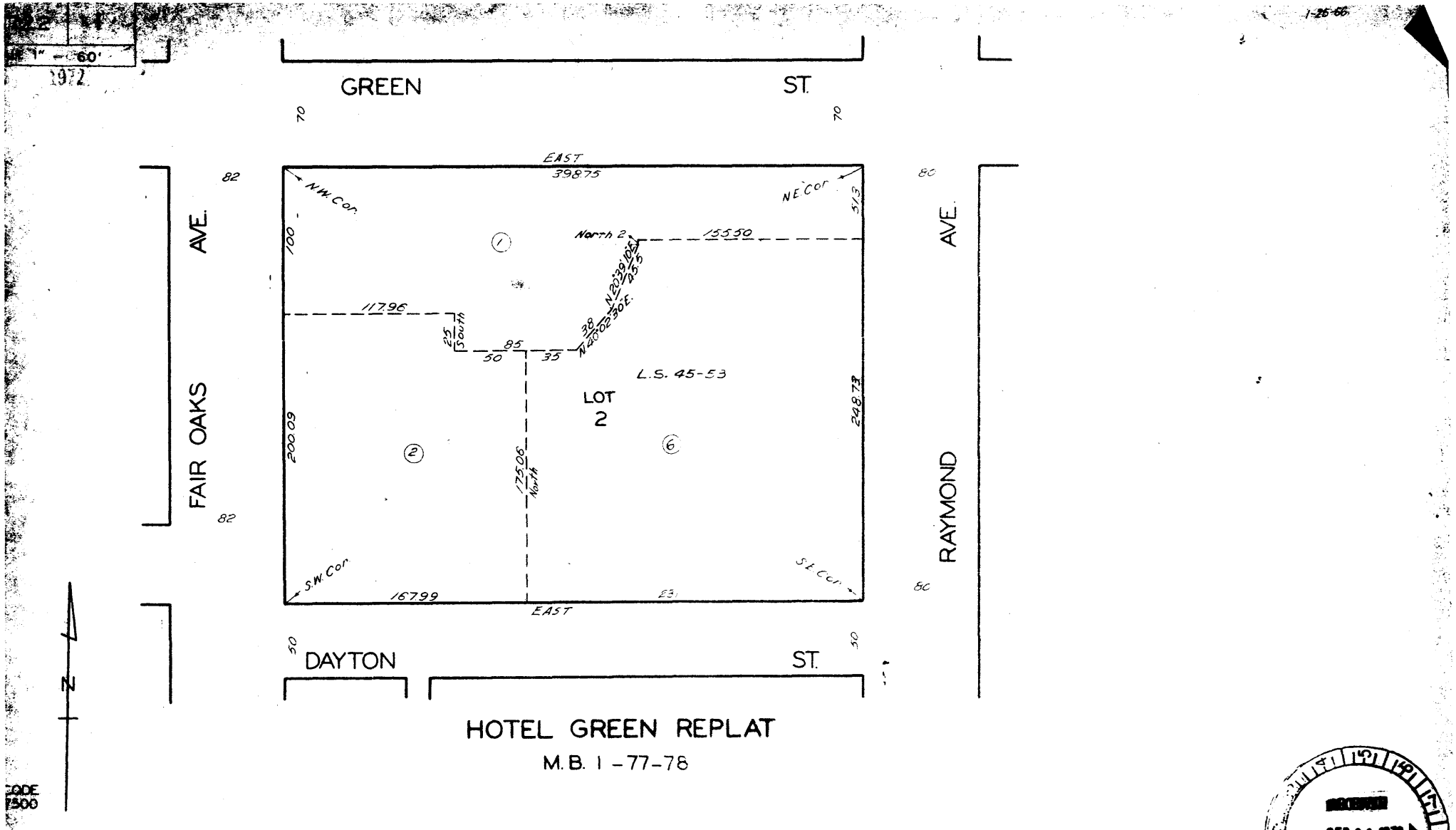
FOR HCRS USE ONLY
RECEIVED
DATE ENTERED

CONTINUATION SHEET 11 ITEM NUMBER 10 PAGE 1

The following described portion of Lot 2, Hotel Green replat, in the City of Pasadena, County of Los Angeles, State of California, as recorded in Map Book 1, page 77, Records of said Los Angeles, State of California.

The square block bounded by Raymond Avenue on the east, Green Street on the north, Fair Oaks avenue on the west and Dayton Street on the south.

See attached parcel map.



HOTEL GREEN REPLAT

M.B. 1 - 77-78

CODE 7500

FOR PREV. ASSM'T. SEE 1812-1

RECEIVED
SEP 26 1979
NATIONAL REGISTER

NPS Form 10-900a
(8-86)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section _____ Page ___

==========

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 83001200/07001303 Date Listed: 3/25/2008

Old Pasadena Historic District
(Boundary Increase/Decrease/Additional Documentation)

Property Name	**Los Angeles**	**CA**
	County	**State**

N/A
Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Signature of the Keeper	**Date of Action**
	3/25/2008

==========

Amended Items in Nomination:

U. T. M. Coordinates:
The U.T.M. Coordinates presented in the original nomination are correct and are retained for the revised Additional Documentation. [The coordinates presented in the current AD do not circumscribe the nominated area.]
The U.T.M. Coordinates for the three specific Boundary Increase areas (noted as points A, B, and E on the new USGS map) are: [A] 11 394031 3778108, [B] 11 393820 3778440, and [E] 11 394031 3779000. [These points are effectively contained within the original four district coordinate points.]

Verbal Boundary Description:
The Verbal Boundary Description for the new Boundary Increase and Decrease areas should refer to the map accompanying the new documentation. [The increase areas are limited to the lots historically associated with the properties at 108-112 South Delacey [#66], 80 West Dayton [#62], 130 -134 North Fair Oaks [#78], and 330 South Fair Oaks [#90]. The Boundary Decrease areas are described as the lots historically associated with the properties at 251 and 255 South Fair Oaks and the lot at NE corner of South Raymond and Del Mar Boulevard. The increase and decrease areas all total < one acre and represent no net change to the listed historic district.]

These clarifications were confirmed with the CA SHPO office.

DISTRIBUTION:
National Register property file
Nominating Authority (without nomination attachment)

NPS Form 10-900
(Oct.1990)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

RECEIVED 2280
MAR 12 2008
NAT. REGISTER OF HISTORIC PLACES
NATIONAL PARK SERVICE

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Old Pasadena Historic District (Additional Documentation/Boundary Changes)

other names/site number

2. Location

street & number See Attached Map N/A ☐ not for publication

city or town Pasadena N/A ☐ vicinity

state California code CA county Los Angeles code 37 zip code 91105

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this ☒ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☒ meets ☐ does not meet the National Register Criteria. I recommend that this property be considered significant ☐ nationally ☐ statewide ☒ locally. (☐ See continuation sheet for additional comments.)

Signature of certifying official/Title Date

California Office of Historic Preservation
State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. (☐ See continuation sheet for additional comments.)

Signature of commenting or other official Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that this property is:

☒ entered in the National Register
☐ See continuation sheet.
☐ determined eligible for the National Register
☐ See continuation sheet.
☐ determined not eligible for the National Register
☐ removed from the National Register
☐ other (explain): _____

Signature of the Keeper Date of Action

3/25/2008

5. Classification

Ownership of Property
(Check as many boxes as apply)

- ☒ private
- ☒ public-local
- ☐ public-State
- ☐ public-Federal

Category of Property
(Check only one box)

- ☐ building(s)
- ☒ district
- ☐ site
- ☐ structure
- ☐ object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
154	40	buildings
1 park		sites
		structures
		objects
154	40	Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)

N/A

Number of contributing resources previously listed in the National Register

158

6. Function or Use

Historic Functions
(Enter categories from instructions)

LANDSCAPE/park
COMMERCE/business, specialty store, financial
RECREATION & CULTURE/theater
RELIGION/religious facility
SOCIAL/meeting hall
TRANSPORATION/rail related
DOMESTIC/multiple dwelling, hotel
DOMESTIC/single family

Current Functions
(Enter categories from instructions)

LANDSCAPE/park
COMMERCE/business, specialty store, financial
COMMERCE/Professional, restaurant
RECREATION & CULTURE/theater
RELIGION/religious facility
TRANSPORATION/rail related
DOMESTIC/multiple dwelling, hotel

7. Description

Architectural Classification
(Enter categories from instructions)

LATE 19 & EARLY 20 CENTURY REVIVALS -
Beaux Arst, Mission/Spanish Colonial Revival
MODERN MOVEMENT – Moderne, Art Deco

Materials
(Enter categories from instructions)

foundation concrete
roof ceramic tile, other
walls wood, brick, stone, stucco
other

Narrative Description
(Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- ☒ A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- ☐ B Property is associated with the lives of persons significant in our past.
- ☒ C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ☐ D Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations
(Mark "X" in all the boxes that apply.)

Property is:

- ☐ A owned by a religious institution or used for religious purposes.
- ☐ B removed from its original location.
- ☐ C a birthplace or a grave.
- ☐ D a cemetery.
- ☐ E a reconstructed building, object, or structure.
- ☐ F a commemorative property.
- ☐ G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance
(Enter categories from instructions)
Commerce
Architecture

Period of Significance
1886-1936

Significant Dates
1886 – Santa Fe Train Station constructed, auctioning of the schoolhouse property, city incorporated
1929-1939 – Colorado Boulevard street widening

Significant Person
(Complete if Criterion B is marked above)
N/A

Cultural Affiliation
N/A

Architect/Builder
Bennet, Cyril; Haskell, Fitch; Ridgeway, Harry; Strange, C.L.; Roehrig, Frederick, Hudson, Frank; Buchanan, C.W.; Blick, J.J.; Parkinson, John; Bergstrom, Edwin; Folland, Walter; de Puger Millar, Louis; Neff, Wallace

Narrative Statement of Significance
(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):
- ☐ preliminary determination of individual listing (36 CFR 67) has been requested.
- ☒ previously listed in the National Register
- ☐ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings Survey # _____
- ☐ recorded by Historic American Engineering Record # _____

Primary Location of Additional Data
- ☐ State Historic Preservation Office
- ☐ Other State agency
- ☐ Federal agency
- ☒ Local government
- ☐ University
- ☐ Other

Name of repository:

10. Geographical Data

Acreage of Property
54.4 acres

UTM References
(Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing		Zone	Easting	Northing
1				3			
2				4			

☐ See continuation sheet.

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet.)
See attached map.

Boundary Justification
(Explain why the boundaries were selected on a continuation sheet.) See attached.

11. Form Prepared By

name/title Teresa Grimes

organization Christopher A. Joseph & Associates date March 30, 2007

street & number 11849 W. Olympic Blvd., Suite 101 telephone 310-473-1600

city or town Los Angeles state CA zip code 90064

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional items
(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of the SHPO or FPO.)

name

street & number telephone

city or town state zip code

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*).
Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.0. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

Summary

The Old Pasadena Historic District contains 154 contributing and 40 noncontributing resources, which form the historic downtown of the City of Pasadena. Dating from 1886 through 1936, the buildings visually document the district's economic and social booms. Most of the buildings are two stories in height, although there are a few taller buildings of eight stories, particularly at intersections, and there are many one-story buildings along the district boundaries. Predominantly commercial in nature, the district also includes a few residential buildings, a train station, some light industrial concerns, several churches, and a park. The strong stylistic eras of Old Pasadena can be discussed using three streets within the district as examples: Fair Oaks Avenue – 1880s, Raymond Avenue – 1890-1915, and Colorado Boulevard 1929-30. Surrounding streets, especially Union Street and Green Street, offer small-scaled buildings, which reflect their industrial and service support to businesses along the major commercial streets. Since the district was originally listed in 1983, many of the contributing buildings have been extensively rehabilitated in a manner consistent with the Secretary of the Interior's Standards. A few contributing buildings were demolished, and several new noncontributing buildings have been constructed. Most of the new construction, however, occurred on vacant and surface parking lots and is compatible with the historic architecture of the district. Generally, bounded on the north by modern office buildings, on the east by the Civic Center and the Santa Fe railroad tracks, on the west by the Long Beach Freeway, and on the south by later industrial development, this district acts as an enclave from the past, which conveys the aspirations of the early residents of Pasadena.

District Description

Old Pasadena evolved from a small wood-frame store constructed on Colorado Boulevard near Fair Oaks Avenue in 1876, setting the pattern of Colorado Boulevard as the east-west artery and Fair Oaks Avenue as the north-south artery. A rate war between the two major railroads between 1885 and 1886 brought about a building boom in southern California that was not lost on Pasadena. The boom spurred the development of Colorado Boulevard between Delacey and Marengo Avenues and along Fair Oaks Avenue between Union and Green Streets. Constructed of brick, buildings remaining from this period utilize such common Victorian-era details as arched windows, decorative brickwork, and articulated cornices. According to historic photographs, projecting bays and Mansard roofs, common to Victorian-era design once dominated Colorado Boulevard, although none remain within the district. The eastside of Fair Oaks Avenue, north of Union Street serves as the best remaining streetscape of Victorian-era commercial design within the district and all of Pasadena.

The alleys of Old Pasadena provide not only a unique interior stret system, but also a view of the district's industrial and service uses. Arched windows, fading wall signs, exposed pipes, and heavy wooden or metal doors punctuate the simple brick facades. The alley setback pattern varies with the historic uses of the buildings, creating a hodge-podge type of space. Still in use today, the alley facades are often the only clues that buildings with 1929-30 street-facing facades date to the 1880s.

As Pasadena established itself as a resort town, catering to the upper class winter tourist trade, the north-south artery shifted from Fair Oaks Avenue to Raymond Avenue. Anchored on its far north and south ends with major hotels and with the Santa Fe Train Station and Hotel Green in the middle, Raymond Avenue became the route between the hotels and downtown. The introduction of buff brick and cast stone ornamentation often associated with Beaux-Arts and Renaissance Revival design on Raymond Avenue buildings document the shift in the 1890s from Victorian to Classical tastes. The two tallest buildings within Old Pasadena, 26-30 and 91-93 North Raymond Avenue offer twin tower reinforced concrete images of window bands, typical of then contemporary Chicago architecture, rare in Pasadena and in the rest of southern California.

The widening of Colorado Boulevard by fourteen feet on each side in 1929 and 1930 created the present-day image of that street. Even though no unified design plan reached final adoption, the popularity of the Spanish Colonial Revival style influenced the design of a majority of the new facades. Smooth plaster walls, tiled parapets, Churrigueresque ornamentation, and decorative wrought iron work are the most common Spanish Colonial Revival style elements within the district. Bennett and Haskell, leading local practitioners of the style, designed a number of the new facades. Some owners declined the revivalist mode and embraced Art Deco as a more modern image. Although different in idea and expression, both styles employed smooth finished surfaces and Classically derived ornamentation and mingle compatibility along the streetscape. 24-26 East Colorado Boulevard is one of several fine examples, which utilize cast stone relief for the source of decoration. 145 North Raymond Avenue is a rare example of the WPA Moderne style within Pasadena.

The simple one-and two-story buildings along Green and Union Streets document the need for industrial uses close to commercial thoroughfares. Early structures began as livery stables, either for personal transportation or for business deliveries. When the automobile became the predominant mode of transportation, existing liveries changed to automobile-related uses. Newly constructed auto service buildings did not differ in style from their antecedents. Usually brick and often with a stepped or gabled parapet, the building form became the design statement instead of applied ornamentation. While industrial buildings such as 150 South Raymond Avenue and 155 South Fair Oaks Avenue were located along busy streets, their more sophisticated design reflects this design. It is only along the side streets

that industrial buildings were permitted to reflect their function. Along 30-80 West Union Street, several buildings constructed between 1908 and 1925, exist as the most cohesive example of the vernacular design found on the side streets.

While the district is predominately commercial in character, several early houses remain, which document the once close proximity of the two uses. 221-231 North Raymond Avenue is the only remaining example of row house construction within the city. Row houses, more often associated with densely populated areas, were rare in Pasadena due to the availability of land to satisfy suburban desires. 45 East Green Street documents the adaptation of a residence to commercial use with a front yard addition, providing a consistent setback pattern with nearby commercial uses. Recently, several multi-family residential buildings have been constructed in the district, some of which include ground-floor commercial uses, and many more are planned for the industrial area to the south.

The streetscape improvements in the district are generally not original, but are respectful of the architectural and historical character. During the period of significance, the sidewalks were concrete scored and divided into squares ranging in size from 12 to 36 inches. While most of the sidewalks have been replaced, extensive segments of original sidewalks remain around Central Park and the Hotel Green. Historic photographs of the area show no street trees until after World War II. The existing street trees are relatively young and are planted in a uniform manner. Crape Myrtle and Tababuia are the two most common species and are found on Raymond Avenue, Fair Oaks Avenue, Holly Street, and Union Street. Colorado Boulevard has alternating Ginkos and Queen Palms, and Green Street has the oldest street trees with mature uniform Ficus. The first street lights in the district were gas-fed, Victorian style fixtures with several globes cascading from a single post. Those light standards were replaced with incandescent lamps. Other than Fair Oaks Avenue and Colorado Boulevard, the streetlights are simple posts with white acorn-shaped lanterns. The streetlights on Fair Oaks Avenue have taller posts with double lanterns. Those on Colorado Boulevard also have double lanterns, but are even more decorative. Precisely when the streetlights were installed is unknown. The ones present are similar to those seen in historic photographs of the district during the 1930s. Of course modern traffic lights and signs are also present.

The district remains relatively intact due to a shift in the community's economic and social forces further east along Colorado Boulevard. This shift, while scorned by shopkeepers and property owners from the 1930s through the 1980s, created a climate that did not encourage architectural change within Old Pasadena. While a few storefronts were modernized, most remained unchanged or fell into a state of disrepair. Interest in the revitalization of the area grew during the early 1980s. The construction of large public parking structures and the listing of the district in the National Register were the two main

catalysts for the district's rebirth. The public parking structures created a district-wide parking supply that benefited all businesses, allowing the area to compete with regional malls. A zoning overlay in 1985 protected the buildings from demolition, and the National Register listing provided tax benefits for the rehabilitation of buildings. Surrounded by high-rise construction and a freeway on three sides and small-scale industrial development to the south, the district acts as a cohesive entity that interprets Pasadena's past.

Contributing Resources

1. 35-45 North Arroyo Parkway — Constructed: 1924, Harold J. Bissner, architect
aka 110-114 East Union
Broadway Building

This two-story commercial brick vernacular building is located on the eastern edge of the district at the corner of North Arroyo Parkway and East Union Street. The most interesting architectural feature of the building is the clipped corner and cast stone pediments over the second story windows. The building was the first work of local architect Harold Bissner, who is responsible for a number of Pasadena buildings.

2. 3. & 4. Central Park — Constructed: 1902
1 site and two buildings

Central Park is located at the south end of the district. The 10.73-acre site is bounded by South Raymond Avenue on the east, Dayton Street on the north, South Fair Oaks Avenue on the west, and East Del Mar Boulevard on the south. The Hotel Green is to the north and the Santa Fe Train Station is to the east. Central Park and Memorial Park (in the Civic Center National Register District) are the oldest parks in the city, the land for both parks having been purchased in 1902. Many mature trees, broad lawns, and a few small buildings connected by winding paths form the general plan of the park. The park became a recreation ground for the tourists staying at the neighboring Hotel Green.

The park was originally designed by Thomas Chisholm, but mainly reflects a redesign by Cook & Hall and Ralph Cornell in 1927. Most of the original footpath configuration of intersecting circles and ovals still exists, notably the large oval in the center. The National Humane Society donated the stone horse trough located in the northeast corner of the park in 1905. It is now used as a water fountain.

At the southeast corner of the park are the Lawn Bowling Clubhouse and two bowling greens. Wealthy eastern gentlemen vacationing in Pasadena and staying in the area hotels, such as the Hotel Green, formed the club in 1921. The sport was apparently so popular that architect Wallace Neff was commissioned to design a clubhouse in 1929. The clubhouse is a one-story Spanish Colonial Revival style building with a red tile roof. It sits between two square-shaped bowling greens that are surround by fences.

Roque, a form of croquet played on clay courts, was also popular in the 1920s; thus six roque courts were constructed west of the south bowling green. They remained at least through the late 1960s, but are now gone.

Constructed in 1915, the Tourist Club sits at the south end of the park at 37 East Del Mar Boulevard. When the stuccoed bungalow style Tourist Club was moved from the north end of the park to its present site in 1926, a new foundation as well as electricity and plumbing were added. It remains mostly unchanged except for the replacement of the original front doors.

The park retains a variety of mature trees including one or more Sago Palm, Bunya-Bunya, Flame Eucalyptus, California Bay, and Canary Island Palm.

The park is counted as one site and two buildings.

5. 1-11 East Colorado
Colfair Building

Constructed: 1904,
Altered: 1929, Balch and Stanberry, architects

The building sits at the important intersection of Colorado Boulevard and Fair Oaks Avenue, and represents a fine example of the Art Deco style in the district. The five-story building is marked by zig-zag Moderne chevron detailing, a decorative iron grille on the west side, a Classical pediment over the door (west side), and large water tower on the northeast corner of the roof. The mass is an important match-up with 2-10 West Colorado Boulevard diagonally across the corner. The windows and storefronts are arranged symmetrically along the Fair Oaks Avenue and Colorado Boulevard facades. Matthew Slavin was the builder; he was responsible for constructing other buildings in the district. The building was rehabilitated in 1996 and retains a high level of physical integrity. Details include original storefronts on Fair Oaks with aluminum and copper display framing, marble bulkheads and black Carerra glass on storefront piers. The storefronts on Colorado have been replaced and the stepped parapet at the roofline was added to hide mechanical equipment.

6. 12 East Colorado — Constructed: 1887
Altered: 1929, Frederick Marsh, architect

The focal point of this two-story Art Deco style building is its frieze of stylized flowers between the first and second stories. On either side of the second story are fluted pilasters topped with an abstract shell design in relief. One of the original owners, J.W. Wood, was a well-known druggist, realtor, and author of Pasadena history.

7. 13-31 East Colorado — Constructed: 1929, Cyril Bennett, architect
Exchange Block

This one-story Classical building includes such decorative features as an elaborate projecting cornice and a cast iron frieze. Built on the site of the Carlton Hotel/Exchange Block, an early Pasadena landmark, some evidence of the former structure remain in the present building even though the former building was ostensibly demolished. A fire destroyed the interior of the building, but the façade and granite bulkheads remain. The architectural features are marked with an abundance and mixture of classical motifs pressed into the relatively narrow space between windows and parapet. The Classical Revival style of the building stands in contrast to the Spanish Colonial Revival style that dominates Colorado Boulevard. The building underwent a certified rehabilitation in 1990.

8. 14-16 East Colorado — Constructed: 1896,
Altered: 1929, Bennett and Haskell, architects

This two-story Spanish Colonial Revival building has stucco-over brick facades and a shed roof fit with red tiles. Architectural details include and elegant first story façade framed by pilasters with scroll and leaf capitals, cut-corner display windows, and transom windows with ornamental iron grillwork over the recessed front entrance. Three large, casement windows are arranged symmetrically on the second story of the building. T he alley façade is largely intact. The building is similar in original design to its neighbor, 18-20 East Colorado Boulevard. The building underwent a certified rehabilitation in 1985.

9. 18-20 East Colorado — Constructed: 1896
Altered: 1929, Bennett and Haskell, architects

This two-story Spanish Colonial Revival structure is tied to 14-16 E. Colorado Boulevard with its Mission tile shed roof and curved downspouts. Three large, single-pane windows are arranged symmetrically on the second story of the building. The architectural details are almost identical to 14-16

East Colorado Boulevard. The capitals were restored and replaced during its certified rehabilitation in 1985.

10. 24-28 East Colorado — Constructed: 1887
Fish Building — Altered: 1929, Frederick Kennedy Jr., architect

In marked contrast to the Spanish Colonial Revival facades on either side, this large two-story reinforced building has an Art Deco façade. While some portions of the structure date from 1887, almost all of the recognizable elements of the building are from the 1929 Art Deco construction. Fluted pilasters and a band of relief abstract swirls, zig-zag, flower and wave patterns between the first and second floor make this building one of the best examples of the style within the district. All pilasters and the relief are of poured concrete. A transom runs above the length of the ground floor windows, accented with an Art Deco star-design grill above the center recessed entrance. The second story is marked by a horizontal ribbon of 13 double-hung windows more typical of the Moderne style. The interior of the building was remodeled in the 1980s, but the front façade is intact.

11. 30-32 East Colorado — Constructed: 1888
Altered: 1929, Bennett and Haskell, architects

This one-story Spanish Colonial Revival building features two shop entrances delineated by two large arches resting on Classical Corinthian columns and a red tile shed roof. Architectural details include a miniature arch motif relief running across the front façade of the building below the cornice. Both recessed, glass entrances are symmetrically arranged beneath each arch. The four, large display windows are arranged symmetrically on either side of each entrance. A contrasting, plain stucco panel occupies the space above the entrances and below the arches.

12. 33-35 East Colorado — Constructed: 1916
Altered: 1929, M.P. Wilkinson, architect

Fluted pilasters capped by stylized rams heads in relief define this two-story poured concrete building in the Art Deco style. A zig-zag decorative molding runs above the second story windows, and the parapet is accented with a circular pattern. Five large, casement windows occupy nearly the entire second story façade. An iron Art Deco style gate arranged between the two large glass display windows protects the recessed entrance. The sidewalk outside the storefront is accented with in-laid glass bricks. The building was rehabilitated in 1994. A rear addition to the building was demolished; however, this addition was not original and its design was incompatible with the original building.

13. 34-36 East Colorado — Constructed: 1890
Altered: 1929, H.H. Ruber, architect

This two-story stucco-over-brick building contains no embellishment except for an arch-and-bracket design in relief just below the parapet. An unadorned transom runs the entire length of the building just above the first story. The recessed front glass entrance is arranged between glass display windows on either side. Architectural details include a simple trim detail running below the flat roof and original black tile bulkhead with yellow accents. A balcony area on top of rear ground-floor flat roof is only visible to parking lot façade. The building was rehabilitated in 1994.

14. 37-39 East Colorado — Constructed: pre-1886
Altered: 1929, Bennett and Haskell, architects

This one-story stucco-over-brick building has a false second story and a red tile shed roof in Spanish Colonial Revival style. Three panel friezes in a wreath and shield pattern flanked by a scroll pattern comprise the chief Spanish element. A horizontal trim runs just below the three panels. Two 6-inch diameter shell patterned elements are supported and decorative corbels on either side of the first-floor rectangular display windows. The recessed entrance retains the transom over the door and terrazzo flooring. Built for Craig and Hubbard Grocers, this was the first brick store building in Pasadena and predates any building records. The building was rehabilitated in 1996.

15. 38-44 East Colorado — Constructed: 1893, Ridgeway and Klock, architects
Altered: 1929, Bennett and Haskell, architects

This two-story stucco-over-brick building is in the Spanish Colonial Revival style. Architects, Bennett and Haskell designed other buildings in the district; this structure is very similar to 14-16 East Colorado Boulevard. The façade is symmetrically organized about a centrally located entrance to the upper story. The entrance sits in an arched opening topped by decorative relief work. Two each side are storefronts with brackets in the upper corners. Double-hung windows defined by wrought iron railings and twisted columns are arranged symmetrically on the second story. A wide decorative frieze sits below the shed roof, which is fit with red tiles. A contoured molding runs the length of the roofline and in between the two stories. The building underwent a certified rehabilitation in 1984.

16. 43 East Colorado — Constructed: 1892, C.W. Buchanan, architect
Defriez Block — Altered: 1919, Louis de Puger Millar

This two-story brick building with a glazed brick front façade is neo-Renaissance in appearance. The most distinguishing feature of the façade is a large Palladian window centered on the second story. The flat roofline is defined by a dentil course and two mock square capitals. At the ground level is a single storefront with a centrally located door flanked by display windows. This façade may stem from the 1919 remodeling and appears to have been moved back on rails in 1922.

17. 45-47 East Colorado — Constructed: 1919, Louis de Puger Millar

This two-story building is the centerpiece in a series of three two-story Beaux Arts facades. Slender ionic columns separate the four one-over-one, double-hung second story windows. A decorative cornice runs above the columns and windows. A larger cornice and blank frieze framed by curved brackets and square capitals accent the parapet. Architectural details on the ground floor include transom windows above the recessed entrances and a larger three-panel transom running the length of the building. The building was rehabilitated in 1993.

18. 46-48 East Colorado — Constructed: 1886
Altered: 1929, Bennett and Haskell, architect

This is a simple two-story, stucco-over-brick Spanish Colonial Revival building with a red tile shed roof. A wide frieze with a narrow cornice and decorated relief panels above the two plain second story double-hung sash windows provide the major decoration. A transom runs the length of the building above the display widows and recessed entrance. Simple pilasters and decorative capitals flank the ground-floor display windows. The building was rehabilitated in 1993, and further minor rehabilitations occurred in 2002.

19. 49-51 East Colorado — Constructed: 1887
Altered: 1898, C.W. Buchanan, architect
Altered: 1928, Louis de Pugar Miller, architect

The two-story stucco-over-brick building is ornamented by second story pilasters and cast iron piers at the street level. In 1898, the building was remodeled by architect C.W. Buchanan to house employees of the Hotel Green. The front façade is part of a 1928 remodeling. The Palladian type roofline is accented by a grey metal cornice with dentals and a bull's eye window in the arch of the roofline. Four pilasters

separate the four double-hung sash windows on the second story. The front façade of the second story is made of ceramic tile in a brick pattern. A four-paneled transom widow and plain pilasters comprise the design details of the ground floor. The rear alley elevation of the building is one-story and is characterized by the arched windows and entrances. The building was rehabilitated in 1982.

20. 50-54 East Colorado — Constructed: 1897
Altered: 1929, Bennett and Haskell, architect

This two-story stucco-over-brick Spanish Colonial Revival building is characterized by a decorative boxed cornice at the roofline, which runs just above an ornate frieze. Decorative moldings run above and below the three double-hung windows. Narrow pilasters separate the windows. Wide pilasters with decorative capitals frame the three-light glass panels that comprise most of the first story façade. The recessed entrance is arranged asymmetrically on the far left corner of the street façade. The building was rehabilitated in 1994. The storefront is not original.

21. 55-61 East Colorado
Frost Building — Constructed: 1889
Altered: 1919, D.C. McCallum, builder

This two-story building was the original Pasadena store of Wetherby and Kayser, an old Los Angeles shoe business owned by Eva Fenyes, a prominent local citizen. The simple façade of white glazed brick is ornamented by a boxed cornice at the roofline and simple pilasters framing the street level entrance to the second story. Six single-pane windows are arranged asymmetrically on the second story. The alley façade has arched windows and entrance, and a distinctive metal sliding door. Architectural details include leaded glass transoms, pressed metal cornices, and a decorative metal gate. The building was damaged in a fire, but underwent a certified rehabilitation in 2004.

22. 56-58 East Colorado — Constructed: 1929, Marston and Maybury, architect

This one-story stucco-over brick building was constructed while neighboring older buildings were refaced in 1929 for the widening of Colorado Boulevard. A plain cornice runs just under the flat roofline. The façade is characterized by a plain fascia above the two storefronts, and the metal grillwork covering the transom that runs the length of the building. Black ceramic bulkheads support the glass display windows. The building was rehabilitated in 2001.

23. 60-64 East Colorado — Constructed: 1888
Stowell Block — Altered: 1928, Bennett and Haskell, architects

This two-story stucco-over-brick building anchors the southwest corner of the intersection of Raymond Avenue and Colorado Boulevard. The second story retains most of the original decorative elements from the 1928 remodel including a series of symmetrical scrolled ornaments projecting above the parapet, and a wide checkerboard frieze framed by two cornices just below the parapet. The multi-pane second story windows are accented by heavy lintels and mock pilaster capitals in a scroll-and-leaves design above each window, and a decorative false metal balcony below each window. An egg-and-dart patterned horizontal band separates the first and second stories. The first story includes plain pilasters with Doric capitals dividing multiple storefronts, large glass display windows, marble-faced bulkheads and a ribbon-window transom. The building is historically important as the long-time location of Vroman's bookstore and for its connection with Alexander Stowell, a prominent Pasadenean. The building underwent a certified rehabilitation in 1982.

24. 63-65 East Colorado — Constructed: 1896, Greene and Greene, architects
Kinney-Kendall Block — Altered: 1929, Bennett and Haskell, architects

The flat roofline of this three-story stucco-over-brick building is characterized by a series of scrolled consoles with acanthus leaves under the cornice. Multi-paned casement windows are arranged in sets along the Raymond façade with large painted transoms above and separated by Doric pilasters. Large transoms, also accent pairs of casement windows arranged symmetrically on the Colorado Boulevard façade. A horizontal band separates each story. The first story is fairly plain, and has suffered from alterations. The alley façade retains an arched entrance with rails on which sides of meat were transported into an early meat market. This building is important historically as the only existing commercial building by Greene & Greene. However the only remaining original Greene & Greene elements are the wooden doors, the newel post, and the balustrade in the Raymond Avenue entrance.

25. 87-89 East Colorado — Constructed: 1929, Benjamin G. Horton, architect

The one-story street façade on this grey terra cotta building conceals the two-stories in the rear. A frieze with flower medallions separated by vertical blocks under the leaf-patterned cornice embellishes the flat roofline. Grooved pilasters and a horizontal band symmetrically divide the façade into two storefronts. Architectural details of the storefronts include black glass bulkheads, black-and-white checkered terrazzo floors, wide transoms, and recessed entrances. The building was rehabilitated in 1995.

26. 95-99 East Colorado — Constructed: 1902-1904
Altered: 1929, Benjamin G. Horton, architect

This two-story brick building is embellished with a mock balustrade at the parapet and a cornice with arched corbelling. The second story windows each feature a cement relief of a Byzantine leaf design. A band of small double dentils runs below the second story windows. The first story display windows are set in metal frames with granite bulkheads. The entrances are accented with patterned leaded-glass transoms. A penthouse structure set back from the street façade above the second story was added in 1921. The building was formerly the location of Pasadena's F.W. Woolworth branch. The building was rehabilitated in 2005.

27. 96-104 East Colorado
Richardson Block — Constructed: 1896, Harry Ridgeway, architect
Altered: 1929, Benjamin G. Horton, architect

This large two-story brick-faced building is accented by classical details throughout. A heavy decorative shell and scalloped pattern comprise the ornamentation at the cornice, parapet, and central entrance. The second story casement windows with narrow transoms are arranged in groups of two and are separated by decorative vertical panels. These concrete panels depict an intricate flower, vase, and scroll design. The same design is used to decorate the flat flush pilasters at the corners and entrances on the first story. Wide transoms and recessed entrances mark the display windows on the first story. The grand, central, recessed entrance to the second story is elaborately decorated with the aforementioned classical frieze and the Richardson name. The building is historically important due to its connection with the Richardson family, a prominent Pasadena family. Harry Horton, the architect of the 1929 remodel, also designed neighboring buildings on the street. The building was rehabilitated in 2000, and again in 2004.

28. 109-125 East Colorado
Commerce Building — Constructed: 1906, John Parkinson and Chamber of
Edwin Bergstrom, architects

This six-story, steel frame, and cream brick office building was one of the earliest of the Parkinson and Bergstrom partnership, and was hailed as the city's "most costly building" when constructed. The building housed Pasadena's most prestigious professionals. The flat roof features a wide overhanging cornice with painted medallions. The façade is characterized by brown, green, and blue brick mosaic-like elements. This motif includes a band above the fifth story and a geometric element below the second story. A banded molding runs the length of the building above the second story and above the first story. Above the first story, an egg-and-dart motif runs adjacent to the molding. The corners of the building incorporate the mosaic-like design vertically. The double-hung sash windows are arranged in

groupings of different widths, with pairs of narrow windows flanked with two wider widows. The main recessed entrance includes large concrete decorative brackets, a cornice above the entrance, and an egg-and-dart motif around the entrance ceiling. The multiple storefront display windows are separated from the transom by a narrow molding. The building underwent a certified rehabilitation in 1985.

29. 1-11 West Colorado — Constructed: 1930, Bennett and Haskell, architects

This two-story Art Deco style building anchors the prominent intersection of Colorado Boulevard and Fair Oaks Avenue. The two street-facing elevations are symmetrically organized and divided into four bays by fluted pilasters that rise above the flat roofline. Zig-zag design that characterizes the style is utilized at the cornice and frieze. At the ground level are identical storefronts with marble bulkheads, recessed doors, and vertically divided transoms. At the second story are unusually large window openings. The entrance to the upper story is located in the northernmost bay on the Fair Oaks Avenue.

30. 2-10 West Colorado
Dodsworth Building
Constructed: 1902, J.J. Blick, architect
Altered: 1930, Walter Folland, 1930

The four-story Dodsworth Building is situated at the prominent intersection of Colorado Boulevard and Fair Oaks Avenue. The original design was altered in 1930 by Walter Folland to take what was a simple building with Classical cornices and windows into the Spanish style.

While the building encompasses Classical, Spanish, and Moderne styles, it relates well to the building across Colorado Boulevard and to the neighboring buildings. The high parapet is embellished with an arched element and an egg patterned band. Wide flat pilasters separating the double-hung sash windows divide the façade. The pilaster capitals project to the roofline, and are ornately designed in scroll pattern. This ornate patterned relief is repeated at the corners of the building above and below the third story. Decorative medallions support a horizontal band just above the first floor. The first floor includes traditional storefronts with vertically divided transoms; a cast stone arched entranceway, and a granite base.

31. 12-18 West Colorado
Constructed: 1900-1901
Altered: 1929, J.Kinsel, architect

This two-story plaster-over-masonry building is one of the few examples of the Moderne style in the district. Plain flat pilasters divide the second story. A thick and a thin band run above the pilasters in the center of the building. The outer pilasters are capped by a simple geometric element. Two narrow units

flank the multi-paned windows. The ground level is divided into three storefronts by plain, flat pilasters. Bulkheads, recessed entryways, and vertically divided transoms define the storefronts. The building underwent a certified rehabilitation in 1985.

32. 13-21 West Colorado
Arcade Building

Constructed: 1888, R.S. Cox, architect
Altered: 1929, Bennett and Haskell, architects

This two-story building is an excellent example of Churrigueresque detailing, and one of the best examples of Spanish Colonial Revival style in the district. Details include ornate cast stone bas relief medallions featuring helmeted World War I soldiers, moldings, finials and cornice supports. The double-hung windows on the second-story are arranged symmetrically and divided by plain pilasters. These same pilasters divide the sections of the cast stone bas relief running under the decorated cornice. Ornament on the first floor façade includes cast iron posts, a grill frieze running across the building, copper storefront mullions on east storefront, and an upper and lower transom. The interior features a rare large art glass skylight, likely designed by Judson Studios. The building underwent a certified rehabilitation in 1984.

33. 20-30 West Colorado

Constructed: 1887
Altered: 1930, Raymond Harvey, architect

This three-story Mediterranean style office building served as a post office in the first decade of the century and relates well to the adjacent buildings. The arched side windows contrast nicely with the front façade metal frames, indicating an earlier vintage of this and other Mills Alley buildings. The cornice is has an overhanging shed tile roof with exposed beams. The facades of the second and third stories are nearly identical; large multi-paned casement windows are arranged symmetrically along both street facades. Pilasters divide the storefronts and entrances on the first floor, and an upper transom runs above the glass storefronts. The glass double-door main entrance to the upper floors is recessed under an arch. Architectural details on the building include a decorative bracket on the corners of the third story, a thick horizontal band running between the first and second story and crescent shaped wrought-iron entrance gates on Colorado Boulevard. The building underwent rehabilitation in 1989.

34. 29-31 West Colorado

Constructed: 1929, Finlayson and Haas, architects

This one-story, flat-roofed commercial building is Art Deco in style. The façade is plain except for a decorative panel of perforated terra cotta in an Art Deco design above the storefronts. A thick bulkhead

contrasts with the pilasters on the ground level. The central entrance is recessed from the metal-framed, glass display cases. The building was rehabilitated in 1993.

35. 33-47 West Colorado — Constructed: 1895
Altered: 1929, Bennet and Haskell, architects

This two-story structure was originally three individual stone masonry buildings constructed in 1895. The three buildings were enlarged and joined by a common façade designed by Bennett and Haskell in 1929. An ornate Churrigueresque decorative panel runs the length of the building just below the overhanging shed tile roof. Eight, large, multi-paned windows are arranged symmetrically along the second story. A horizontal band separates the second and first story. A Churrigueresque frieze similar in a pattern to the upper panel richly ornaments the central entrance. Storefronts with vertically divided transoms flank the central entrance. The building was rehabilitated in the 1992.

36. 42 West Colorado — Constructed: 1886
Altered: 1929, Frederick Marsh, architect

This narrow two-story building is one of the most significant examples of the Art Deco style in the district. The façade is characterized by cast stone frieze in an Art Deco pattern on the parapet, original cast stone recessed window spandrels in a stylized jazz age jungle motif, and a jagged decorative metal canopy above the entrance. Two narrow wood-framed windows with transoms are arranged symmetrically on the second story. The first story has undergone minor alterations, but the recessed entrance, tile bulkheads, entry tile, and metal canopy are intact. The architect also designed the Art Deco style building at 12 East Colorado Boulevard. The building was rehabilitated in the 1980s.

37. 49-51 West Colorado
Salvation Army Building — Constructed: 1903, W. Higgins
Altered: 1929, W. Higgins, architect

This two-story commercial brick vernacular building compliments a smaller building at 53 West Colorado Boulevard. The façade is sheathed in a light brown brick and trimmed with a darker brown brick. A very tall flat parapet sits above a denticulated course. At the second story are one-over-one double-hung sash windows. The first story contains a single storefront. The entrances to the storefront and the upper story are offset to the west.

38. 50-54 West Colorado — Constructed: 1924, Hudson and Munsell, architects
Altered: 1929, Bennett and Haskell, architects

This two-story stucco-over-brick Spanish Baroque style building was constructed in 1924 as a warehouse and remodeled in 1929 when Colorado Boulevard was widened. Major architectural features include a red tile shed roof, ornate classical bands above the second story windows, brackets below each window, and elaborate ornamental ironwork just above the ground floor storefronts. Cement pilasters with decorative capitals and original tile bulkheads frame each ground floor storefront. Original brick characterizes the rear façade.

39. 53-55 West Colorado — Constructed: 1912, Frohman and Martin, architects
Dobbins Building

This two-story commercial building features a burnt-brick exterior and is one of the few moved in 1929 during the widening of Colorado Boulevard instead of being resurfaced. Consequently, the building provides a fine example of rarely found burned brick styling in the district. Three double-hung sash windows are arranged symmetrically on the second story above the ground floor storefront. Façade details include cornice bands around the second story windows showing dentil and egg and dart details, molded brick trim below the windows, green and white tile in the entryway, and prism glass transoms set in metal frames above the storefront. Horace Dobbins, the original owner, is important to Pasadena's history as the builder of the cycleway to Los Angeles. The building was rehabilitated in 1992.

40. 59-75 West Colorado — Constructed: 1910
Altered: 1929, Roth and Parker, architects

Located at the corner of Colorado Boulevard and Delacey Street, this substantial two-story building was constructed in 1910 and served as Clune's Pasadena Theater. In 1929, it was remodeled and given its present Spanish Colonial Revival style façade. Like many of the corner buildings on Colorado, the original design is apparent on the side street elevation. The stuccoed façade is topped by a shed roof fit with red tile. Multi-paned casement windows are evenly distributed along the second story. Along the considerable length of the ground level are display windows and storefronts.

41. 85-89 West Colorado — Constructed: 1915, Louis du Pugar Millar
Motor Car Agency

Originally the Chandler Motor Car Agency, this one-story building with plaster-over-brick surfaces utilizes a characteristic stepped parapet roofline, which surmounts a three-bay arrangement of plate glass windows. Plain pilasters with a horizontal banded capital separate the storefront bays. A paneled transom runs the length of the building. The building was rehabilitated in 1997.

42. 93-95 West Colorado — Constructed: 1921, Paul Martin, architect

This one-story Mission Revival style commercial building features a tiled shed roof jutting out over the single storefront. A multi-paned bank of high broad windows banded with heavy wood and a paneled transom dominates the storefront.

43. 103-111 West Colorado — Constructed: 1908-25

These three older one-story commercial buildings have been incorporated into one. The façade includes both stucco-over-brick and painted brick finishes. Although unified in the interior, the buildings remain visually separate due to such features as different parapets, window size and detailing variations. 111 West Colorado Boulevard features two large parapets stepped up in the center of the building. 105 West Colorado Boulevard is characterized by a large bank of wide storefront windows and a simple horizontal band above the transom. 103 West Colorado Boulevard is characterized by a flat roof and a virtually unadorned façade. The rear façades constitutes an important architectural feature of adjoining alley. The buildings were joined and rehabilitated in 1994.

44. 106 West Colorado — Constructed: 1918
Altered: 1929, Marston and Van Pelt, architects

This two-story commercial building is Spanish Colonial Revival in style. The façade is symmetrically organized about a centrally located entryway with a wood door, sidelights, and transom. Cast stone piers, bulkheads, and a cornice surround the storefront windows. Two pilasters capped with decorative urns on either side accent the tiled shed roof. A narrow window framed by cast stone blocks opens onto a wrought-iron balcony. To each side are two small round wood windows covered by decorative grills. The building was rehabilitated in 1995.

45. 108-110 West Colorado — Constructed: 1922-23, McCune and Spendt, Altered: 1929, Dale McCune, architect

This single-story Spanish Colonial Revival commercial building provides a strong linkage between its neighbors. A simple horizontal cornice just below the roofline accents the tiled shed roof. Simple cast stone parapets frame a heavy wood-framed arched transom. The storefront includes tile bulkheads and a recessed entrance.

46. 112-114 W. Colorado — Constructed: 1895 Altered: 1929, E. Ehrenfield, C.H. Basore, architect

This two-story Spanish Colonial Revival commercial building features a single storefront set beneath a large arched transom. A tiled shed roof is anchored on each end by plain piers. Three rectangular double-hung sash windows are arranged symmetrically on the second story. Storefront features include simple pilasters without capitals on either side of the storefront and black tile bulkheads. The scale and details of the 1929 façade echo those of 106 West Colorado Boulevard. The building was rehabilitated in the 1990s.

47. 117 West Colorado — Constructed: 1925

This one-story Spanish Colonial Revival style commercial building is similar in scale and relates well to 103-111 West Colorado Boulevard. The tile parapet is framed on either side by decorative seashell moldings and pilasters topped with decorative urns at the roofline. A simple cornice runs just below the parapet. The unique arrangement of the storefront features a wood transom and decorative wood mullion. The building was rehabilitated in 1994.

48. 118-120 West Colorado — Constructed: 1909 Altered: 1929, G.S. Bliss, builder

This simple two-story commercial building ties this side of the street to similar plain facades opposite. The plaster façade is characterized by as simple decoration on the cornice along the flat roofline, and a talk bank of Chicago-type windows below vertical painted panels. The entrance is asymmetrically arranged on the left of the large display windows, with a transom and grill over the glass double-door. The building was rehabilitated in 1989, and again in 1994.

49. 121 West Colorado — Constructed: 1902
Altered: 1994, David Maman, architect

This one-story masonry commercial building was constructed in 1902, but completely remodeled in 1946 and 1959. When the district was originally listed it had a plain stucco façade with two storefront openings that were bordered over and no design features. In the course of rehabilitating the building in 1994, portions of the original façade were discovered and subsequently restored. The building once again features storefronts fit within two large rusticated stone arches and a pitched red tiled parapet.

50. 124-128 West Colorado — Constructed: 1923, D.E. Postle, architect

This single-story Spanish Colonial Revival style commercial building was constructed to conform to the future street widening. Ornamental scalloped parapets that accentuate the center storefront set off the tiled shed roof. Plain pilasters frame either side of the building, and decorative moldings outline each of the three storefronts. Other details include thick bulkheads, recessed storefront entrances, and scalloped transoms. The building was rehabilitated in 1998.

51. 132 –134 West Colorado — Constructed: 1919, R.E. Millsap, architect
Altered: 1929, Leo Bachmann, architect

This two-story Churrisgueresque style commercial building features a tower element on the east end. The tower is capped by a tiled roof and has two arched openings with multi-paned windows above the iron grille balcony and ground floor entrance. The main storefront is marked by large Baroque frieze of cast concrete depicting shield and portrait medallions topped with twelve finials. The storefront below the frieze has an expansive band of windows and a side entrance with a double-hung window arranged directly above the door. The painted brick rear façade is composed of two windows and a door asymmetrically arranged. The exposed brick east façade features six arched window openings. This building is in good condition and exhibits some of the exuberance of the Spanish Colonial with Baroque detailing. The building underwent a certified rehabilitation in 1986, and was subsequently altered in 1997.

52. 133 West Colorado — Constructed: 1905

This simple single-story building is almost completely devoid of ornamentation. The main design feature is a patterned brick cornice just under the flat roofline. A central entrance is arranged

symmetrically between the two storefront windows. The rear ally façade includes a large paneled door and a multi-paned window. The building was rehabilitated in 1994.

53. 135-45 West Colorado — Constructed: 1925, architect unknown

This two-story commercial brick vernacular building has a textured brown and tan brick façade that is symmetrically organized. There are three storefronts located at the ground level. They have a traditional configuration with a recessed entryway flanking display windows, paneled bulkheads, marble bases, and vertically divided transoms. Above are one-over-one double-hung sash windows set in pairs. Architectural details include denticulated stringcourses at the parapet and below the second story windows. "Wood and Jones Printers" is written in gold leaf letters across the roofline. The rear of the building reveals the fact that it was formerly three separate buildings constructed in 1905, 1914, and 1925.

54. 144 West Colorado — Constructed: 1910
Tanner Motor Livery — Altered: 1929, Bennett and Haskell, architects

This two-story Spanish Colonial Revival style building is topped by a tiled shed roof and sheathed in stucco. Constructed in 1910 for the Tanner Motor Livery, the original use is still evident from the two scored-concrete floor areas for washing horses. The façade is symmetrically organized with three large openings on the ground level. The central one is wider than those to each side and originally accommodated the ingress and egress of carriages and then automobiles. Multi-paned wood casement windows are set in pairs on the second story. Cast stone relief work is used as a decorative frieze as well as panels between the windows. The building underwent a certified rehabilitation in 1991.

55. 148-154 West Colorado — Constructed: 1929, Wendell Warren, architect

Built as shops for Eva Fenyes, and important member of the artistic community, this is a one-story stucco-over-brick building with three storefronts set beneath blind arches. The only ornamentation are four bas-relief sculptured medallions set between the arches. The building underwent a certified rehabilitation in 1991.

56. 161 West Colorado — Constructed: 1903
Altered: 1936, Breo Freeman, architect

This one-story stucco-over-brick building has fluted columns at each end. Above the storefronts is a tall parapet with a blank panel framed by contoured molding, which is now used for signage. The building was one to the Crown City Automobile Company. The original garage door at the east end has been replaced by a modern storefront and entryway.

57. 163 West Colorado — Constructed: 1921

This one-story stucco-over-brick building has two large arched openings offset to the east and a rectangular window to the west. A tiled shed roof contributes to the simple Spanish Colonial Revival style.

58. 166-68 West Colorado — Constructed: 1930
Texaco Station

The former site of a Texaco service station, this property included two one-story Spanish Colonial Revival style buildings: one used as an office and the other used as a service building. The buildings were adaptively reused as a restaurant as part of a certified rehabilitation in 1985. The larger project was called "Tanner Market" and also included the buildings at 140-44 and 148-54 West Colorado Boulevard and 30-44 South Pasadena Avenue.

59. 24 West Dayton — Constructed: 1922, J.H. Woodworth & Son
Francisca Building

The original owner of this one-story commercial brick vernacular building was James T. Philips, a Black lawyer who used the building for his offices. Philips was a charter member of the NAACP and for many years the city's only Black attorney. The principal elevation is symmetrically organized. Two smaller arches and large rectangular windows flank a larger centrally located arched opening. The brick is exposed on the side and rear elevations, but is painted on the principal elevation. A simple molded cornice runs the length of the flat parapet.

60. 37 West Dayton — Constructed: 1889, C.W. Buchanan, architect
Pasadena Fire Department

This two- and-one-half-story red brick building retains the only cast iron façade in the district. Design features include new wood doors on the ground level, arched openings with groups of double-hung sash windows at the second story, and a decorative cornice along the flat roofline. Built in 1889 as the main station of the Pasadena Fire Department, which had organized in 1887. The original building comprised a narrow central bay with a bell tower and that portion to the west of it. Around the turn of the century, the eastern addition was made. At some point in time, the bell tower was removed. The station originally accommodated horses and horse-drawn equipment, until motorized units were purchased in 1909.

61. 51 West Dayton — Constructed: 1902
Palace Livery

This one-story commercial brick vernacular building was originally constructed as the Palace Livery in 1902. By 1921, it had been converted into an automobile repair garage. Signs painted on the front of the building are fading, but still visible. Generally utilitarian in design, the primary elevation has a tall arched opening centered on the primary elevation that was originally used by carriages and then motor vehicles. The original stepped parapet has been reduced in size. The building under went a certified rehabilitation in 1994. At that time, the central opening was filled with a window, and a sign, which reads "Palace," was added at the peak of the parapet.

62. 80 West Dayton — Constructed: 1925, Norman Foote Marsh, architect
Friendship Baptist Church

Friendship Baptist Church was not included in the original application for the district, although it is located on the boundary. It was individually listed in the National Register in 1978 and is significant for its role in the history of African Americans in Pasadena as well as for the quality of its architecture. Founded in 1893, it was the first African-American congregation in the city. As the congregation grew and prospered a larger edifice was required. The noted architect, Norman Foote Marsh, designed the existing building in 1924. The three-story building blends the Spanish Colonial and Mission Revival styles. The design features a distinctive tower at the corner of West Dayton Street and South Delacey Avenue and a Mission-style entrance centered between piers and topped by a shaped parapet. The building was rehabilitated in 2000. At that time, earthquake damage was repaired and the building was seismically reinforced. Restoration work included reestablishing the original color scheme and cast stone finishes on the exterior and period lighting.

63. 34 North Delacey — Constructed: 1924, R.F. Inwood, architect
Salvation Army

This three-story commercial brick vernacular building was constructed for the Salvation Army in 1924. The brown brick elevation facing North Delacey Avenue is symmetrically organized and is trimmed with white glazed brick. Five bays wide, there is and entrance to the old Salvation Army store in the center bay. Display windows flank it. In the outer bays are narrow doorways that lead to what were apartments on the upper floors. The windows are one-over-one double-hung sash set individually except in the second and fourth bays where they are in a group of three. The parapet accentuates the rhythm of the bays with an arched rise in the center and small gables at each end. Punctuating the center of the parapet is a cast stone sign for the Salvation Army. The rear (east) and north elevations of the building face Miller and Bonham Alleys respectively. They are more utilitarian in design with plain exposed red brick walls and one-over-one double-hung sash windows. Storefronts were added to the ground level of the rear elevation in 2000.

64. 35 North Delacey — Constructed 1930, Bennett & Haskell, architects
Penn Oil Building — Alterations: 1956 and 1998
aka 100 West Union

This Art Deco building was constructed in 1930 for the Penn Oil & Supply Company. It consisted of a 47-foot tower with a one-story service wing at the corner of North Delacey Avenue and West Union Street. The open service bays along the street-facing elevations of the one-story wing were closed in 1956 when the building was converted into a printing and manufacturing facility. Designed by Bennett & Haskell, it is one of the most distinguished Art Deco style buildings in the district. In 1998, the building was adaptively reused for retail use. Changes at that time included the removal of the 1956 alterations, their replacement with display windows, and a second story addition that is set back from the wall plane. Despite the alterations, the building still retains enough physical integrity to be considered a contributing building. Significant architectural features include the tower element with recessed vertical bas relief panels and a stepped ziggurat roof, the original stucco clad surfaces on the street-facing elevations the stepped copping, the continuous frieze with zig-zag detailing, the wall spandrels, and the flared concrete wheel stops at the base of the piers. The south elevation facing Christensen Alley retains its original utilitarian design with plain red brick walls and steel sash windows.

65. 42 South Delacey/39 Mills Place Constructed: 1910 and 1927

42 South Delacey Avenue is a single-story commercial brick vernacular building constructed in 1927 as an automobile repair garage. In 1968, it and the building at 39 Mills Place were combined into a single light manufacturing facility. The north side of both buildings forms a continuous brick wall along McCormick Alley. In 1984 the centrally located main entrance and flanking storefronts that had been closed were restored. And 1995 the parapet was restored.

39 Mills Place is a one-story painted brick building facing the alley. It was constructed as a garage in 1904. In 1995, the building was rehabilitated. Utilitarian in design, a denticulated molding and molded cornice define the flat parapet. The tall, narrow, multi-paned windows were restored. When the district was listed they were filled with brick. In what was a vehicular entrance, a storefront has been added.

66. 108-112 South Delacey Constructed: 1928

This one-story commercial brick vernacular building at the corner of South Delacey Avenue and West Dayton Street was constructed as an automobile repair garage. Simple in design, the brick exterior has been painted and there is tiled coping along the flat parapet. The West Dayton Street elevation is symmetrically organized with a vehicular entrance in the center flanked by large windows. The same type of windows are evenly spaced along the South Delacey Avenue where there is also a pedestrian entrance. The missing parapet was reconstructed in the 1990s. The building was not included in the original application for the district, although it dates for the period of significance and retains it physical integrity.

67. 30 East Del Mar Constructed: 1928, Bennett & Haskell, architects

This one-story brick and concrete warehouse was originally used as storage and later, around 1940, housed the electric company. The building is located at the south end of the district, across the street from Central Park. The primary elevation is divided into three bays by engaged columns. In the central bay is the main entrance flanked by display windows. In the side bays are large plate glass display windows. Additional decorative features include ceramic tile bulkheads and multi-light transoms.

68. 125 Electric Drive — Constructed: 1909
The Little Church

The Little Church is a surprising remnant of former life on Electric Avenue. Constructed in 1909 for Dr. James R. Patterson, the one-story stucco-over-brick church might be mistaken as a commercial building. The flat roof has a parapet stepped in the center and anchored at each end by short columns. The side-by-side entrances flanked by the original Gothic-style stained glass windows reflect the fact that it originally housed two congregations.

69. 11-17 North Fair Oaks — Constructed: 1887, Harry Ridgeway, architect
Plant Block

This three-story Victorian-era commercial building is a delightful and successful mixture of details. It displays a typical Gothic polychromatic façade of deep red brick set off by white detailing. The straight-sided arched windows of the second story suggest the Italianate. Other decorative features including ornamental terracotta friezes at the cornice and between each story. The wood windows are one-over-one double-hung sash. When the district was listed the storefronts had been altered. They have since been rehabilitated, but the date is unknown.

70. 16-20 North Fair Oaks — Constructed: ca. 1886

Originally owned by Fannie Bonham, this is a two-story commercial brick vernacular building. In 1947, the façade was stuccoed and in 1953 the parapet was removed. The only remaining characteristics of the original front façade are the three-over-one double-hung sash windows on the second story. Although extensively altered, this building is the oldest brick structure still standing in Pasadena. The building was rehabilitated in 1994. At that time, the existing storefronts were installed.

71. 19-25 North Fair Oaks — Constructed: 1894
Mary K. Bartlett Building

This two-story commercial brick vernacular building has a simple design ornamented by white glazed brick surrounding the second story windows and the peaked parapet creating a mosaic effect. Pasadena's "Model Grocery" got its start here in 1894 and remained at this site through the 1920s. "The" market in town – for some time almost an institution – this became a branch with construction of a new store building in 1910 on Colorado. In 1923, the upper floors were transformed into the Fair Oaks Hotel, and the lower story became the China Palace restaurant.

72. 29-33 North Fair Oaks Constructed: 1893

Built by Mathhew Slavin the same year as the adjacent building at 37-39 North Fair Oaks Avenue, this two-story commercial brick vernacular building is an integral component of the streetscape. Although simpler in design than 37-39, the building has a decorative brick cornice, which is stepped in the center and appears to be supported by brackets. The rear of these North Fair Oaks Avenue buildings forms the most significant alley space within the district. When the district was listed the storefronts had been altered. They have since been rehabilitated, but the date is unknown.

73. 37-39 North Fair Oaks Constructed: 1893
Slavin Block

An elaborate parapet with arched corbelling on the cornice and "Slavin Block" inscribed in brick in the center, are the focal points of this two-story commercial brick vernacular building. Contractor Matthew Slavin, an active and prominent participant in Pasadena's architectural and political life, constructed the building. It retains its original one-over-one double-hung sash windows. Like most commercial buildings in the district, the storefronts have been replaced but the date is unknown.

74. 45-47 North Fair Oaks Constructed: 1887

This two-story brick commercial building features elaborate Renaissance Revival style detailing. The cast iron storefront configuration remains much as it did originally. Engaged pilasters that are treated differently at the first and second stories define the corners of the building, and appear to support a denticulated molding and parapet along the flat roofline. At the second story, a terracotta plaque ornament divides two large window openings with arched headers.

75. 72 North Fair Oaks Constructed: 1904

This two-story commercial brick vernacular building utilizes several Classical features including a cornice belt with brackets and an egg and dart molding and a second story window header with dropped corners. The storefront and entrance has been moved back approximately ten feet from the face of the building to create outdoor seating.

76. 76-82 North Fair Oaks — Constructed: 1904, G. Corwin-Keyes, architect

This two-story brick building is one of the few remaining examples of the Mission Revival style in the district. Design features include a stepped cornice with tile shades over protruding bay windows framed by a stepped up window lintel.

77. 118-128 North Fair Oaks — Constructed: 1884

Marine Hotel — Altered: 1904

The Marine Hotel is a two-story commercial brick vernacular building with tall, narrow windows, extended brick cornices, and a vintage neon sign. The second story remains virtually unaltered. The storefronts were rehabilitated in 1986.

78. 130-34 North Fair Oaks — Constructed: 1918, Buchanan & Brockway, Morrison Transfer & Storage architects

This one- and two-story commercial brick vernacular building housed the Morrison Transfer and Storage Office from 1919 to 1931. In 1988, the building was rehabilitated. At that time, the existing storefronts were installed.

79. 2-18 South Fair Oaks — Constructed: 1929, Walter Folland, architect

This two-story commercial building sits at the important intersection of Fair Oaks Avenue and Colorado Boulevard and is one of the finest examples of the Spanish Colonial Revival style in the district. It was documented in the original application for the district as 2-18 East Colorado Boulevard. The building has strong tower elements at the north and south ends with the main entrance to the building located in the center of the Fair Oaks Avenue elevation. Design features include stucco walls, red tiled roofs, arched window openings, and cast stone ornamentation around the entrance, the frieze along the roof line, medallions, and columns. Ground floor storefronts retain the original vertically divided transoms. The building was rehabilitated in 1994. At that time the bulkheads were retiled.

80. 19-25 South Fair Oaks — Constructed: 1886, Harry Ridgeway, architect
Altered: 1923

This simple one-story commercial building has three storefronts. The most distinctive feature of the building is the Art Deco style parapet that consists of a zigzagging frieze.

81. 37-39 South Fair Oaks — Constructed: 1922

The original application for the district identified three buildings at 33-45 South Fair Oaks Avenue as a single non-contributor. They were united into a single building in 1946 by the Crown Mattress Co. and are still under a single ownership. Pursuant to a tax credit application in 1985, the National Park Service determined that the three buildings should be evaluated separately and that 33-35 and 43-47 South Fair Oaks Avenue are noncontributing, but that 37-39 is contributing. The one-story commercial building at 37-39 has two identical storefronts with painted brick exteriors, simple parapets with vents covered by turned wood balusters, and vertically divided transoms. The building underwent a certified rehabilitation in 1994.

82. 84 South Fair Oaks — Constructed: circa 1925

This small one-story commercial brick vernacular building seems to have been left out of the original application for the district. It sits just south of the Wooster Block of the Hotel Green. The building is covered with roughly textured stucco. The façade contains a single storefront with vertically proportioned openings and a decorative cornice.

83. 103-15 South Fair Oaks
Doty Block — Constructed: 1887
Altered: 1924

This large three-story red brick building dominates its corner site. The principal façade (along Fair Oaks Avenue) has eight bays defined by brick pilasters, accented at each story by massive blocks of grey rusticated stone tied together by narrow projecting bands of molding above the first and second stories. Built during the boom of the late 1880s for James E. Doty, the Doty Block was one of the earliest substantial brick buildings in the city. Doty's carriage business was on of the largest in the San Gabriel Valley during the 1890s. The building originally had a corner tower and projecting bays, which were removed in 1924. In 1998 the building was rehabilitated. The work included the replacement brickwork that had been damage by abrasive cleaning and the replacement of the storefronts, except for the original cast-iron columns.

84. 155 South Fair Oaks — Constructed: 1906, Hunt & Grey
Star Saddle Livery — Altered: 1910, J.C. Hillman, architect

A former saddle livery, this two-story plaster-over-brick building is in the Mission Revival style. A three-story tower on the north side and a two-story bay with a wide garage entrance on the south dominates the building. This southern bay, a 1910 addition was built on the site of a former corral. Built for Charles N. Post, a local banker, the livery served guests of the Hotel Green who were interested in pleasure riding. Similar to many liveries, the building became an auto repair shop in the 1930s. Original architectural elements include the pitched roofs fit with red clay tile, arched window headers, multi-paned wood casement windows, and original hayloft doors on the rear. The storefronts replaced what were barn-style doors originally. The building was rehabilitated in 1991 and again in 1999.

85. 199 South Fair Oaks — Constructed: 1920, Buchanan & Brockway

This single-story commercial brick vernacular building originally housed a bottling works. The plastered primary elevation is symmetrically organized with an arched entrance centered under a peaked parapet. The entrance is slightly recessed and displays a fanlight above the door and a quioned surround. Similar fanlights are featured above the arched windows on either side of the entrance.

86. 203 South Fair Oaks — Constructed: 1922, Foss Design Co.

The original application for the district identified 203-207 as a single contributing building. 203 is a two-story commercial brick vernacular building. The second story façade retains the original brown veneer brick, while the first story has been remodeled. Display windows flank the centrally located recessed entrance. The south elevation has segmental arched windows at the first story and a faded advertisement painted on the brick that reads "Western Plumbing and Tin Works."

87. 207 South Fair Oaks — Constructed: 1922, Foss Design Co.

The original application for the district identified 203-207 as a single contributing building. 207 is a single-story commercial brick vernacular building containing a single storefront with an entrance located at the north end. The façade is covered with a narrow red brick veneer. The space between this building and 203 is used as a passageway to the rear garden area that is distinguished by a very large camphor tree. A wooden double leafed gate covers the entrance to the passageway.

88. 217 South Fair Oaks — Constructed: 1922, Herbert Hamm, architect

This single-story commercial brick vernacular building has a centrally located entrance flanked by display windows. Painted white brick trim adds entrance to an otherwise utilitarian design. The awning hides a Luxford glass transom. The New England Dry Cleaning and Hand Laundry originally used the building. The brick has been damaged by sandblasting.

89. 219 South Fair Oaks — Constructed: 1929

Thomas and Sons Grocery originally occupied this single-story commercial brick vernacular building. It has a centrally located main entrance consisting of a set of glazed double doors. To each side display windows are recessed and sit above a bulkhead of black subway tile. A vertically divided transom spans the entire assemblage. The secondary entrance has been added to the south side, which now faces a surface parking lot. The building was identified as 221 South Fair Oaks Avenue in the original application for the district. The parapet is missing and the brick has been damaged by sand blasting.

90. 330 South Fair Oaks — Constructed: 1926

This two-story commercial brick vernacular building anchors the south end of the district. The first and second story window openings are evenly stacked. The second story features one-over-one double-hung sash windows in groups of threes. The building was constructed as a factory and warehouse for W.F. Dagget and Sons, Wholesale Notions.

91. 30 West Green — Constructed: 1925, Lloyd T. Bowers, architect

The Pasadena Automobile Radiator and Lamp Repair Company originally occupied this one-story commercial brick vernacular building. The design of the building was influenced by the Spanish Colonial Revival style with its stuccoed façade and red tile coping. Two recessed arched openings in the outer bays were probably the vehicular entrances. They now contain commercial storefronts. The two display windows in the central bay are original.

92. 33-37 West Green — Constructed: 1905
Altered: 1926

A flat roof surrounded by a parapet with red tile coping caps this one-story commercial brick vernacular building. The stuccoed façade is symmetrical in plan and consists of five bays. The parapet rises higher

over the central bay than the rest of the building. An automobile entrance with a metal roll-up door is located in the central bay and pairs of large display windows occupy the two bays on either side. In 1926, the front twenty feet of the building were cut off and built anew in response to the widening of Green Street.

93. 40 West Green Constructed: 1923, Louis de Puger Miller, architect

This one-story commercial brick vernacular building has a stuccoed façade and a triangular shaped parapet with red tile coping. The façade is symmetrically organized with a centrally located garage door opening. The outer bays feature large plate glass display windows. The doors in the outer bays flanking the garage door are not original.

94. 44 West Green Constructed: 1909

This one-story commercial brick vernacular building is a duplicate of the building at 40 West Green Street. The storefronts in the outer bays are original, while the original garage door in the central bay has been replaced with a modern commercial storefront.

95. 52-58 West Green Constructed: 1912

This one-story commercial brick vernacular building duplicates the design of the building at 40 and West Green Street with its stuccoed façade and a triangular shaped parapet with red tile coping. The centrally located window has a segmented arched header. This window is original; however the two on each end appear to have been replaced.

96. 60 West Green Constructed: 1912

This one-story commercial brick vernacular building was original used as Miller's Transfer and Storage Company. A stepped parapet caps the painted brick façade. The storefronts do not appear to be original.

97. 70 West Green Constructed: 1921

This one-story commercial brick vernacular building has a stepped parapet. The façade is symmetrically organized with a central bay flanked by large display windows. The garage door in the central bay was replaced by a modern commercial storefront in 2005. The building was originally occupied by the Pasadena Auto Products Company.

98. 80 West Green — Constructed: 1908

This one-story commercial brick vernacular building was constructed for the Crown Service Auto Repair Company. The building occupies the southeast corner of Green Street and Delacey Avenue. Four flat fluted pilasters divide the Green Street elevation into three bays. One pilaster on the Delacey Avenue elevation divides the stuccoed "front" portion of the building from the painted brick rear. All of the storefronts were installed in 1997 when the building was converted to a restaurant.

99. 101 West Green — Constructed: 1912

This two-story commercial brick vernacular building has a stuccoed façade and a flat roof with a molding along the top. The building is now connected to the restaurant on the corner. There is a band of one-over-one double-hung sash windows on the second story. The windows and doors on the ground level are not original.

100. 111 West Green — Constructed: 1925, Zeddy Burr Barker, architect

This one-story commercial brick vernacular building seems to have been left out of the original application for the district. The brown brick façade has a stepped parapet and a symmetrical design. Large multi-paned tripartite windows flank the recessed central entrance, which was originally occupied by a garage door. A pair of double, wood-framed glazed doors with single glazed transoms are now located within this central section.

101. 115 West Green — Constructed: 1895
Altered: 1947, Glen Smith, architect

This one-story Queen Anne-influenced cottage is covered by a front-facing gabled roof with a fish-scale shingles and a semi-circular attic vent. A raised porch with a hipped roof is centered on the façade and is supported by a single turned post. An addition made to the west end of the facade in 1947 has a utilitarian design. The building is counted as contributing because it is one of the very few turn-of-the-century residential buildings remaining in the district and it is otherwise intact.

102. 119 West Green — Constructed: 1922, George Tombleson, architect

The design of this one-story commercial building was influenced by the Spanish Colonial Revival style. The stuccoed façade has a stepped parapet with red tile coping. Multi-paned wood-framed display windows flank a centrally located door.

103. 136 West Green — Constructed: 1926, Trent Thomas, architect
Werk Brothers Garage

The design of this one-story commercial building was influenced by the Classical and Spanish Colonial Revival styles. The stuccoed façade is symmetrical in plan and is divided into three bays by pilasters with ornate scrolled capitals. Large fixed-paned display windows each with transoms flank the central garage entry. Tiled pent roofs with exposed rafter tails extend out over the window openings. The Werk Brothers Garage originally occupied the building. The existing sign is a reproduction of the original.

104. 2-20 East Holly — Constructed: 1914
Holly Hotel

This two-story commercial brick vernacular building sits at the corner of East Holly Street and North Fair Oaks Avenue. Designed as a hotel, dark burnt brick is used to decorate the cornice with woven patterns of open and closed spaces, while lighter bricks top the piers with a geometric arrangement. This building is important because it solidly defines the corner with an urban perspective. The storefront configurations are mostly original and have generously proportioned transoms above, which add to the height of the building.

105. 11-15 East Holly — Constructed: 1924
Pierce Hotel

The design of this two-story commercial brick vernacular building features brown-yellow brick with a thin silver course. On the second story, one-over-one double-hung sash windows are set in pairs. Between every two sets of windows are plaster medallions of the California Bear and the Pasadena Crown and Key. The transom area above the storefronts has been filled and stuccoed. The date of this alteration is unknown. The storefront configuration remains original with recessed centrally located entrances flanked by display windows. The material on the bulkheads, however, is not original. A twin to this building is located at the corner of East Colorado Boulevard and Mentor Avenue.

106. 34-38 East Holly — Constructed: 1910, C.W. Buchanan, architect

This one-story commercial brick vernacular building contributes to the streetscape through its use of scale, color, and texture. It has a stepped parapet and a long vertically divided transom above four storefronts.

107. 40-46 East Holly — Constructed: 1904, W.Wathins, architect
Altered: 1949

This two-story brick building with a partial third-story originally housed a blacksmith, carriage painter, and a wagon-manufacturing establishment. While the façade dates from 1949, the two alley elevations are intact and significantly contribute to the alley network that is unique to the district.

108. 110 East Holly — Constructed: 1904

This simple brick building has an unusual shape with its east wall following the curve of the railroad right-of-way. Although only one-story in height, its walls are high to accommodate a hayloft over the east section. The original hayloft door is still visible at the rear. Unaltered, with original livery doors still in place, the old livery stable sites isolated on its lot next to the Santa Fe railroad tracks. Early maps indicated that it was used both for horses and for autos. As such it represents a phase in the transition to mechanized transportation. The building is individually listed in the National Register.

109. 22 Mills Place — Constructed: circa 1923

This one-story commercial brick vernacular building has a stepped parapet. It sits behind the noncontributing building at 19-25 South Fair Oaks Avenue and faces the alley, Mills Place. The alley elevation is symmetrically arranged about a central entrance with flanking windows and topped by an attic vent.

110. 32-40 Mills Place — Constructed: circa 1922

This two-story commercial brick vernacular building has a flat roof and a boxy shape. It sits behind the contributing building at 37-39 South Fair Oaks Avenue and faces the alley, Mills Place. It is mainly distinguished by large multi-paned steel casement windows. The entrances on the alley elevation have been modified.

111. 30-34 South Pasadena — Constructed: 1919

This one-story commercial brick vernacular building connects with 144 West Colorado Boulevard on the rear. The red brick exterior has a stepped parapet and a wide entrance flanked by two large windows with small divided lights. The building was originally used as an auto barn. South Pasadena Avenue forms the far western boundary of the district.

112. 20 North Raymond — Constructed: 1901-02, C.W. Buchanan, architect
Union Savings Bank — Altered: 1929, Bennett & Haskell, architects

This three-story tan brick building clearly reflects its two periods of development. The building was originally constructed in 1901-02 and was vernacular in style. That portion of the building is still visible on the west elevation, which has simple stringcourses between floors and traditional storefronts with rusticated stone bulkheads and prism glass transoms. When Colorado Boulevard was widened in 1929, the south elevation was redesigned in the Art Deco style with a slightly different brick and terra cotta ornamentation. The zig-zag parapet line is particularly noteworthy. One-over-one double-hung sash windows are used throughout.

113. 26-30 North Raymond — Constructed: 1913
Central Building

This eight-story Chicago style building is somewhat of an anomaly in Pasadena. The reinforced concrete and steel frame office building has a denticulated frieze at the seventh story, a bracketed cornice, and wide window bays separated by slender piers. One-over-one double-hung sash windows are set in groups of two and three. The building has a twin at 91-93 North Raymond Avenue. Both were constructed by one of Pasadena's leading contractors, Matthew Slavin. The building is one of the earliest reinforced concrete and steel buildings in Pasadena.

114. 35-39 North Raymond — Constructed 1904, C.W. Buchanan, architect
Boston Building — Altered: 1933, Henry Greene, architect
1936, E.J. Borgmayer, architect
2005, American General Constructors, architect

This two-story business block was constructed in 1904. It housed several retailers including Meyer's Department Store, Brenner & Wood Men's Furnishings, and Bon Accord Dry Goods Co. In 1933, the original commercial brick vernacular design was altered by Henry Greene, who added a mezzanine, new

storefronts, two new entrances, and new floors. E.J. Borgmayer made subsequent changes in 1936, which included the existing horizontally scored plaster on the street-facing facades. Greene had an office in the building for many years after his brother Charles moved to Carmel. In 2005, the 1930s design was restored and three stories were added on the roof. The addition is setback from the street-facing elevations of the original portion of the building and is clearly distinguishable as new. A series of shop windows with transoms above and terrazzo bulkheads below articulate the ground floor. Terrazzo is also used for planter boxes and doorframes. A flat canopy distinguishes the main entrance. The rear and side facades facing the alley network retain their original 1904 exposed brick walls and wood-framed windows. This building was identified as a non-contributor when the district was originally listed, but is now contributing due to the fine quality of the recent work.

115. 61-69 North Raymond
B.O. Kendall Building

Constructed: 1896, Seymour Locke, architect
Altered: 1907, C.A. Buchanan, architect

61-69 North Raymond Avenue was identified as 57-71 North Raymond Avenue in the original application for the district. 61-65 North Raymond Avenue is a two-story brick commercial building at the corner of North Raymond Avenue and East Union Street. The two street facing elevations are covered with a tan brick veneer and feature Classical detailing. The most distinguishing elements of the design are the large second story Palladian windows. Other design features include a bracketed cornice, medallions set between the second story windows, and traditional storefronts with tiled bulkheads and transoms divided vertically by turned wood posts. Originally called the Auditorium Building, it housed T.W. Mather Dry Goods in 1913.

69 North Raymond Avenue was added by C.A. Buchanan in 1907. It is the same height as the original portion of the building, but three-stories. The bracketed cornice, stringcourse above the storefronts, and brickwork generally match the original portion of the building. On the second and third stories are one-over-one double-hung sash windows.

116. 60-64 North Raymond

Constructed: 1905
Altered: 1922, J.J. Blick, architect

Constructed in 1905, a second story was added to this commercial brick vernacular building in 1922. The plain façade is relieved by a narrow light brick outline of windows and broad and narrow brick bands running below the parapet. Storefronts retain their original prism glass transoms.

117. 75-77 North Raymond — Constructed: 1914
Altered: 1927, T.P. Kellog, architect

Constructed in 1914, the second floor of this commercial brick vernacular building was added in 1927 when it was purchased by Piggly Wiggly. The front façade has been altered through the years, but the rear façade remains intact and significantly contributes to the Kendall-Hayes Alley network. There are three storefronts evenly spaces along the primary elevation with six double-hung wood sash windows on the second story set between exposed brick. The building underwent a certified rehabilitation in 1983.

118. 91-93 North Raymond — Constructed: 1914

This eight-story reinforced concrete and steel frame office building matches that of 26-30 North Raymond Avenue, although its floor plan and general use differ. Matthew Slavin also constructed it. None of the windows or storefronts is original. In 1981, the building was rehabilitated and unfortunately the windows were replaced at that time.

119. 95-97 North Raymond — Constructed: 1895, J.J. Blick, architect
Turner & Stevens Funeral Home — Altered: 1914

This two-story commercial brick vernacular building sits at the corner of Raymond Avenue and Holly Street. Originally brick, it was stuccoed in 1914. The most distinctive features of the building are the stained glass transoms over the windows, though they do not appear to be original. The building was constructed for one of Pasadena's earliest funeral homes, Turner & Stevens. The building is also significant as one of Joseph J. Blick's earliest works. A local architect, he designed a large number of buildings and residences between 1895 and 1935.

120. 129 North Raymond — Constructed: 1920, Cyril Bennett
Jensen-Raymond Theater (aka Crown Theatre) Altered: 1948 & 1963

The four-story Crown Theatre dominates the block by virtue of its size and Federal Revival style. The reinforced concrete building is faced with brick and trimmed with Adamesque cast stone ornamentation. The primary façade is symmetrically organized into three bays. The original design has been comprised by a number of alterations. Recent restoration of the façade restored the original glazed terra-cotta base, the plaster medallions in the recessed foyer, and the ticket windows and wood-and-glass doors. The tall arched windows on the façade have also been restored. Corinthian pilasters divide the arches. The end bays consists of arched niches holding Grecian urns and topped by plaques decorated with a garland and

urn design cast in low relief. Additional ornamentation includes a frieze of urns cast in relief, an Italianate balustrade across the central section of the parapet, and a boxed cornice with two triangular pediments. Extensive restoration of the Raymond Avenue façade occurred in 2005 including removal of the red paint from the original buff-colored tapestry brick.

One of the largest theaters of southern California in the 1920s, the theater continued to feature vaudeville along with films in the 1930s. In 1948 the theater was sold to the Crown Holding Corp. After a $100,000 modernization, it was reopened as the Crown Theatre. Construction is underway for conversion of the interior of the theater into a mixed-use project with housing and work-live units. The project also includes the construction of a new building on the parking lot to the south.

121. 145 North Raymond — Constructed: 1932, Bennett & Haskell, architects
National Guard Building (aka Armory)

This two-story reinforced concrete building is an excellent example of the PWA Moderne style, which flourished in the 1930s. The primary elevation is symmetrically organized with a centrally located main entrance flanked by four sets of windows. Flat, fluted pilasters on each side of the double doors seem to support a relief of an American eagle, facing an olive branch, superimposed on a faint mountain background. A relief work frieze also extends along the flat parapet of the roof. Spandrel panels with vertical grooves divide the windows on the first and second stories.

122. 155-59 North Raymond — Constructed: 1913
Altered: 2001

This is a one-story commercial brick vernacular building with three storefronts. The sand colored brick of the circular air vents and cornice contrast with the red brick facade. In 2001, the rear portion of the building was demolished and a three-story apartment building with subterranean parking was constructed. At that time, the original marble bulkheads were restored. The new addition is set back from the original façade and is clearly distinguishable as new.

123. 221 North Raymond — Constructed: 1901
Fannie Bonham Row Houses

This two-story, seven-unit row house is not a common building type in Pasadena, or southern California for that matter. The units were constructed with fireplaces and solar heaters. Primarily utilitarian in

design, the building has a flat roof, individual unit entrances, clapboard siding, wood-framed windows, and scroll-patterned friezes on the north and south elevations.

124. 273 North Raymond — Constructed: 1927, Ross Montgomery, architect
St. Andrews Catholic Church

The four-story tower of St. Andrews acts as a visual landmark defining the northernmost district boundary. Constructed in 1927, the Romanesque Revival style church embodies architectural qualities often found in northern Italy. Montgomery utilized a common basilica plan, with arch arcaded narthex and chapel arcade with Corinthian columns. The Venetian artist, Carlo Wostry, painted *The Stations of the Cross* and other murals. While the rectory is technically an intrusion due to its construction in 1958, the garden between the two buildings provides a peaceful contrast to the nearby freeway.

125. 26-38 South Raymond — Constructed: 1894, Frank Hudson
Vandervort Block

The Vandervort Block is a two-story commercial brick building with Renaissance Revival style elements. Symmetrically organized, the cream-colored brick façade is three bays wide in a B-A-B pattern. The central bay contains the main entrance, recessed in an arched opening. Above are two narrow windows in arched openings. The side bays have two storefronts on the ground level, and one-over-one, double-hung sash windows on the second story. The most distinctive feature of the building is the bas relief frieze over the second story windows and the denticulated cornice.

126. 35 South Raymond — Constructed: 1906, C.W. Brockway
Braley Building

This four-story beige brick commercial building features Chicago-style windows and Beaux Arts decorative elements. The primary façade is five bays wide with a centrally located entrance flanked by two storefronts. The upper story windows are one-over-one, double-hung sash set in groups of three. Originally built for Edward R. Braley, the building has historic interest as the possible home of one of the earliest auto dealerships in Pasadena. The Braley Building is an excellent example of the work of C.W. Brockway, perhaps Pasadena's most prolific architects of the period.

127. 44 South Raymond — Constructed: 1886, Ridgeway & Klock, architect
Altered: 1929

Connected to the old Morgan Livery stable at the rear, this single-story brick building was constructed as an entrance to the livery. There are two storefronts divided by a cast iron pier. Cast iron piers are also on each end of the façade and topped by round finials connected by a simple denticulated cornice. The blank paneled parapet is now used for signage. The building underwent a certified rehabilitation in 1984.

128. 48-58 South Raymond — Constructed: 1887/98, C.W. Buchanan, architect
Altered 1928

This three-story, stucco-over-brick building was originally constructed during the boom of the late 1880s. In 1898, C.W. Buchanan remodeled it to house employees of the Hotel Green. The primary façade was remodeled again in 1928. Engaged pilasters divide the upper stories vertically.

129. 62-70 South Raymond — Constructed: 1902
Altered: 1926

This three-story, plaster-over-brick building was originally constructed as a hotel, perhaps for employees of the Hotel Green. The widening of Green Street in 1926 caused the 20 feet of the south end of the building to be demolished. The ensuing remodeling also carried to the South Raymond Avenue façade.

130. 80-82 South Raymond
Webster Hotel/Hotel Green — Constructed: 1887-90, Strange & Carnigle
Altered: 1935

This one-story building at the corner of Raymond Avenue and Green Street is all that is left of the original portion of the Webster Hotel. Ed Webster sold his hotel to Colonel Green in 1891, who proceeded to build the annex across the street. In 1935, the original four-story hotel was demolished except for this fragment.

131. 99 South Raymond (Castle Green) — Constructed: 1898, Frederick L. Roehrig architect
132. 50 East Green (Hotel Green) — Constructed: 1887, C.L. Strange, architect
aka 71 South Raymond — Addition: 1903, Frederick L. Roehrig, architect

Individually listed in the National Register, the Castle Green/Hotel Green occupy the entire block between Fair Oaks and Raymond Avenues on the west and east and Green and Dayton streets on the north and south.

The Castle Green, then called the Central Building, was constructed in 1898 and was connected to the original portion of the Hotel Green at the second story by a pedestrian bridge over Raymond Avenue. In 1903, an addition, then called the North Annex was constructed along the length of Green Street and connected to the Wooster Block, which was constructed in 1887. This portion of the building is now referred to as the Hotel Green.

In the 1920s the popularity of the hotel began to wane. Around this time, the original portion of the hotel east of Raymond was sold and the name was changed to the Pasadena Hotel. In 1926, the Castle Green was converted into a cooperative apartment building. In 1929, the bridge between the two buildings was torn down as it was no longer necessary and impeded the flow of traffic. In 1935, the original portion of the hotel was demolished except for a small portion at the corner of Green Street (80-82 South Raymond Avenue). The North Annex and the Wooster Block fell into a state of disrepair, but was converted into an apartment building for senior citizens in 1972. These are now two separate buildings that were counted as one in the original application for the district.

The Castle Green has a north-south orientation and sits approximately 100 feet from Raymond Avenue and 30 feet from Dayton Street, which provides space for a large garden. It is a six- and seven-story building that is eclectic in design with references to Spanish Colonial Revival and Islamic architecture. The steel-framed and brick building has a rough stucco finish. The large scale of the building is relieved by a variety of treatments to its massing, roofline, fenestration, and exterior ornamentation.

The North Annex and the Wooster Block (now called the Hotel Green) extend along Green Street from Raymond to Fair Oaks Avenues. Although they were constructed at different times by different architects, they are joined internally and are both steel-framed structures sheathed in cement plaster. The North Annex was constructed in 1903 as an addition to the Castle Green. It was designed by Frederick L. Roehrig, who also designed the Castle Green. The seven-story east section is covered by a low-pitched hipped roof with corbelled supporting brackets, while the sex story middle section has a shed roof carried on overhanging eaves. The window and door openings have little detailing. A large buttressed brick chimney appears on the most eastern point. The south façade is dominated by the semi-circular projection of what was originally the hotel's dining room and by square towers at each end.

The six-story Wooster Block is distinct from the North Annex, having been constructed in 1887 according to plans by C.L. Strange. The building's wealth of detail is almost Romanesque in feeling. It is covered by a low shed roof that is characterized by overhanging eaves, exposed rafters, and clay tiles. The street-facing elevations are articulated by numerous bays and arches. In 1987 the North Annex and the Wooster Block underwent a certified rehabilitation.

The Hotel Green under went a certified rehabilitation in 1987.

133. 150 South Raymond Constructed: 1920, John C. Smith, architect

This two-story industrial brick building was originally designed as a factory. The utilitarian design features large window openings stacked vertically and spaced evenly on all four sides. Arched headers top the openings, which are filled with multi-paned wood sash.

134. 164-70 South Raymond Constructed: 1897
Hotel Green Heat & Light Plant and Laundry Altered: 1902

A single-story brick building, the Hotel Green Heat & Light Plant and Laundry represents the kind of industrial buildings needed to keep a large resort hotel functioning smoothly. The building is covered by a hipped roof. The east façade displays a large arched doorway and two matching arched windows as well as two rectangular windows. At the south end of the building is a rectangular flat-roofed section that was added in 1902. The construction of the west annexes in 1898 and 1903 with their own boilers in the basement ended a need for the old plant. The building served for some time as a garage for the hotel, but was later sold, probably during the original hotel's demolition in 1935.

135. 182 South Raymond Constructed: 1922
Wilkinson Building

Known historically as the Wilkinson Building, this one-story brick building with a stuccoed façade sits well back from the street. Brick trim enhances the building by outlining the edges of the façade, doorways, and windows as well as by creating a frieze-like panel across the front. The rear entrance fronts on the railroad tracks.

136. 222-50 South Raymond Constructed: 1935, H.L. Gilman, architect
Santa Fe Train Station

The Santa Fe Train Station is a one-story Spanish Colonial Revival style building that was incorporated into a larger mixed-use project with a light rail stop in 2005. The building was moved from its original site in 1994 and stored in Central Park, while the light rail line and subterranean parking for the project were being constructed. It was returned to the site in 2004 and rehabilitated. It now sits in approximately in the same location, but closer to the street and on a podium over subterranean parking. The wood-framed building has a cement-plaster exterior and an irregular plan. The main wing of the building has a north-south orientation that matches the train tracks to the rear. Gabled roofs fit with red tile cover the various wings. A heavy post and lintel portal marks the street-facing entrance, while the trackside entry presents an arched opening in a loggia to the disembarking passengers. Gabled wings extend from both sides of the street-facing entrance. Wood casement windows set in deeply recessed openings. The rehabilitation work included the restoration of the exterior cement-plaster based upon an original fragment exposed during relocation. The original surfaces had been textured coated. The interior has also been restored. There were some changes as well to the grade and the rise of the baggage-handling and freight platforms above grade, but the overall integrity is good.

137. 25 East Union — Construct: 1913
Emergency Hospital

This one-story brown and tan brick commercial building is three bays wide with storefronts in the two eastern bays. Display windows have vertically divided transoms above and green and brown glazed tile bulkheads beneath. At the rear of a previous location of the City Hall, Police Department, and City Jail, this building housed the Emergency Hospital. The original garage door in the western bay has been replaced by two sets of double doors. The building underwent a certified rehabilitation in 1989.

138. 33-37 East Union — Constructed: 1910

This two-story commercial brick vernacular building has front and rear stepped parapets. The building housed C.D. Haime Gas Stoves, Willis Business College, and the Union Athletic Club in the 1920s and in the 1930s the City Light Department and meeting rooms for the Eagle Lodge and Loyal Order of Moose. The ground floor has a centrally located entrance flanked by two storefronts featuring tiled bulkheads and prism glass transoms. A1994 rehabilitation included the replacement of the original second story windows.

139. 39-45 East Union — Constructed: 1895
G.W. Shipley Saddle Livery — Altered: 1924

This two-story commercial brick vernacular building began as a one-story building in 1895. Low arched windows and a wide arched doorway opening onto Kendall Alley are evidence of the original use, the G.W. Shipley Saddle Livery. In 1924, the first floor area was enlarged and a second story was added. The primary painted brick façade has simple stringcourses at the cornice, below the second story windows, and above the ground level storefronts. There are two storefronts with recessed entrances, flanking display windows, tiled bulkheads, and prism glass transoms. On the second story are one-over-one, double-hung sash windows. The building underwent a certified rehabilitation in 1983.

140. 99 East Union — Constructed: 1923

This is a simple one-story brick commercial building. For many years the office of Kendall Auto Company, this is one of the many Pasadena buildings connected with the prominent property owner, B.O. Kendall, who owned a number of buildings on North Raymond Avenue. Small in scale and unaltered, it continues the 1920s feeling on the north side of East Union Street.

141. 109-121 East Union — Constructed: 1911, J.J. Blick, architect
Union Building

Known as the Union Building, this two-story commercial brick vernacular building is located on the east side of the district. The unusual curved shape of the west façade, dictated by the railroad right-of-way, adds interest to the building. Decorative elements include a wide metal cornice with metal dentils below and pale brick in a quoin pattern around second story windows. The building was home to the Pasadena Hardware Co., Pasadena's oldest hardware store, from 1924 until 1984. The building retains a high level of physical integrity that includes original storefronts with prism glass transoms.

142. 26-32 West Union — Constructed: 1902, W.B. Edwards, architect
Altered: 1928

Constructed in 1902, the building at 26 is a single-story commercial brick vernacular building designed by architect William B. Edwards. The building was originally occupied by the Dunn Tin & Cornice Shop and later became a candy and tobacco store. Alterations to the façade were made in 1928 when the structure was joined with neighboring building at 30-32. The building underwent a certified rehabilitation in 1985.

143. 34-36 West Union — Constructed: 1905, W.B. Edwards, architect
Model Grocery Stables

Built for Mark K. Bartlett, this two-story painted brick livery stable housed horses and delivery vans for the Model Grocery, located on North Fair Oaks Avenue. Termed "one of the finest stables that has ever been planned for Pasadena" in a contemporary newspaper account (*Pasadena Evening Star*, February 24, 1905, p.1.) The building underwent a certified rehabilitation in 1984.

144. 62-64 West Union — Constructed: 1888-1900
Schneider & Black Blacksmith Shop

Known as the Schneider & Black Blacksmith Shop, this one- and two-story brick building was constructed in two phases. The two-story portion of the building has a single arched opening on the ground floor that now contains a door, sidelight, and transom assemblage. Above single wood sash windows, all of which have arched headers, flank paired wood sash windows. The single story portion of the building extends along the alley. The roof now forms a terrace, which is covered by a loose awning. The building underwent a certified rehabilitation in 1985.

145. 70 West Union — Constructed: 1920
James Black Garage

Constructed for blacksmith, James Black as a garage, this single-story commercial brick vernacular building has been converted to retail use. In 1982, the building was rehabilitated and the original windows were removed. The building was rehabilitated again 1993. At that time a recessed doorway replaced the garage entrance, which is offset to the east, and the windows were replaced again within the original openings.

146. 78 West Union — Constructed: 1919
Detroit Battery & Supply Company

James Black, partner of Schneider & Black, Blacksmiths, built this single-story commercial brick vernacular building as a battery service station. The former garage entrance located off the corner of Union Street and Delacey Avenue is now filled with a full-length frameless glass storefront system. The multi-paned, double-hung wood sash windows with arched headers on the Delacey Street elevation add interest to the utilitarian design. The building underwent a certified rehabilitation in 1985.

147. 114-20 West Union — Constructed: 1924

This one-story commercial brick vernacular building was originally used as a garage. The building served as the pressroom for a local newspaper, the *Pasadena Independent*, from 1939 to the 1950s when the printing industry began to concentrate in this area. Originally the building had two service bays accessed by garage doors in the center of the façade. Two gabled roofs that were hidden by a tall stepped parapet covered the bays. The original parapet has been removed, revealing the side-by-side gabled roofs. The garage doors were probably filled with wood storefront systems when the building was converted to a printing facility. They have since been replaced by be modern storefront systems. Flanking the garage openings are single doors and multi-paned windows.

148. 130 West Union — Constructed: 1925, J.C. Wheeler, architect

Originally a blacksmith's shop, this single-story commercial brick vernacular building was later converted into a store, Beeds Auto Parts, to serve the needs of the burgeoning automobile population.

149. 132 West Union — Constructed: 1904

This one-story commercial brick vernacular building was originally a blacksmith's shop.

150. 136 West Union — Constructed: 1923

This one-story commercial brick vernacular building was originally a store, but in 1924 it was converted into a garage requiring the entrance to be enlarged.

151. 140 West Union — Constructed: 1923

Built originally as an ornament and sheet metal works, this two-room, single-story commercial brick vernacular building became an auto repair shop in 1927 and then a pottery factory in the 1940s.

152. 42 East Walnut — Constructed: 1931, Paul C. Benner, architect
Pasadena Labor Temple — Altered: 1953

The Pasadena Labor Temple is a simple, two-story, ochre-colored brick building. Fine detailing in the wrought iron ornamentation, the stair riser tiles, and in the carved stone plaque, finials and pilasters of the façade attests to the craftsmanship of the building. Built in 1931, at a time when the labor movement was gaining increasing recognition in this country, the Labor Temple stands as a reminder of the growth

of the labor movement in that era as well as its place in civic life today. The building features a vintage sign projection over the centrally located entrance on the primary façade. Basement level and first-story windows are steel sash. In 1953, an additional wood-framed story was added to the roof, but set back from the original wall planes. In 1994, the building was rehabilitated and incorporated a larger, new housing project. The sign is designated as a significant object under the local historic preservation ordinance.

153. 47-51 East Walnut — Constructed: 1914, Bennett & Haskell
Altered: 1989

This two-story brick commercial building relates well to the older brick buildings in the district. The symmetrical design of the front façade utilizes brick in a herringbone pattern above the second-story and below the first-story windows. A stuccoed, rooftop addition was constructed in 1989. It is setback from the front façade and clearly distinguishable as new.

154. 55 East Walnut — Constructed: 1922
Altered: 1929, Bennett & Haskell, architects

A one-story commercial building in the Spanish Colonial Revival style, this building received a new stucco façade in 1929. The façade, designed by Bennett & Haskell, is similar to others remodeled by the architectural team during the widening of Colorado Boulevard in the same year.

Noncontributing Resources

155. 95 North Arroyo Parkway — Constructed: 1925, Glen Elwood Smith, architect
Altered: 1947

This two-story reinforced concrete building is a combination of late Moderne and International styles due to the 1947 remodeling and second floor addition. Originally a gas station and garage, the lot and building are triangular in shape, conforming to the adjacent railroad tracks.

156. 80 East Colorado
Masonic Temple — Constructed: 1894, Harry Ridgeway, architect
Altered: 1929, Walker & Eisen, architects

Historically one of the most important buildings on East Colorado Boulevard, the Masonic Temple Block was designed by Harry Ridgeway, Pasadena's most prominent Victorian architect. Old photographs reveal the building to be a fine exercise in Richardsonian Romanesque, traces of which still remain in the form of the large arched windows on the second floor. In 1929, the front was moved back on rails and retied to the sidewalls. At the same time, the original three stories were reduced to two stories with a portion of the rear demolished. Unfortunately, the stuccoing of the building has completely covered the original pressed brick walls and the rough dressed brown stone surrounding the windows and doors.

157. 40 West Colorado — Constructed: 1990
Addition: 1990, Architects Consortium

Jake's Diner was misidentified as a contributing building in the original National Register application because it post-dated the period of significance. More importantly, in 1990, Jake's was completely rebuilt and a two- and three-story addition was made to the south (rear) and west. Although the rebuilt diner remains, it is now a small appendage (300 sq. ft.) to a much larger building (20,000 sq. ft.).

158. 46 West Colorado — Constructed: 1922
Addition: 1999, Dahl Architects

This one-story masonry warehouse building was originally used as storage for the Crown Mattress Co. Access to the warehouse was from the alley and a painted wall sign for the company still exists. Originally, the building was setback from Colorado Boulevard fifty feet. As such, it left an awkward opening in the street wall. In 1999, an addition was made to the front of the building to create a

continuous street wall. The addition is two stories in height and compatible with the adjacent historic buildings.

159. 64 West Colorado — Constructed: 2005, McKently Malak Architects

This property was a vacant lot that has been developed twice since the district was listed. In 1986, a United Artist Theater was constructed on the site. It was recently demolished and in 2006 a large retail building with four distinct stores was constructed. The two stores to the east are one-story in height and evocative of the Spanish Colonial Revival style. The corner store has an Art Deco inspired design with a taller corner element. The store facing Delacey Avenue is two-stories in height and has more in common with the commercial brick vernacular buildings along Green Street.

160. 86 West Colorado — Constructed. 2006, RSA Architecture

This property was occupied by a single-story building that was part of a larger noncontributing building (86-90 West Colorado Boulevard), which was demolished in 1996. The east end of the building remained until 2006 when it was demolished. The new building is two-stories in height, flat-roofed, and mostly clad in a red brick.

161. 90 West Colorado — Constructed: 1996
Remodeled: 2006, RSA Architecture

In 1996, this multi-story commercial building was constructed. The site was formerly occupied by a noncontributing building (86-90 West Colorado Boulevard) and a surface parking lot to the west. Only the west end of the noncontributing building was demolished. The east end at the corner of Delacey Avenue remained as a separate building. In 2006, the building was remodeled.

162. 127 West Colorado — Constructed: 1887
Altered: 1995, Seaton Wilson Architects

This two-story building combines two commercial brick vernacular buildings from the late nineteenth century. In 1940, the buildings were combined and stripped of all their details. In 1995, the building was rehabilitated. The second story has double-hung sash windows spaced evenly along the stuccoed facade, while the lower story features a contemporary version of historic storefronts. The building is now more compatible with the architecture of the district, but remains noncontributing because it lacks physical integrity.

163. 169 West Colorado — Constructed: 1917
Altered: 1950s

This single-story building was constructed in 1917, and remodeled in 1930 for Pep Boys. Although it now has a Modern façade, it contributes to the scale and massing of the adjacent buildings. "Baker Iron Works, L.A., Calif" is visible on bumpers at the entrance to what was a garage accessed from the side elevation on Pasadena Avenue. The storefronts were altered in 1950 and the parapet was altered in 1953.

164. 21 West Dayton — Constructed: 1923

A one-story brick warehouse of utilitarian design, the front façade has been stuccoed. The garden area on the west side; however, reveals the original brick wall and arched window openings.

165. 45 South Delacey — Constructed: 1987

This large, three-story public parking structure was constructed in 1987. It has ground floor retail space at the corner of South Delacey Avenue and the alley. The site was formerly occupied by a contributing building at 41 South Delacey Avenue as well as a surface parking lot.

166. 86-90 North Fair Oaks — Constructed: 1916
Altered: 1988-90

This one-story commercial brick vernacular building is much altered. The rear portion of the original building was damaged by fire in 1970 and replaced with a one-story addition between 1988 and 1990. The street-facing elevation is stuccoed and divided into three bays by brick piers. The central bay is a passageway to the courtyard at the year, which was originally a parking area. To each side are storefronts. The parapet was restored and the storefronts were remodeled, although the vertically divided transoms are original.

167. 33-35 South Fair Oaks — Constructed: 1922
Altered: 1946, 1985

The original application for the district identified three buildings at 33-45 South Fair Oaks Avenue as a single non-contributor. They were united into a single building in 1946 by the Crown Mattress Co. and are still under a single ownership. Pursuant to a tax credit application in 1985, the National Park Service determined that the three buildings should be evaluated separately and that 33-35 and 43-47

South Fair Oaks Avenue are noncontributing, but that 37-39 is contributing. The one-story commercial building at 33-35 was rehabilitated in 1994 and is now more compatible with the historic character of the district, but remains noncontributing because it lacks physical integrity.

168. 43-47 South Fair Oaks — Constructed: 1885-86, Harry Ridgeway, architect
Altered: 1926, 1946, 2006

This two-story commercial building has office spaces above a ground floor restaurant. It has been repeatedly remodeled, most recently in 2006 for the existing restaurant. The building was originally constructed for A. F. Mills. It was purchased by the Crown Mattress Co. in 1946, which also owned four adjacent buildings.

169. 145 South Fair Oaks
Fire Station #31 — Constructed: 1990, SATA Collaborates, architect

Fire Station #31 was constructed in 1990 on the site of a former surface parking lot. It is a two-story concrete block structure with garage doors for three fire engines.

170. 165 South Fair Oaks — Constructed: 1911
Altered: 1945, Hillman & Nowell, architects

The two buildings at 165 and 175 South Fair Oaks were identified as a single noncontributing building in the original application for the district. The one-story commercial building at 165 was constructed in 1911 by the same owner and architect as the neighboring Star Saddle Livery, and used for garage space. The building was altered in 1945 and no longer retains its physical integrity.

171. 175 South Fair Oaks — Constructed: 1945, Hilman & Nowell, architects

This single story commercial building was constructed in 1945.

172. 300 South Fair Oaks
Union Garage Company — Constructed: 1907, C.W. Buchanan, architect
Altered: 1928

Constructed for the Union Garage Company, this one-story building was considered one of the most complete garages on the West Coast. The building was originally Mission Revival in style and included a plaster exterior, a decorative shaped parapet, arched window and door openings on the north (Del Mar)

elevation, and storefronts on the east (Fair Oaks) elevation. The building was remodeled in 1928; however, what that entailed in unknown. Based upon historic photographs, the parapet was removed at the time. Much later, the plaster was removed thereby exposing the underlying brick construction and the storefronts were replaced.

173. 33 East Green — Constructed: 1986, Vitro Architects

This is a large public parking structure with ground floor retail plus two levels of parking above. It occupies a site that was formerly a surface parking lot.

174. 22 West Green — Constructed: 2003, Togawa & Smith, architects

This four-story mixed-used building was constructed in 2003. It is clad in stucco and red brick veneer. The site was formerly occupied by a noncontributing building at 77 South Fair Oaks Avenue and another noncontributing building at 20 West Green Street.

175. 45 West Green — Constructed: 1920

This small one-story stucco building does not contribute to the district, as its scale and setback are not compatible. It also appears to have been remodeled, although the date is unknown.

176. 55 West Green — Constructed: 1925 & 1928
Altered: 1951

The one-story brick building was constructed in 1928. The warehouse to the rear was added in 1928. The only remaining design feature is the glass display window in the front.

177. 63-65 West Green — Constructed: 1965, Serge Kolesoff, architect

This two-story cinderblock building is similar in design to the building at 75 West Green Street, which was designed by the same architect. It has offices above ground floor storefronts. The upper story has been stuccoed and there is a shaped parapet.

178. 75 West Green (aka 50 S. Delacey) Constructed: 1965, Serge Kolesoff, architect

This two-story cinderblock building is located at the northeast corner of West Green Street and South Delacey Avenue. It has offices above ground floor storefronts. The upper story as been stuccoed and there is a shaped parapet.

179. 85 West Green Constructed: 1994

The Twin Palms Restaurant was constructed in 1994. The site was formerly occupied by a contributing gas station. The mostly outdoor dining area is surrounded by a low, stucco wall with arched openings and covered by a tent-like structure fanning out from two Canary Island date palms.

180. 125-31 West Green Constructed: 1954, Serge Kolesoff, architect

Built as a factory and storage area, this building now serves as office space. It is a one- and two-story structure of reinforced concrete brick. There is a surface parking lot in the front setback, which is deeper than the other buildings on the street.

181. 139-45 West Green Constructed: 1991, CHCG Architects

This two-story mixed-use building was constructed in 1991. The site was formerly occupied by a contributing building at 135 West Green Street.

182. 26 Mills Place Constructed: circa 1922

This one-story commercial brick vernacular building has a flat roof and a thick plaster finish. It sits behind the noncontributing building at 33-35 South Fair Oaks Avenue and faces the alley, Mills Place. The alley elevation is symmetrically arranged about a central entrance with flanking one-over-one double-hung sash windows. The entrance and the windows have arched headers.

183. 48 North Raymond Constructed: 1989, Jean Cramer, architect

This large, three-story parking structure was built on the former site of a surface parking lot. Constructed in 1989, the building has a stucco exterior and a ground floor retail space that faces North Raymond Avenue as well as East Union Street.

184. 70 North Raymond — Constructed: 1903
Home Telephone Company Building — Altered: 1955

This two-story building once housed the Home Telephone Company, one of two phone companies serving the Pasadena during the early part of the 20th century. Although built in the Mission Revival style, the front façade of this stucco-over-brick building has been altered. The façade is symmetrically organized with a centrally located arched entrance flanked by storefronts. Four windows are evenly spaced across the second story, which is divided from the first story by a course. A cornice caps the flat roof.

185. 80 North Raymond — Constructed: 1992, Pedersen, Beckhard, Wesley & Stice, architects

This is a multi-family residential building on the site of a former surface parking lot. Three-stories in height, the units are townhouse style with individual entrances off North Raymond Avenue and East Holly Street. Balconies with French doors are positioned over the entrances. One-over-one, double-hung sash windows are generally set in pairs.

186. 171 North Raymond — Constructed: 1999

Constructed in 1999, on the site of a former surface parking lot, this large six-level parking structure backs up to the Marriott Hotel, which faces North Fair Oaks Avenue (180).

187. 22 South Raymond — Constructed: 2006, Glen De Veer, architect

This two-story commercial building is of contemporary design.

188. 110 South Raymond — Constructed: 1940, Gerald Marsac, architect

The two buildings at 110 and 120 South Raymond Avenue were identified as a single non-contributor in the original application for the district. The single-story utilitarian building at 110 has a reinforced brick structure covered by a truss roof. The building was used as a garage through the 1950s.

189. 120 South Raymond — Constructed: 1940

A Lamella dome roof covers this single-story reinforced brick building.

190. 202 South Raymond — Constructed: 2006, Moule & Polyzoides, architects

This is a six-story apartment building just north of the train station.

191. 1 East Union — Constructed: 2005, Rothenberg Sawasy, architects

Located at the northeast corner of East Union Street and North Fair Oaks Avenue, this two-story commercial building occupies a former surface parking lot. The building has a strong corner element, over hanging eaves and brackets that are evocative of the Mission Revival style.

192. 20 East Union — Constructed: 1986, Charles Kausen, architect

This large, four-story parking structure was constructed in 1986. The site was formerly occupied by a surface parking lot as well as a contributing building at 24 East Union Street. The building has a red brick exterior and ground floor retail facing East Union Street as well as North Raymond Avenue.

193. 40 West Union — Constructed: 1991

This large three-story structure was constructed in 1991 for the Marketplace project. The site was formerly occupied by a contributing building. The building has a simple brick exterior with segmented arched openings on the second story, rectangular openings on the third story, and a layered denticulated cornice. The project also involved the rehabilitation of the historic buildings on the entire block and the creation of a courtyard in the center. The 40 West Union building contains a cineplex and restaurant that are accessed from the courtyard. Many of the historic buildings on Colorado Boulevard were given new secondary entrances on the rear, courtyard-facing elevations.

194. 40 East Walnut — Constructed: 1996, Bahr, Vermeer & Haecker

This is a four-story, multi-family residential project at the corner of East Walnut Street and North Raymond Avenue. Constructed in 1996, the site was formerly occupied by a Texaco Gas Station at 195 North Raymond Avenue, which was a contributor to the district. The apartment building is reminiscent of the Beaux-Arts style with a three-part horizontal organization, side-by-side casement windows, and stucco exterior. The project incorporates the 1931 Pasadena Labor Temple building, which is identified as contributing to the district.

Vacant Lots

5713-007-025
5713-021-008
5713-008-005
5713-020-001
5722-001-002
5722-010-005
5722-010-007
5722-011-003
5723-021-020
5723-021-019

Summary

The Old Pasadena Historic District is significant in local history under National Register Criteria A and C. As the historic commercial center of Pasadena, the district documents the economic development of the city and its various phases of growth between 1886 and 1936. The period of significance begins in 1886, when several key events occurred that stimulated the development of Pasadena, and ends in 1936 when the commercial activity began to dissipate. The district also contains an important record of the evolution of architectural design in southern California as well as the work of many prominent regional architects. The district imparts a strong sense of past time and place and retains its design integrity from the period of significance.

Statement of Significance

Pasadena's beginning dates to 1873 when a group of settlers from Indiana formed the San Gabriel Orange Grove Association, and purchased land in the area of the old Rancho San Pasqual from Benjamin Wilson. As surveyed in 1874, the Association lands were bounded by the Arroyo Seco to the west, Wilson Avenue to the east, Villa Street to the north, and Mission Street to the south. The original center of Pasadena was the intersection of Orange Grove Avenue and California Boulevard where several churches of different denominations were located, as well as a small number of stores. The intersection was in the midst of agricultural tracts, which were cultivated by gentleman farmers and their families. Between Fair Oaks Avenue and the edge of the Arroyo Seco to the west, the land was divided from north to south by Orange Grove Avenue with land held in east-to-west rectangular tracts by approximately two-dozen owners. These long, rectangular properties were all bisected by Orange Grove Avenue.

The relocation of the school and the subdivision of a large tract of land by Benjamin Wilson shifted the geographic focus of the growing town to the intersection of Fair Oaks Avenue and Colorado Boulevard. In 1876, a general store and post office were established at this new location, along with the town school. The approximate boundaries of this generally rectangular subdivision were Villa Street on the north, Raymond Hill on the south, and Wilson Avenue on the east, and Fair Oaks Avenue on the west. The size of the tract was between two and one-half miles from north to south, and less than one and one-half miles from east to west. One third of the tract lay to the north of Colorado Boulevard (originally Street), and two-thirds lay to the south. The Lake Vineyard tract became the subdivision that would lead to the creation of an urban environment that became the commercial center of Pasadena.

While Pasadena prospered as a local marketplace, the development of the town as a tourist mecca elevated Pasadena to national attention. The first of the city's hotels were established in 1883, the Pasadena House and the Los Angeles House, respectively. These inns were located at the center of town, but larger resort hotels such as the Huntington, the Vista del Arroyo, and the Raymond, still exerted a force upon the downtown. Carriages routinely carried guests to Colorado Boulevard for shopping and business and the street began to cater to the tourist class with fine shops and professional offices.

The coming of the railroad to Pasadena, as in many communities, was the catalyst for a different scale and type of development. The Southern Pacific connected Los Angeles to the rest of the country by way of San Francisco in 1876. The Atchinson, Topeka, and Santa Fe route through the southwest was extended to Los Angeles and then through Pasadena in 1885. A vicious rate war between the two railroads ensued and eventually sent people west from Kansas City for one dollar. Throngs of emigrants took advantage of the special offer and moved to southern California. The population of Pasadena grew from 2,000 to 12,000 during the 1886-88 period, which accounts for the tremendous amount of new commercial construction.

Edward C. Webster, a particularly shrewd hotel operator purchased land on the east side of Raymond Avenue between Green Street and Del Mar Avenue in 1886 and constructed the Santa Fe Train Station at his own expense. The train tracks that run mid-block between South Raymond Avenue and Arroyo Parkway generally form the eastern boundary of the district. The Richardsonian Romanesque train station operated for nearly fifty years, until 1935, when the plans for the new station were announced and the old station was demolished. The 1935 station was completely restored in 2005 and incorporated into a transit-oriented mixed-used development.

In 1887, Webster began the construction of the hotel north of the station, which he named after himself. However, financial troubles forced him to sell the hotel to an associate, Colonel George G. Green. The hotel was officially renamed the Hotel Green after New Year's Day, 1891. Green carried out Webster's plan to expand the hotel further north to Green Street. In 1898, the hotel was expanded again, this time across the street. The new building (then called the Central Building and now referred to as the Castle Green) was connected to the original building (sometimes referred to as the East Building) by a pedestrian bridge over Raymond Avenue. The Wooster Block at the corner of Fair Oaks Avenue and Green Street was purchased and incorporated into the hotel, and was referred to as the West Building.

The original portion of the hotel (the East Building) was demolished in 1935. All that remains of the four-story building is a one-story fragment at 80-82 South Raymond Avenue, which is now used as part of a floral supply store. The Castle Green and the Wooster Block at (99 South Raymond Avenue) serve

as visual reminders of the heyday of resort hotels in Pasadena. Occupying the entire block between Raymond and Fair Oaks Avenues and Green and Dayton Streets, they are individually listed in the National Register. Also, many of the industrial buildings along South Fair Oaks and Raymond Avenues began as laundries, stables, and worker housing for the Hotel Green. Of particular note is the building at 196-70 South Raymond Avenue, which was constructed as the heat plant and laundry for the Hotel Green. Several smaller hotels with separate ground floor retail businesses on East Holly Street and North Fair Oaks Avenue represent the type of lodgings that were designed to accommodate tourists of more modest means. They include the Holly Hotel (1914), the Piece Hotel (1924), and the Marine Hotel (1884, 1904).

The auction of the schoolhouse property in 1886 (the block bounded by Colorado, Raymond, Green, and Fair Oaks) also prompted large-scale development and speculation. Substantial brick buildings replaced early wood-framed structures and almost every prominent family participated in some aspect of the "boom" development. Several remnants of that early heyday remain: the former City Hall building at 45 North Fair Oaks Boulevard; the Old Firehouse at 37 West Dayton Street; the Plant Block at 11-17 North Fair Oaks Avenue; and the Doty Block at 103-115 South Fair Oaks Boulevard. In addition, the alley facades and configurations offer a different view of this era. The alley network of the block bounded by West Colorado Boulevard, North Fair Oaks Avenue, West Union Street, and North Delacey Avenue is the best remaining example within the district, but within every block some vestiges of an alley network remain.

Colorado Boulevard has always been accorded special attention due to its importance as a main thoroughfare, the Rose Parade route, and its historic role as the western gateway to Pasadena. As early as 1900, traffic congestion prompted local citizens to consider widening Colorado Boulevard. In 1919, the City Council approved the expenditure of $2,000,000 to widen Colorado Boulevard between Orange Grove Boulevard and Delacey Avenue. The project took ten years to complete and was soon followed by the widening of another three blocks from Delacey to Broadway (now Arroyo Parkway). When the project was completed in 1930, the City's main thoroughfare was 100 feet wide and most of the adjoining buildings were given new facades.

Colorado Boulevard also played a role in the national transportation network, which further enhanced its status as the primer commercial street in the city. In 1914, the Automobile Club of Southern California posted a sign at the corner of Colorado Boulevard and Fair Oaks Avenue marking the National Old Trails Route. The route was conceived and implemented by the organization and involved the posting of signs along 3,000 miles of roadway directing travelers from New York to Los Angeles. In 1926, the National Old Trails Route became part of Route 66, the first interstate highway. The original Route 66

entered Pasadena on the east on Foothill Boulevard, traveled west to Hill Street, turned south on Hill to Colorado Boulevard, west on Colorado Boulevard to Fair Oaks Avenue, and then proceeded south on Fair Oaks Avenue to South Pasadena and beyond.

Most construction in Pasadena during the 1920s, whether residential, commercial, or civic bore some relationship to Spanish Colonial Revival images. The construction of Pasadena's Civic Center (listed in the National Register) in the 1920s, promoted Spanish Colonial Revival design and other styles from the Mediterranean region. The association of this style with the upper class, due to its prolific use for houses of the period, symbolized Pasadena's image of itself as a wealthy locale. The 1920s remain the "Golden Age" of Pasadena's economic and cultural history and the fine design along Colorado Boulevard attests to the commitment of local enterprises to portray their city in its best light. While the buildings along Colorado Boulevard do not bear the exuberance of large-scaled Spanish Colonial Revival design, they do offer some of the finest example of the style in a restrained urban setting. Some of the buildings are individually important for their balance of detail and massing but the chief significance is due to the collection as a whole. Relatively unaltered, the almost four-blocks of Colorado Boulevard still provide a glimpse of the unity of purpose and enthusiasm, which guided the residents to go beyond a problematic street widening and attempt a cohesive urban design.

The stylistic images of Old Pasadena can be attributed to the talents of over thirty-five architects and numerous builders. Many of these architects achieved regional and statewide recognition through extensive coverage in such trade journals as *Architect and Engineer* and *Architectural Record.* Many other regionally acknowledged architects, who are not represented on the roster of Old Pasadena architects, lived in Pasadena which created an environment that demanded design excellence.

Harry Ridgeway, the first major architect to practice in Pasadena, designed many of the "boom" commercial buildings of which only 11-17 North Fair Oaks Avenue remains. He is recognized as the premiere Pasadena Victorian-era architect. The two phases of the Hotel Green demonstrate the talent of two major turn of the century architects, C.L. Strange (82 South Raymond Avenue, the remains of the first hotel) and Frederick Roehrig (99 South Raymond Avenue, the Central Building). Strange also design the Doty Block (103-15 South Fair Oaks Avenue) and is best known for his Old Orange County Courthouse in Santa Ana. The Castle Green is Roehrig's best large-scale work as his is predominantly known for his residential designs. The Vandervort Block (26-38 South Raymond Avenue) may be the first southern California work of Frank Hudson who achieved notoriety as a partner in the Los Angeles firm of Hudson and Munsell. His most notable Los Angeles buildings include the County Hall of Records (demolished) and the Museum of Natural History in Exposition Park. Frederick Kennedy Jr., recognized primarily for his ecclesiastical designs (First Baptist Church and Trinity Lutheran Church,

both in Pasadena) has one commercial design within the district, 24-28 East Colorado Boulevard. In addition to designing seventeen buildings or facades within Old Pasadena, the firm of Bennett and Haskell also designed the Pasadena Civic Auditorium (a local landmark and a contributing building in the Civic Center National Register District) with Edwin Bergstrom. While Bennett trained in the offices of Greene and Greene, Haskell had a classical architect's education at Harvard, MIT, and the Ecole de Beaux Arts. Haskell also worked with McKim, Mead & White in New York before coming to Pasadena in the early 1920s. Although the firm of Marston and Van Pelt has only one representative in Old Pasadena (106 West Colorado Boulevard) they enjoyed popular acclaim due to their other Pasadena buildings including the Grace Nicholson Building, the Pasadena Athletic Club, and the Civic Center YMCA.

The business and cultural focus of the community shifted east along Colorado in the 1920s and 1930. The 1929-30 street widening and resultant façade program was seen by many as a last ditch attempt to revive commerce at this end of Colorado. The construction of the Civic Center and the Maryland Hotel (just three blocks east of the district in the 1920s began this shift which was cemented with the development of South Lake Avenue as a shopping avenue in the 1940s. Despite this shift, merchants continued their business, accommodating a different clientele. The lack of investment in the district saved it from the "modernization" which hit most other downtowns after World War II.

In conclusion, the Old Pasadena Historic District is historically significant as the commercial center of Pasadena. The district represents the major phases of development in the local community from the 1880s through the 1930s. The district is architecturally significant as the largest intact assemblage of commercial buildings in Pasadena, containing numerous individually distinguished buildings and the works of many notable architects. Collectively, the assemblage documents the evolution of commercial architecture in Pasadena.

Sources

Books and Articles

Carew, Harold, *History of the San Gabriel Valley, California*. Pasadena, CA: Clarke Publishing Company, 1930.

Chapin, Lon F., *Thirty Years in Pasadena*. Pasadena, CA: Southwest Publishing Company, 1929.

English, Sean, *Pasadena Fire Department*. Pasadena, CA: Firemen's Relief Association, 2002.

Gebhard, David and Robert Winter. *Los Angeles: an Architectural Guide*. Salt Lake City: Gibbs Smith, Publisher, 1994.

Gleye, Paul. *The Architecture of Los Angeles*. Los Angeles: Rosebud Books, 1981.

Heckman, Marlin L., *Pasadena in Vintage Postcards*. Chicago, IL: Arcadia Press, 2001.

Reid, Hiram, *History of Pasadena*. Pasadena, CA: Pasadena Historical Society, 1895.

Schied, Ann, *Pasadena: Crown of the Valley*. Northridge, CA: Windsor Publications, 1986.

Pasadena Community Book. (Ralph Arnold Edition). Pasadena, CA: A.F. Cawston, 1955.

Pasadena, In Southern California, Between the Mountains and the Sea. Pasadena, CA: Chamber of Commerce and Civic Association, 1926.

Pasadena Saving & Loan Association, *Valley of the Hahamog-na: Pasadena Through Two Centuries*. Pasadena, CA: Cole-Holmquist Press, 1952.

Reports and Surveys

Old Pasadena Historic District, National Register of Historic Places Nomination Form, January, 1983, Pasadena Heritage.

Central District Historic Resource Survey, 2000-2004, Planning Consultants Research (PCR) Corp. and the City of Pasadena

Primary Materials

Building Permit Records, various dates

Sanborn Fire Insurance Maps, various dates

City Directories, various dates

Address Files – These files at the City of Pasadena Planning Department often include historic resource inventory forms from the 1980s, copies of old building permits and newspaper articles, and correspondence, plans, and photographs related to proposed alterations since the 1980s.

Boundary Justification

The heart of the district is the intersection of Colorado Boulevard and Fair Oaks Avenue. The district emanates from that point in an irregular manner and includes the densest concentration of buildings associated with the historic business district of Pasadena. The vast majority of the buildings in the district are commercial; however, there are a few residential buildings, churches, and social halls. The district is generally bounded on the north by modern office buildings and the 210-Foothill Freeway, on the east by the Civic Center and the Santa Fe railroad tracks, on the west by the Long Beach Freeway, and on the south by later industrial development.

The boundaries are generally the same as those in the original application for the district. They have been adjusted slightly for two reasons: first to include contributing buildings that were inadvertently left out of the original application and second to exclude new noncontributing buildings on the edge of the district. The boundaries have been adjusted to exclude noncontributing and include contributing buildings on the edge of the district.

Four buildings on the edge of the old boundary have been picked up as new contributors to increase the boundaries of the district. Each was constructed during the period of significance, reflect the historic context, and retain their physical integrity. 130-134 North Fair Oaks (#78) was rehabilitated in 1988, and is now considered a contributor to the district. The inclusion of this building extends the northwestern edge of the district boundary. 80 West Dayton (#62) was individually listed in the National Register in 1978, and 108-112 South Delacey (#66) retains its physical integrity. As such, both buildings are now considered contributors to the district, and the southwestern boundary of the district has been extended to reflect this. Finally, 330 South Fair Oaks retains its physical integrity and is considered a contributor to the district, extending the southern boundary of the district.

The boundary changes also reflect new non-contributors along the boundaries, which slightly decrease the district boundaries. The property at the southwest corner of the Orange Place and South Fair Oaks is now a non-contributor; therefore, the southwestern boundary of the district is drawn to exclude this property. In a similar manner, a new non-contributing building is located on the northeaster corner of Del Mar and South Raymond; the southeastern boundary now excludes this area.

It should also be noted that eleven of the original contributing buildings have been demolished. They include:

41 South Delacey

101 South Fair Oaks
251 South Fair Oaks
255 South Fair Oaks
85 West Green
135 West Green
26 South Pasadena
195 North Raymond
130 South Raymond
24 East Union
40 West Union

Four of the original noncontributing buildings have been demolished. They include:

25-27 West Colorado
86-90 West Colorado
77 South Fair Oaks
20 West Green

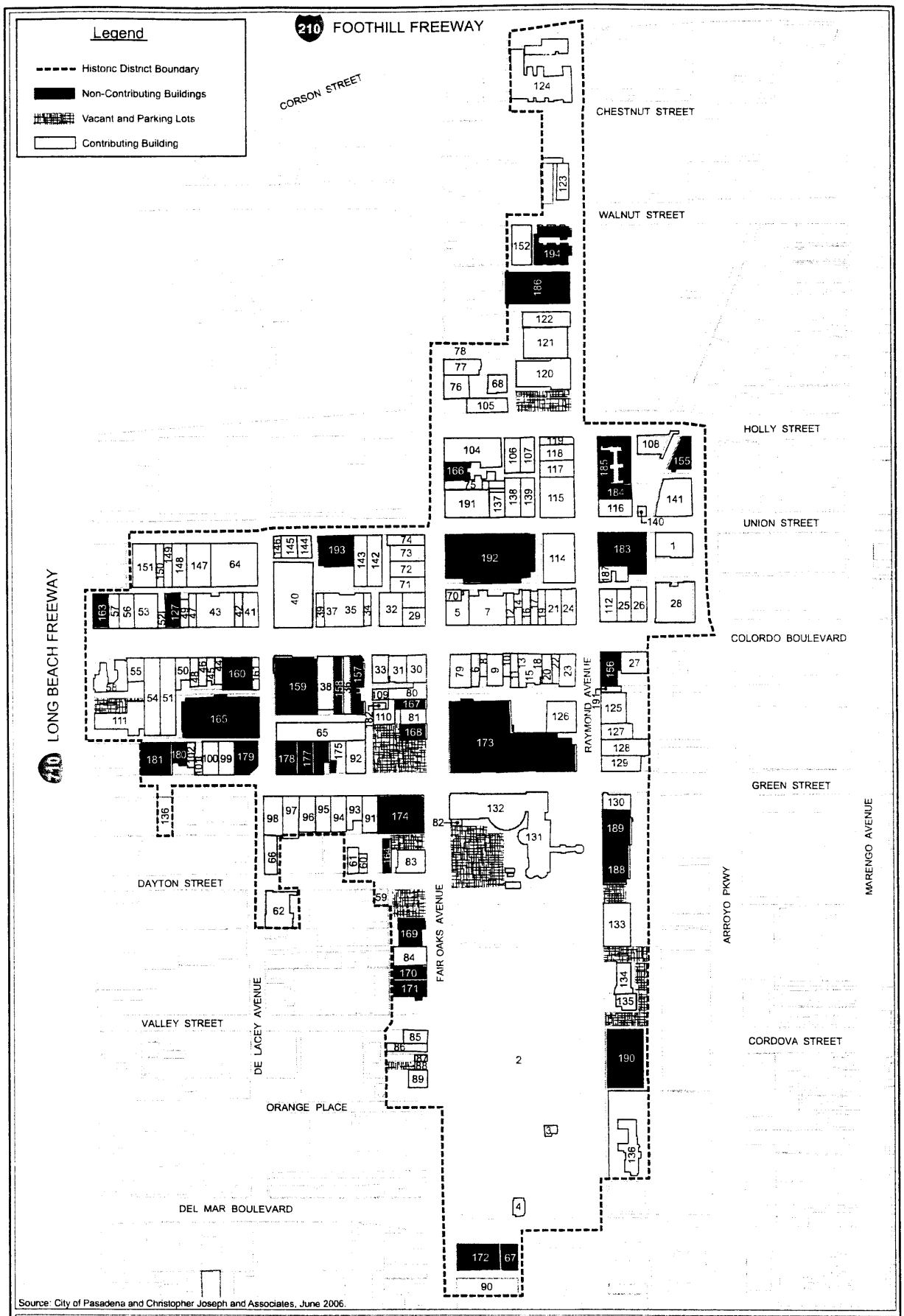
One building at 300 South Fair Oaks had been included as contributing is now considered noncontributing due to a lack of physical integrity.

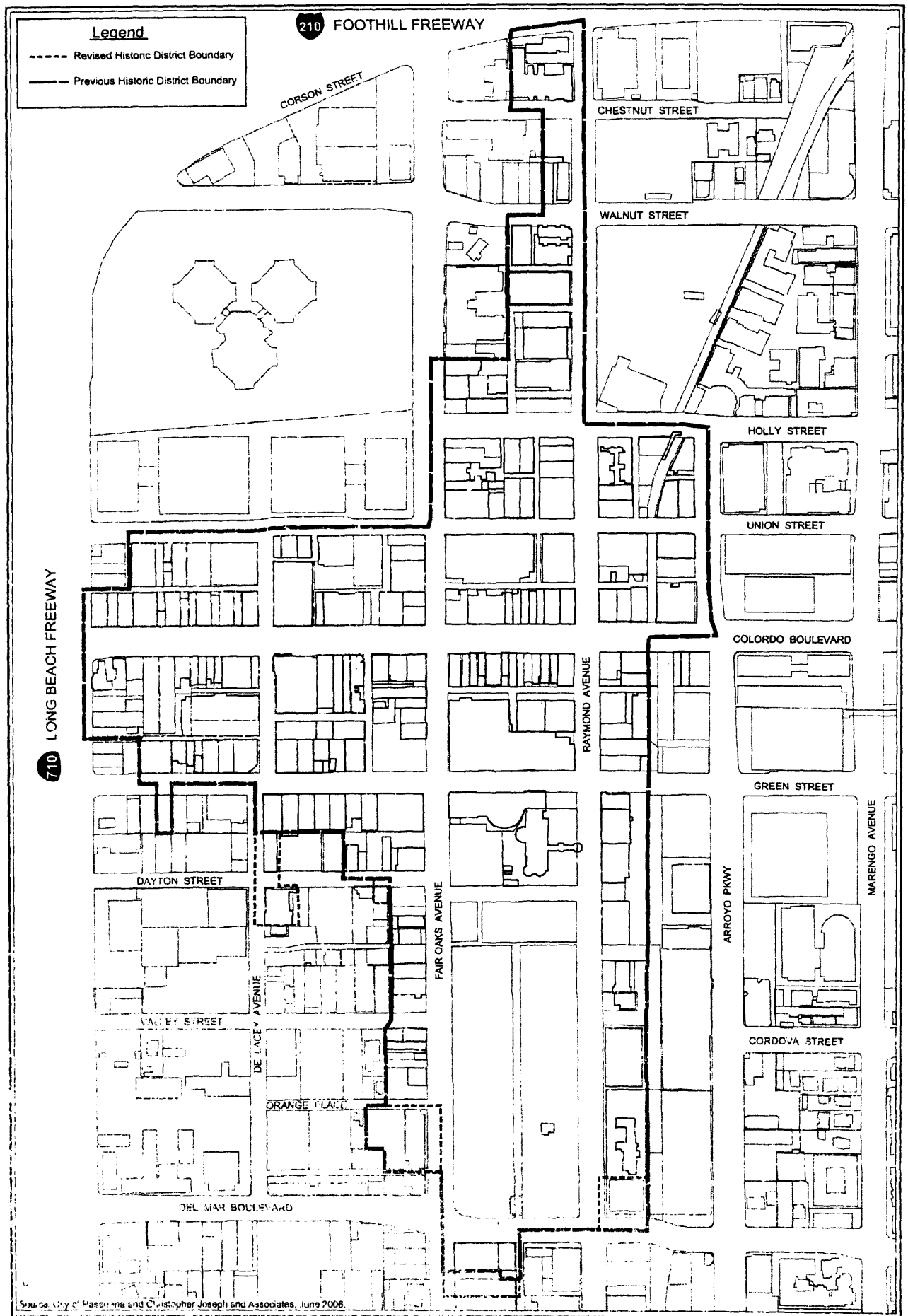
Although the boundaries have been adjusted only slightly, there are now more resources in the district for two reasons. First, the old application sometimes counted multiple side-by-side buildings as one building with a range of addresses. For example, two buildings at 165-175 were counted as one building, but are now counted as two at 165 and 175. Another example is 33-45 South Fair Oaks. These three buildings were originally counted as one noncontributing building. They are now counted as two noncontributing buildings (33-35 and 43-47) and one contributing building (37-39). Second, about twenty noncontributing buildings have been constructed within the district, mostly on vacant and surface parking lots that were identified in the old application. There are now very few surface parking lots remaining in the district.

Photographs

The following is the same for all of the photographs:
City: Pasadena
County: Los Angeles
State: CA
Photographer: Teresa Grimes
Date: February 2008

1. South Fair Oaks Avenue, looking northeast toward 300 (#172) and 330 (#90).
2. Central Park (#2), looking northwest toward the Lawn Bowling Clubhouse (#3).
3. Central Park (#2), looking southwest toward the old horse trough.
4. Dayton Street, looking north toward the Castle Green (#131).
5. South Raymond Avenue, looking north with the Castle Green (#131) on the left and #188 and #189 on the right.
6. East Colorado Boulevard and South Raymond Avenue, looking northeast at Union Savings Bank (#112).
7. North Raymond Avenue, looking northwest at the B.O. Kendall Building (#115).
8. East Colorado Boulevard, south side of the street, looking southwest toward the intersection with Fair Oaks Avenue.
9. 40 West Colorado Boulevard (#157), looking southwest.
10. Mills Place, looking south, #109, #182 & #110 on the left.
11. West Colorado Boulevard, looking north, Arcade Building (#32) on right and #34 on left. A non-contributing building was demolished to create the passageway to the interior of the block.
12. West Colorado Boulevard, north side of the street, looking northwest toward the intersection with Delacy Avenue.
13. West Colorado Boulevard, south side of the street, looking southeast toward #159, a new noncontributing building.
14. 40 West Union Street (#193), looking southeast.
15. North Delacey Avenue, looking northwest toward Penn Oil Building (#64).
16. Christiansen Alley, looking southwest toward the rear of #127.
17. Friendship Baptist Church (#62), looking southeast.
18. South Delacey Avenue and West Dayton Street, looking northeast toward #66.
19. Pasadena Fire Department (#60), looking northeast.
20. South Fair Oaks Avenue, west side of the street, looking northwest toward the intersection at Colorado Boulevard.


Legend
Historic District Boundary
Non-Contributing Buildings
Vacant and Parking Lots
Contributing Building
210 FOOTHILL FREEWAY
CORSON STREET
CHESTNUT STREET
WALNUT STREET
HOLLY STREET
UNION STREET
COLORDO BOULEVARD
GREEN STREET
CORDOVA STREET
LONG BEACH FREEWAY
710
RAYMOND AVENUE
FAIR OAKS AVENUE
DE LACEY AVENUE
ARROYO PKWY
MARENGO AVENUE
DAYTON STREET
VALLEY STREET
ORANGE PLACE
DEL MAR BOULEVARD
Source: City of Pasadena and Christopher Joseph and Associates, June 2006.
CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research
NORTH
0 150 300 450 600
Feet
Old Pasadena
National Register Historic District


Legend
Revised Historic District Boundary
Previous Historic District Boundary
210 FOOTHILL FREEWAY
710 LONG BEACH FREEWAY
CORSON STREET
CHESTNUT STREET
WALNUT STREET
HOLLY STREET
UNION STREET
COLORDO BOULEVARD
GREEN STREET
CORDOVA STREET
RAYMOND AVENUE
FAIR OAKS AVENUE
ARROYO PKWY
MARENGO AVENUE
DE LACEY AVENUE
DAYTON STREET
VALLEY STREET
ORANGE PLACE
DEL MAR BOULEVARD
Source: City of Pasadena and Christopher Joseph and Associates, June 2006.
CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research
0 150 300 450 600
Feet
Old Pasadena
National Register Historic District

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Name of Property

County and State

Section number _____ Page _____

Name of multiple property listing (if applicable)

OLD PASADENA HISTORIC DISTRICT (ADDITIONAL DOCUMENTATION)
Pasadena, Los Angeles County, CALIFORNIA
83001200

Accept Additional Documentation

Keeper of the National Register

Date 3/25/2009

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Name of Property

County and State

Name of multiple property listing (if applicable)

Section number _____ Page _____

OLD PASADENA HISTORIC DISTRICT (BOUNDARY INCREASE/DECREASE)
Pasadena, Los Angeles County, CALIFORNIA
07001303

Accept Boundary Increase and Decrease

Keeper of the National Register

3/25/2008

Date

The Boundary Decrease effectively removed two contributing buildings from the edge of the original nomination district that had been demolished and replaced by a non-contributing building, and removed a lot at the edge of the boundary now occupied by a large non-contributing building. The Boundary Increase added four (4) contributing buildings at various points around the perimeter of the district, which were either left unaddressed in the original nomination or received subsequent rehabilitation that removed non-historic features (108-112 South Delacey [#66], 80 West Dayton [#62], 130 -134 North Fair Oaks [#78], and 330 South Fair Oaks [#90]). The total area of changes represents less than one acre.



OLD PASADENA HISTORIC DISTRICT
Pasadena, Los Angeles County, California

UTM:

A. 11/394280/3779330 B. 11/394270/3778100
C. 11/393670/3778100 D. 11/393670/3779330

ROAD CLASSIFICATION

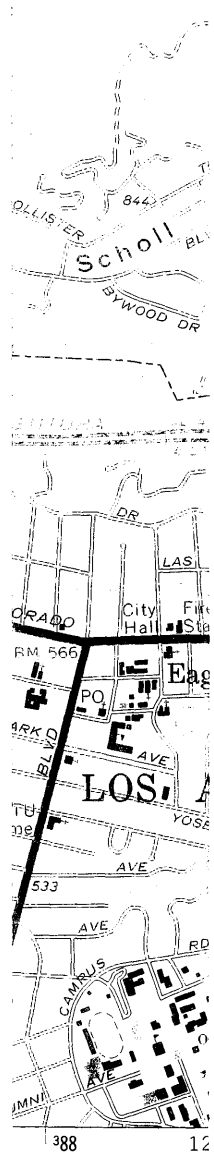
Heavy-duty — Light-duty
Medium-duty — Unimproved dirt

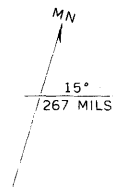
U. S. Route — State Route

Interstate Route



RANGLE LOCATION





MAGNETIC NORTH
ENTER OF SHEET

(EL MONTE)
2352 II SE

PASADENA, CALIF.
N3407.5—W11807.5/7.5

1966
PHOTOREVISED 1972
AMS 2352 II NW—SERIES V895

ATTACHMENT B

TERESA GRIMES | Historic Preservation

Teresa.Grimes@icloud.com
323-868-2391

Teresa Grimes has 30 years of experience in the field of historic preservation. She is widely recognized as an expert in the identification and evaluation of historical resources having successfully prepared dozens of landmark and historic district applications for a wide variety of property types. Teresa graduated from the University of California with a Master of Art degree in Architecture and has worked in the private, public, and non-profit sectors. Teresa has extensive experience in the preparation of environmental compliance documents in accordance with the California Environmental Quality Act including the identification of historical resources, analysis of direct, indirect, and cumulative impacts, and development of mitigation measures. Her many projects throughout Southern California include the Art Center College of Design Master Plan, Baldwin Hills Crenshaw Plaza, Cinerama Dome Entertainment Center, City of Hope Master Plan, Claremont Graduate University Master Plan, Claremont McKenna College Master Plan, John Anson Ford Theatres, Oakwood School Master Plan, Los Angeles County Museum of Art, Times Mirror Square, Sunset Las Palms Studios, and Sunset Bronson Studios.

Educational Background

- M.A., Architecture, University of California, Los Angeles, 1992
- B.A., Political Science, University of California, Los Angeles, 1986

Qualifications

- Meets the Secretary of the Interior's Professional Qualifications Standards for history and architectural history pursuant to the Code of Federal Regulations, 36 CFR Part 61, Appendix A.

Professional Activities

- Pasadena Heritage Board Member, 2008-2012
- Highland Park Heritage Trust, Board Member, 1996-1998
- West Hollywood Cultural Heritage Advisory Board, 1990-1994

Professional Experience

- Teresa Grimes | Historic Preservation, Principal, 2020 - Present
- GPA Consulting, Principal Architectural Historian, 2009-2020
- Christopher A. Joseph & Associates, Senior Architectural Historian, 2006-2009
- Teresa Grimes | Historic Preservation, Principal, 1999-2005, 1993-1994, 1991-1992
- Historic Resources Group, Architectural Historian, 1994-1998
- Getty Conservation Institute, Research Associate, 1992-1993
- Los Angeles Conservancy, Preservation Officer, 1988-1991

Letter I-1

Takeda, Michi

From: Carole <carolea5@aol.com>
Sent: Tuesday, May 04, 2021 8:34 PM
To: Johnson, Kevin
Subject: Hotel Green

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you know the content is safe. Report phish using the Phish Alert Button. Learn more...<https://mydoit.cityofpasadena.net/sp?id=kb_article_view&sysparm_article=KB0010263>.

Hi
I am totally opposed to the development that blocks the Castle Green. Pasadena's beauty is being destroyed by overdevelopment and this is a prime example. I have lived and paid taxes here my entire adult life. My grandparents came out from Chicago and stayed at that hotel, I have many happy memories. 1
Please reconsider
Carole Abelmann

Sent from my iPhone

Letter I-2

Johnson, Kevin

From: John Adams <nomonames@icloud.com>
Sent: Thursday, May 06, 2021 3:48 PM
To: Johnson, Kevin
Subject: Castle Green

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you know the content is safe. Report phish using the Phish Alert Button. Learn more...<https://mydoit.cityofpasadena.net/sp?id=kb_article_view&sysparm_article=KB0010263>.

Please do not approve the development that would obscure this old Pasadena landmark. This city which my grandfather moved to in 1895, in which my father was born in 1905 and in which I was born in 1933 has steadily been divested of its historical identity. What is left MUST be fought for and retained. SAVE OUR CITY. 1

JOHN ADAMS
380 Glenullen Drive
Pasadena CA 91105

adams380@earthlink.net

323/254-5814

Sent from my iPad

Letter I-3

April 24, 2021

Dear Kevin Johnson, Senior Planner
Concerning: Central Park Apartments Project

We, the residents of all the apartments at the green place have this petition signatures of disagreements for this central park apartments project.

First of all this is not what we need for a lot more apartments as our neighbours. There is already a lot of apartments already built all around old town neighbourhood. This to us should be a sign of enough apartments surrounding our apartments complex already.

We need the quiet time that we are enjoying right now without more chaotic noise of more apartments right next door to us here at green apartments place.

We also enjoy the Central Park for our beautiful view from our windows and our convenience of having this central park for our pleasure of walking, jogging and relaxation of our old town Central Park when we, residents can use this park for our need!

One bible verse to be our example for not more central Park apartments project!
Psalm 91:3 Surely he shall deliver thee from the snare of the fowler, and from the noisome pestilence.

With great appreciation & my LORD Jesus help,
Mrs. Thelma Alvarado
Green Apt 501

1

Letter I-4

Johnson, Kevin

From: Lorraine Anderson <aqualorraine@gmail.com>
Sent: Wednesday, May 05, 2021 5:42 PM
To: Johnson, Kevin
Subject: Fwd: Castle Green

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

---------- Forwarded message ---------
From: **Lorraine Anderson** <aqualorraine@gmail.com>
Date: Wed, May 5, 2021 at 9:45 AM
Subject: Castle Green
To: <kevinjohnson@pasadena.net>

Dear Mr Johnson, I am absolutely horrified at the thought of the reprehensible idea of constructing a huge new building complex so incredibly near the beautiful and historic Castle Green!! This is one of the worst things that could possibly be done to my beloved city. It is DESECRATION of the first order. It would ruin one of the most visible and valuable jewels in the crown of our city. I urge and implore YOU to VETO this huge and terrible blight on Pasadena. I know there are other sites where this monstrosity could be built, without RUINING our city. 1

Lorraine Anderson

Letter I-5

Takeda, Michi

From: Mark Archer <archer528@gmail.com>
Sent: Wednesday, April 07, 2021 12:10 PM
To: Johnson, Kevin
Subject: 86 S. Fair Oaks Avenue

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

Hi Kevin,

I work at 15 S. Raymond, and received the Notice to Public Comment for the property listed at 86 S. Fair Oaks Avenue. I also live in the Westgate Residences on De Lacey.

This proposed project is absolutely **incredible**, and it would be unfortunate if nimby's cause it to be shelved. As a resident and someone that works nearby, please give my name to the list of people that approve of this project.

1

Thank you,
Mark Archer
818-486-0880

Letter I-6

Johnson, Kevin

From: Aimee Brazeau <fondaflora@yahoo.com>
Sent: Thursday, May 06, 2021 4:19 PM
To: Johnson, Kevin
Subject: SCEA - Central Park Apartments

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you know the content is safe. Report phish using the Phish Alert Button. Learn more...<https://mydoit.cityofpasadena.net/sp?id=kb_article_view&sysparm_article=KB0010263>.

Dear Kevin,

As a lifelong Pasadena resident, I must tell you that I am thoroughly dismayed by the continual development of large scale projects throughout the city. Years ago when Bill Bogaard campaigned for his first term as an elected mayor, he promised that infrastructure would be developed to handle the explosion of multi-family housing and that his wife Claire would step down from her position with the city since it would be a conflict of interest for both of them having voting rights on projects. The infrastructure discussed included the expansion of one way streets, and better timing of traffic signals. Neither of those promises came through, and Claire never stepped down from her position. Instead, residents were subjected to a continual concrete and population explosion in the city, along with horrendous traffic jams. Unfortunately, Pasadena suffered because of false lip service given by its city leaders.

Now the city is considering building a multi-level apartment structure adjacent to the historic Green Hotel, in an area already congested with vehicle traffic. Aside from the traffic congestion, it appears there is no regard to how this historic structure will fare through the construction process, and the beautiful mountain views enjoyed by the residents and guests of this building will be replaced with concrete and stucco. Where is the consideration for historical significance for many of our buildings? And where is the water coming from to serve this new multi-level apartment building. There has been much discussion recently, as well as in the past few years, that the Colorado River is not sustainable to the growing population it serves. Will the water question even be addressed by the city? 1

Our city touts itself as a green city, but it is not. The carbon footprint made by our city is sickening, and only getting worse, and fossil fuel is being burned and wasted at every street corner because the city has not figured out how to time its traffic signals. I have traveled to many cities across the United States for my job, and I can tell you that Pasadena is nowhere near becoming the green city it believes it is.

I ask that the Central Park Apartment project either be denied or reduced substantially in scale. It is high time our city leaders take an environmental approach to doing business, and hand back the developer payments that are carried in the city's back pockets.

Sincerely,

Aimee Brazeau

Letter I-7

Kevin Johnson
City of Pasadena
Senior Planner
175 N. Garfield Ave.
Pasadena, CA 91101

Dear Mr. Johnson,
My name is Kathy Brown. I live in Pasadena's Historic Castle Green. I moved to Pasadena 9 years ago from Agoura, CA and immediately fell madly in love with this city as if I were born and raised here. I stumbled upon Castle Green quite by accident just after I moved here while walking my dog. I saw it from afar and was gobsmacked as people generally are. I spent 2 years finding a way to live there and I can happily say I have been a resident now for 6 wonderful years.

I can imagine you know why I am writing you. I am just your average citizen. I don't know a lot about city planning but what I do know is how much Castle Green means to the citizens of Pasadena. I know how much the history of the building is part of the fabric of this City. As a resident and one of the many fans of the Castle Green, I can tell you that Colonel Green is a legend here. The documented history of Colonel Greens vision is legendary within these walls and we have all seen the plans he laid out for the future many times. I know there are those that can speak at length about the plans the Colonel had back in 1898 for the historic recreation portion of the Castle Green/Hotel Green site located at the corner of Dayton St. and Fair Oaks Ave. but I only know them from the images. The breathtaking images that for some of us would be a dream come true if they were ever realized. I understand this is just a dream.

1

I know that there is no stopping progress. I understand that. But with every plan presented over the years, most currently by the developer, Goldrich Kest, there is no care being taken for the historic nature of this property. The last time they presented a plan to the city back in 2015 their project had 64 units and 2 subterranean parking levels. As I understand it the City sent them back to the drawing board and now, they have come back with a plan that has 84 Units and 4 subterranean parking levels. I realize that this is just scraping the surface of the issues with their new plan. The negative impact that their current proposal would have on traffic on Dayton would be unimaginable. This is the street that runs along the Castle and the proposed project site on one side and Central Park on the other. It is very narrow and as it exists now and is very congested. 2 cars can barely pass each other. I already worry a lot about the children playing so close to that street in the park or a dog that may break free of its leash as there are so many cars there is not much visibility as it is. This would also be the street that these 84 proposed unit's residents would enter and exit. It seems impossible!

Letter I-7

I know there are many other people reaching out. Those which much more experience in these matters and can speak intelligently about the legalities. I know that dollars are all that matter to the developers and I am hoping that you see through that and can withstand what I can only imagine is immense pressure to make progress. I looked at the developer's website that claims to be fulfilling Colonel Greens plans for the property and that is not the truth.

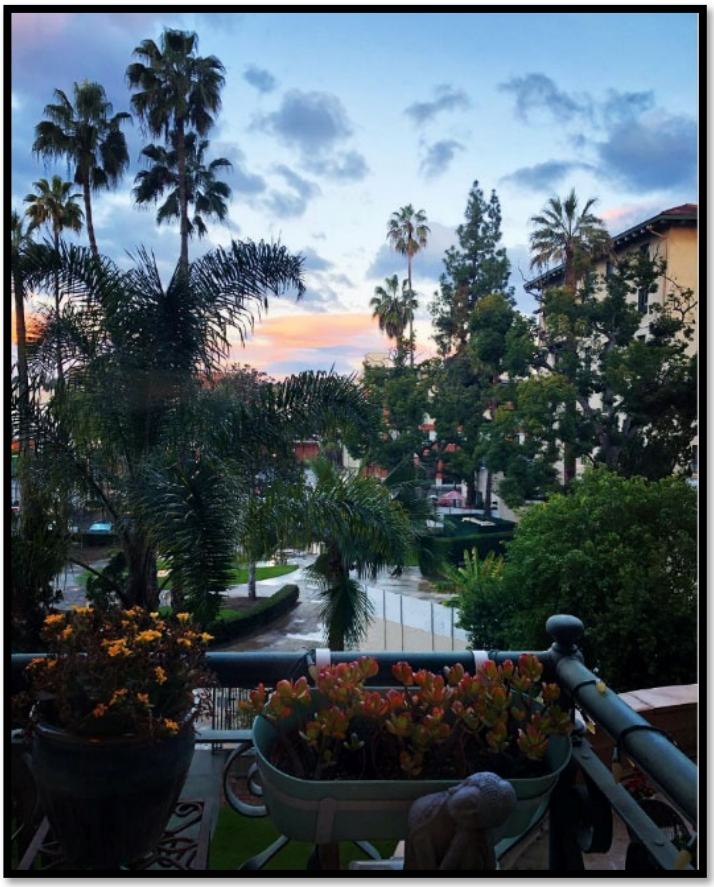
Overall, I am writing to implore you to listen closely to the many experts who want to protect this historic site. I know I speak not only for myself but for many residents of Castle Green as well as Hotel Green. Many who are elderly and all of us who will literally be feet away from this project. This current proposal is entirely too ambitious for Old Pasadena and the Historical land. I hope you will help us protect it.

1

I will end with the view from my Castle Green Balcony at Sunset that looks out over the proposed building site. All of this will be destroyed with the current developer's proposal. I am not at all opposed to a sensitive and respectful project. I hope that ultimately that can be accomplished.

Thank you very much for taking the time to hear my concerns.

Kathy Brown
99 S. Raymond Ave. #302
Pasadena, CA 91105
805-990-5008



Letter I-8

Takeda, Michi

From: Eric Brubaker <brubcue@gmail.com>
Sent: Tuesday, May 04, 2021 9:05 PM
To: Johnson, Kevin
Subject: Castle Green

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you know the content is safe. Report phish using the Phish Alert Button. Learn more...<https://mydoit.cityofpasadena.net/sp?id=kb_article_view&sysparm_article=KB0010263>.

Kevin

If you're going to mess with historical landmarks. Replace city hall with condos I being sarcastic. It's that same thing with Castle Green there are to many housing developments in the city that aren't 100% capacity. We're going to mess with historical landmarks what's next to Rosebowl City Hall Langham JPL? This developer is not doing the right thing for Castle green and the surrounding area all he wants is money it's all about money. There are reasons why properties become historical landmarks leave the historical landmarks alone. 1

That's my 2 cents

Eric Brubaker

Sent from my iPhone

Letter I-9

Takeda, Michi

From: Shirin Caiola <caiolashirin@gmail.com>
Sent: Saturday, May 01, 2021 3:42 PM
To: Johnson, Kevin
Subject: Central Park Apartments project

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

Dear Mr. Johnson,

As I was playing with my daughter at the playground of Central Park, I was informed by a lady that you plan on building apartments right across from Central Park, where hundreds of children come to daily.

I strongly oppose this plan that will not only severely impact parking across the playground, but even worse congest the area further bringing danger to the air quality we breathe due to the much higher traffic. 1

Thank you for hearing the voices of the Passdena community and doe working together with us to make a better suggestion.

Shirin Caiola

Letter I-10

50 E Green st RM 424
Pasadena CA 91105

Kevin Johnson
City of Pasadena
Planning of Community Development Dpt
175 N. Garfield Ave
Pasadena, CA 91105

Respectful Mister
尊敬的 Kevin Johnson 先生：

Recently received your letter thoroughly learned
最近收到您的来信，详悉。

In this respect, our opinion is: it is not inappropriate to build buildings here
为此，我们的看法是在此楼建房是不妥当的。

because We are live here over 70 year old seniors to original
因为我们是居住在此已年逾古稀的老年人对原有的

environment adopted & got used to your development plans will affect
环境已习惯而有的适应，而您的要的建房计划将影响

our life several years & beyand ever Current pandemic still not turn,
我们的生活好几年以及永远 当前疫情尚未根本好转，

Rate crime to asian incidents frequently happens We are afraid go better
仇恨亚裔的犯罪事故又频繁发生，我们又不敢轻易出门，

in this only green land space to do activities, exercises, live &
在这一块仅有的绿地空间可以活动，锻炼，生活和

enjoy sunshine yet your executive of development plans will affect
享受阳光，而您的计划的实施即对我们的生活将是

to our life in bad & forever influence. So, We firmly oppose it, please
永久性的不良影响，为之我们是坚决反对，请谅解！understand

greetings
敬礼

此致
Sincerely

Zongding Zhang
Zhaohui Chen

5-1-2021

1

Letter I-11

Nina Chomsky
1500 Lancashire St.
Pasadena, CA 91103
nrchomsky@aol.com

May 6, 2021

Mr. Kevin Johnson, Senior Planner
Pasadena Planning Department, Design and Historic Preservation
kevinjohnson@cityofpasadena.net

Re: Central Park Apartments Proposed Project
Draft Sustainable Communities Environmental Assessment (SCEA)

Mr. Johnson:

I am submitting comments on the above-referenced Draft SCEA in my individual capacity, and not on behalf of any organization. I submit the following comments. 1

1. The Current Revised Project is Not Eligible for CEQA Review and Assessment Utilizing a SCEA.

   The current "proposed" Project is not a newly submitted Project subject to SB 375, and, therefore, eligible for SCEA assessment under the California Environmental Quality Act (CEQA). The current "proposed" Project is a revised original Project. The original Project was submitted and in the process of review, it appears, prior to the adoption and effective date of SB 375 – in other words, the revised original Project is a "pipeline" project initiated prior to SB 375, and it is not permissible to apply SCEA rules retroactively.

   The original Project continues to undergo previously initiated CEQA and entitlement review. To pretend that the original Project never happened and no longer exists, and to jump to a SCEA level of environmental analysis for this highly environmentally sensitive site, appears to be an effort to avoid full public participation and full public review and to rush the revised original Project through to final approval and environmental clearance. 2

   The original Project is an open matter and has never been withdrawn as far as I can determine. The Draft SCEA totally ignores the procedural and legal status of the original Project. It appears that jurisdiction over the original Project continues to rest

with the Pasadena City Council and all applicable Commissions, and the original Project was and remains subject to review and analysis pursuant to the original full Environmental Impact Report (EIR) under CEQA. The revised Project does include design, density, and other changes, and it appears that the original EIR is subject to being Supplemented or otherwise updated to reflect original Project revisions and changes. 2

Therefore, reliance on a SCEA level of CEQA analysis for the revised Project is inadequate under CEQA and violates CEQA. The original EIR should be updated as required and continue to be the operative CEQA review document.

2. <u>All Public Comments Submitted in Connection with Review of the EIR Continue to Be Valid and Must Be Preserved.</u> Since the legal and applicable CEQA review document for the revised original Project is the EIR, all public comments submitted in response to the EIR, whether oral or written, should be deemed as valid comments in response to the revised original Project and preserved. If any such prior EIR public comment is resubmitted, revised, or updated in response to the revised original Project, such public comment should be responded to as required and in the context of the continued validity and applicability of the EIR. 3

3. <u>The Revised Original Project Must Receive Planning Commission Review.</u> It appears that part of the plan to rush the revised original Project through the Pasadena public process, and to avoid full and adequate public process and review, is to "skip" Planning Commission review and recommendations prior to CEQA and entitlement review by the City Council. Skipping and avoiding Planning Commission review is not acceptable and violates Pasadena rules and customs and is a Land Use and Planning CEQA inadequacy. 4

Thank you for the opportunity to submit these comments. At your convenience, please acknowledge timely receipt of these comments. 5

Sincerely,

Nina Chomsky

Nina Chomsky

Letter I-12

Johnson, Kevin

From: cindy clark-schnuelle <cindy@orangeheights.org>
Sent: Wednesday, May 05, 2021 11:47 AM
To: Johnson, Kevin
Subject: Central Park Apartments Project

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you know the content is safe. Report phish using the Phish Alert Button. Learn more...<https://mydoit.cityofpasadena.net/sp?id=kb_article_view&sysparm_article=KB0010263>.

Dear Kevin,

I write as a citizen of Pasadena that is opposed to the density and massing of the Central Park Apartments Project. I urge that our city council not allow the developer to circumvent our city's long history of applying thoughtful and appropriate levels of density. 1

Keep our city commissions review process intact and let all interested and possibility impacted parties have a voice in how this proposed project proceeds.

Best regards,
Cindy Clark-Schnuelle
Northwest Pasadena
cell: 323 791 7721

Letter I-13

Johnson, Kevin

From: Carmen Daugherty <daughcar@gmail.com>
Sent: Wednesday, May 05, 2021 8:06 PM
To: Johnson, Kevin
Subject: Central Park Apartments Project

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

Dear Mr. Johnson,

I am writing to you to comment on the above project. I am not a Pasadena resident, but I do visit Central Park regularly with a painting group and by myself to sketch and paint the beautiful Castle Green Building.

I visited this lovely location on this Saturday with my husband. I sketched and painted while he read the paper. It was a lovely and relaxing morning at the park.

While I was there, I learned of the above proposed project. I am against this project, it will change the whole atmosphere of the park. It does not make sense to build a development of this size. It needs to be AFFORDABLE housing. You are building it near the Del Mar Station so people can have access to public transportation, why do you need a parking structure with 195 parking spaces?
You should not approve this project.

1

Thank you for your time.

Letter I-14

Judy Desormeaux
50 E. Green Street Apt 409
Pasadena, CA 91105
(626) 676-0571
April 24, 2021

City of Pasadena
Planning & Community Development Department
175 N. Garfield Ave
Pasadena, CA 91101

Re: Central Park Apartments project

Dear Kevin Johnson:

I am a senior with heart failure, kidney disease, and asthma. As a tenant of the Green Hotel Apartments, I oppose the building of the Central Park Apartment project for the following reasons:

1. Up until a few years ago, I walked around Old Town Pasadena for exercise. One day I was crossing Arroyo Parkway at south Colorado when a young man came running up behind me and assaulted me. He punched me on right part of my back. I had a very painful bruise about 6 inches in diameter. I reported the incident to the Pasadena police. The officer said that he had heard about young adults assaulting seniors in downtown Los Angeles and Korea town, but it was the first time it was reported in Pasadena. After the report, I talked to two other tenants in the building who were punched and knocked down on the sidewalk. Since then, the only place that I feel safe walking for exercise is the fenced in Green Hotel parking lot and small courtyard. I, also, sit in the courtyard, so I can get sunshine for Vitamin D as recommended by my doctor.

2. I live on the north side of the building across from the School House parking garage. At night Old Town Pasadena is a very noisy place especially after last call for the bars and restaurants. People are screaming, blowing car horns, racing their automobiles, driving around without mufflers on motorcycles and cars, police using bullhorns, etc. This goes on from about 1:30 AM to 2:30/3:00 AM. Because of the noise, I usually can't fall asleep until 3:30 AM. I used to go to sleep at 10:00 PM, but when the noise started, I would wake up. It was very hard for me to fall asleep again, so I started waiting for the noise to stop before going to sleep. To get 7 or 8 hours of sleep, I usually sleep until 10:00 AM or 11:00 AM. If the construction of the Central Park Apartment project is allowed, I will get only about 3 or 4 hours of sleep a day because of construction noise. A couple of weeks ago, some workers started cutting the cement sidewalk across the street at 7:00 AM. (During Covid lock down, Old Town was quiet. It is getting noisy again.)

3. I am afraid to use the Central Park for exercise and for spending time outdoors because of the scary characters that use the park. I have seen people using drugs and drinking alcohol in that park.

1

Please do not let this project go forward.

Sincerely,

Judy Desormeaux

Letter I-15

Judy Desormeaux
PO Box 92032
Pasadena, CA 91109
(626) 676-0571
May 2, 2021

Kevin Johnson (Senior Planner)
City of Pasadena
Planning & Community Development Department
175 N. Garfield Avenue
Pasadena, CA 91101

Dear Mr. Johnson:

Enclosed are 8 letters opposing the Central Park Apartment Project from tenants of the Green Hotel Apartments. Also, there are 4 pages of signatures from tenants of the Green Hotel Apartments on a petition opposing the Central Park Apartment Project. We only received one notice sent on April 5, 2021. If we had received a notice in March, we would have had time to get more signatures. 1

Was a report prepared under the National Environmental Policy Act? Was an environmental impact report (EIR) done? Is there a website where I can see the reports? I would very much like to read both. 2

Sincerely,

Judy Desormeaux

Judy Desormeaux

Enclosures (12)

Letter I-16

Takeda, Michi

From: Paul Dorn <padorn512@gmail.com>
Sent: Wednesday, May 05, 2021 7:53 AM
To: Johnson, Kevin
Subject: Hotel Green

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you know the content is safe. Report phish using the Phish Alert Button. Learn more...<https://mydoit.cityofpasadena.net/sp?id=kb_article_view&sysparm_article=KB0010263>.

Please , please do not continue the plan of “rebuilding” the hotel Green! Pasadena is loosing its iconic presence to boring architecture. Don’t be a part of this!
Repair, maintain, but don’t destroy! 1

Sent from Paul Dorn's iPhone

Letter I-17

Takeda, Michi

From: Mary Fitzpatrick <wordfitz@aol.com>
Sent: Wednesday, May 05, 2021 9:22 AM
To: Johnson, Kevin; kevin.johnson@cityofpasadena.net
Subject: Central Park - Castle Green Development

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

I would like to express my complete horror and opposition to the development in front of Castle Green and Central Park. The "1903" project is absolutely the wrong place and way to achieve housing density in Pasadena. It would utterly mar the historic character and beauty of that Old Pasadena landmark and area, and "privatizing" a Park area. I oppose. 1
I am a resident of Pasadena for 48 years.

Sent from the all new AOL app for Android

Letter I-18

Johnson, Kevin

From: Erin Fleming <sheezhired@icloud.com>
Sent: Wednesday, May 05, 2021 5:18 PM
To: Johnson, Kevin
Subject: Born at St Luke's so I'm old school Pasadena

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you know the content is safe. Report phish using the Phish Alert Button. Learn more...<https://mydoit.cityofpasadena.net/sp?id=kb_article_view&sysparm_article=KB0010263>.

Mr Johnson,
Feel free to building your building in the park across the street from the Green Street but do not mess with perfection. Those grounds are awesome and to mess with a Pasadena icon like that is just stupid. 1

Please. Don't be stupid.

Erin Fleming
Pasadena area lifer
323/896.8246
sheezhired@icloud.com

Sent from my iPad

Letter I-19

Johnson, Kevin

From: Vicki Fletcher <coachvics777@gmail.com>
Sent: Wednesday, May 05, 2021 2:35 PM
To: Johnson, Kevin
Subject: Castle Green

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you know the content is safe. Report phish using the Phish Alert Button. Learn more...<https://mydoit.cityofpasadena.net/sp?id=kb_article_view&sysparm_article=KB0010263>.

Please please preserve this wonderful historical landmark. I can't imagine even thinking about destroying it. Thank You
Victoria Fletcher 1

Sent from my iPhone

Letter I-20

Johnson, Kevin

From: Alan Flores <alanflorestdmarketing@yahoo.com>
Sent: Wednesday, May 05, 2021 1:16 PM
To: Johnson, Kevin
Subject: Construction Concerns

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

Dear Mr. Johnson,

We are Pasadena residents who use the children's play area at Central Park. We understand there will be a 6 floor apartment building right at the curb on Dayton, across from the park. The only safe area to load and unload our kids in the car is at Dayton. The play area is only 50 feet from Dayton and less than 100 feet from the building construction. Has the city considered the effect on the health of small children this close to a construction site? Will the parking on Dayton disappear for the duration of construction? Will it disappear forever? This park is the only open space around here. The only thing that makes the play area safe is it is right across the street from the Fire Station, the reset of the park is not safe. 1

What steps will be taken by the City of Pasadena to keep park users, especially those using the play area, safe from the noise, dust particles and construction debris in the air?

Thank you in advance for answering my questions,

Alan Flores

Sent from Yahoo Mail for iPhone

Letter I-21

HENRY GOLAS

May 4, 2021

Re: Comments – G&K Central Park Apartments Project

The Hotel Green Block is one of Pasadena's Tiffany gems in its Crown City ethos – arguably the most historically significant blocks in Old Pasadena representing the confluences of Pasadena's rich cultural heritage as a world-famous salubrious destination resort, culture and defining architectural styles.

We only have one chance to get it "right" and the project as submitted doesn't preserve or enhance those values but takes that "Tiffany" and instead of polishing it and making it shine, degrades it to costume jewelry. The block is on the National Register and we are a City Historic Monument. Worthy of higher vision and better efforts.

The developers proffering that their project "...completes Colonel G.G. Green's 1903 vision for The Hotel Green" is disingenuous at best.

Colonel Green's design and promotional materials of the day leaned heavily on the gardens and parklike settings of the Hotel Green compounds (also inextricably tied to Central park both in significance and aesthetic beauty in that Pasadena landscaper Thomas Chisholm designed early iterations of both and his son was the landscaper of choice for architects, Greene & Greene) and indeed that now "parking lot" at the G&K property was lawns, gardens and even tennis courts and a pool which have slowly been lost under G&K's ownership over the years.

So rather than complete his vision, the design obliterates it by incompatible excessive mass and scale in the quest for density - maximum units and income which an order of magnitude out of balance with the original design and existing historic structures and that consumes what little is left of their surviving historic greenspaces with seeming little regard to the out-of-scale project's impact on the quality of life and sustainability of the residents – current and future.

1

I understand on this pass, they are now trying to leverage being in the transit area to grasp at that greater density, even more parking, and cut corners and circumvent the usual planning requirements such a signific site deserves?

Adding more parking and parking levels with greater, deeper excavations (which can threaten the adjacent existing historic structures even more) seems counter to the purpose of encouraging more use of mass transit in such a special district – it should be less -onsite parking, not more. In the cities like San Francisco and New York where I have lived, not having onsite parking has been the biggest motivation to not owning a car and taking public transportation. That element should instead be severely reduced id that is the goal and residents who have cars encouraged to use nearby public parking structures if they absolutely need to need to. Win/win.

Letter I-21

The traffic on Dayton is already dense and dicey at times with cars not being able to pass each other, the playground and kids not to mention special events that take place there. That seems ill-conceived and unaddressed. Why not Fair Oaks?

The artwork used appears to be visually deceptive. It's out of scale and perspectives are fudged. Details seems missing. The visual and physical impacts are actually much greater. How about at minimum story poles for layout and physical 3-D models to review the true dimensions and scales of their plan? How can one adequately review artistic legerdemain?

What are the potential health impacts and proposed mitigations of the project to existing residents which live so adjacent to the project and the children across the street using the playground?

Having been a neighbor of G&K since 1994, I don't view them as good neighbors nor good stewards of their building and property. I've watched it degrade over of the years. So, I don't have faith that our community's interests or well-being are forefront or even considered in this project. 1

This new design of theirs has gone in the opposite direction of input given their prior project iterations by increasing and maximizing mass and scale with little regard to the heritage, cultural sustainability nor its impact on the community in the future. I see it as focused solely on squeezing as much into the lot for their short-term maximum profits at the neighborhood's expense.

Instead of completing "...Colonel G.G. Green's 1903 vision for The Hotel Green" I view it as grasping and rapacious.

This major project should not be an attempted end-run to circumvent the more substantive, well-established process it was originally started with and community input it received prior respected. It needs and deserves the proper time, focus and effort given the setting, stature and potential of this famous historic block to get back into the well-established process where the various needs, views and interests of all stakeholders can obtain some homeostasis and we can polish this gem in Pasadena's reputation as the Crown City to be something that serves the city, the community, the neighborhood (and future visitors!) and we can all be proud of vs an eternal embarrassment.

Sincerely,

Henry J. Golas

Pasadena Mayor Gordo, City Council &
Sr. Planner Kevin Johnson
City Hall
P.O. Box 7115
Pasadena, CA 91109-7215



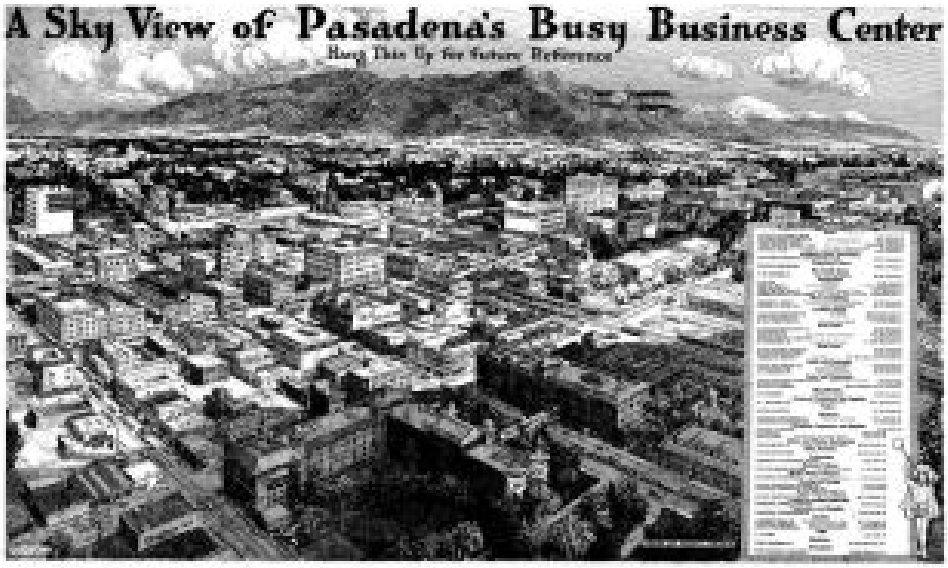
Col Green's "vision"...



Another vintage artist's aerial view of Col Green's actual vision. Note the much smaller and appropriate scale and copious gardens between the Castle Green and the envisioned Fair Oaks wing back then vs. G&K's own "vision" it is presenting as Col Green's.



Arial view showing the emphasis on parklike settings and greenspaces on our block.



Similar artist rendering.



View from Central Park



The pool and gardens area now mostly parking lot.



Vintage pano postcards showing the prior uses of that lot (gardens and tennis court).



For ease of reference, contemporary view of the lot in question. Note there are several missing domes, defining historic features now lost, on the roof of their building. The filled in pool in the center area with lawn and walkway. A major heritage tree toppled a few years ago in the night.

Letter I-22

Johnson, Kevin

From: Shannon Gold <shannon.gold@gmail.com>
Sent: Wednesday, May 05, 2021 2:31 PM
To: Johnson, Kevin
Subject: 86 S. Fair Oaks Project

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

Kevin Johnson
City of Pasadena
Senior Planner
175 N. Garfield Ave.
Pasadena, CA 91101

Dear Mr. Johnson,

My wife and I have been residents of the Castle Green for 8 years as of this spring. We appreciate the uniqueness of this building and it's historic significance to Pasadena. For quite some time, this block has been a haven, away from the noise and crowds of busy commercial areas of Colorado Blvd. Not just for the residents in the immediate neighborhood but for families from all over Pasadena to come and relax away from the commerce and noise. The currently proposed project for 86 S. Fair Oaks would surely obliterate that haven for the sake of more commercial space and real estate.

In the past, we've come to the city planning meetings regarding the proposed developments on the Green Hotel property and each project was rejected due to various reasons. It hardly seems that this new proposal is an improvement on the previous proposals with regard to the negative impact on the neighborhood, the streets and the historic property that would surround it. 1

My wife and I strongly oppose this property development proposal, however we would be in favor of a much more modest structure. The proposal at hand does not take into regard the residents of the Hotel Green nor the safety of families that enjoy the playground on the corner of Dayton and Fair Oaks.

In addition, Dayton is a narrow street where cars are often at a stand-still as just with Central Park traffic alone. It's unimaginable to consider a structure with parking and commerce of this size on this corner. I strongly urge you to reconsider moving forward with this project for the good of Downtown Pasadena and it's residents.

Sincerely,

Shannon Gold
99 South Raymond Ave.
Pasadena, Ca 91105

Shannon Gold
212.361.9633

Letter I-23

Johnson, Kevin

From: Timothi Jane Graham <timothiphoto@gmail.com>
Sent: Wednesday, May 05, 2021 3:21 PM
To: Johnson, Kevin
Subject: 86 S. Fair Oaks Project

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

Kevin Johnson
City of Pasadena
Senior Planner
175 N. Garfield Ave.
Pasadena, CA 91101

Dear Mr. Johnson,

I and my husband have been living at The Castle Green for about 7 years now. One of the reasons we moved to this building was for its historic value as its one of a handful of buildings in the country on the registry of historic landmark places. Central Park and its environs are a welcome respite from the busy streets of old town Pasadena.

We were shocked, dismayed and disappointed in reviewing the current proposal for the space next door on Dayton. Not only is it larger in scope than the previous project that had been proposed, but it also flagrantly oversteps the objections that had been raised for every single iteration at every single planning meeting we have attended over the years. The number of units, which have always been disputed, have now increased by 25%. The parking structure, which was always problematic, has ballooned to accommodate this. On a very narrow street this would create a huge problem for not only traffic but the park, its visitors and the children that play there. It seems unrealistic. It's already a problem as is with 2 cars not being able to share the street and traffic piling up to turn onto Raymond or Fair Oaks. How can that possibly work with 84 units? It seems untenable.

1

We understand that something must be agreed upon and commerce is welcomed, but this seems like such a gross overreach and not at all what Colonel Green intended, despite how the developers, Goldrich Kest, are trying to frame and market it. This is much too large and ambitious. This would harm the structure of the original buildings and would take away much needed common areas for the elderly that live next door as well as creating an untenable living situation for the current residents that live here. This also includes all those, including children, that enjoy Central Park (originally grounds for The Castle Green). We're hoping we can come to an agreement on something a little more modest in scope that won't be as destructive and which everyone can live with.

The Castle Green is an iconic structure and whatever lives alongside it should be carefully considered. There are so few places that completely exemplify the history of this wonderful old town better than this one of a kind building. She deserves to be protected and treated like the treasure she is.

Sincerely,

Timothi Jane Graham
99 South Raymond Avenue
Pasadena, CA 91105

Letter I-24

Dear Kevin,

May 6, 2021
2:10PM

Having been a part of this project since the Scoping Sessions, I have some comment and many questions, centering on how we got to this point. Mainly, how this project has progressed through the Planning Department prescribed process. My comments and questions have to do with the in-meeting questions and answers during the Design Commission Hearings and City Council Meeting on the topic. 1

DESIGN COMMISSION AS REVIEW AUTHORITY

I would like to start with the description of the process given by you at the start of the Scoping Session on April 8, 2013. Since there are no Entitlement issues with the proposed development, the project did not go before the Planning Commission for that purpose, "It was determined it would be more appropriate to have the scoping session before the Design Commission. Because the Design Commission will be the Ultimate Decision Maker for the project". You further stated on March 11, 2014, "The only Entitlement required for this project is Design Commission Review. CEQA applies to discretionary projects only. Because this project requires Design Review, this is a discretionary project" (paraphrased). My question is, does the SCEA completely trump the CEQA process and the City of Pasadena project review process that you and David Reyes stated was the case for this project?

I understand that the SCEA has an anomaly about it where ONLY an elected body can approve it. However, I also understand an elected body, the City Council, has the discretion NOT to be the ones to approve the SCEA thus allowing the project to finish the course it has been on since before the inception of SB743 and the resulting SCEA review methodologies. For example, the first question asked by a commissioner after the presentation you gave at the RDEIR hearing on February 24, 2015, (I believe it was Commissioner Loomis, he was not announced for audio) had to do with Traffic Methodologies used since a new (less rigorous) method had been approved in the intervening months (December 2014) before the initial March 11, 2014 DEIR hearing. You categorically stated that, the traffic methodology in use at the time the project was submitted for review would be the determining methodology used in traffic calculation. David Reyes then added to this fact that not only would the traffic calculation method stay the same, but the "review authority" would stay the same and remain with the Design Commission per CEQA. He said this, even though an ordinance bringing the City into compliance with a new state law requiring a shift of final review to an elected body was approved that same December of 2014. Mr. Reyes then doubled down on this assertion in response to a question from Dianne Patrizzi asking if the FEIR would be certified by the Design Commission or another body. The response was clearly the Design Commission would be the Certifying body since those were the rules and guidelines in place at the time the project was submitted for review. Logic would dictate that if the vested authority to Certify a project, would stay with the Design Commission, even though there was an intervening ordinance to the contrary, would not the City Council defer to the Design Commission and not engage the SCEA process due to project consistency? Isn't project consistency a hallmark of CEQA vested authority in the Design Commission? 2

ECONOMIC FEASIBLITY

Another question I had concerned Mitigation Measures about comments made in response to a question from Commissioner Barar during the 2015 RDEIR hearing. He asked about the Alternative of a smaller project scope. The reply you gave was that it is was not economically feasible. In quantifying the economic feasibility, or infeasibility of a project as put forth by Mr. Skidmore in his EIR, and as part of Planning Department Staff review, is there a published Table on this specific Feasibility Study? Or is the determination on this matter taken directly form the Developer? I am asking this question because it is not understood how a 35% increase in the size and scale, number of units and parking spaces, figures into this Alternative finding. In other words, where is the delineation between economic feasibility and infeasibility? Should there be unbiased analysis? Is it the developer determined economic feasibility number that gets rewarded by 35% by reason of the Transit Corridor SCEA overlay? Or is there a reasonably determined economic feasibility number that the 35% gets added too? If there is not, why include this determination in the EIR feasibility? Why not just say, "because this is not the maximum allowed and we want the maximum allowed"? The arbitrariness of the Economic Feasibility Alternative, coupled with the 35% Transit Corridor Increase, should correlate with CEQA required developer mitigation efforts, and they obviously do not. I raise this Economic Feasibility (or Infeasibility) issue because it was brought up numerous times by Commissioner's in their questions concerning various aspects of the project. 3

DESIGN COMMISSION ORIGINAL PROJECT QUESTIONS FROM 2011

There were seven separate concerns voiced by the Design Commission in 2011 that were reiterated by you in the July 14, 2015 FEIR presentation.

- Historic Status Impact for Block and Adjacent Buildings
- Legal Subdivision concerns
- Parking access and open space
- PFD turnaround space
- Non-biased Analysis on National Registry Listing Implications for the Entire Block and adjacent buildings
- Mass and height subordinate to adjacent Historic Resources per Sec. of Interior Standards (John Byrum question and comments at completion of Architects presentation as well as Architects response, includes item 7) 4
- Architecture of the building matching (or not) the 1902 rendering

Also from Staff: Tree protection Ordinance enforcement. (10 trees, which received much discussion, is now changed to 27 trees removed under the SCEA).

Did these concerns translate into the larger SCEA project? If so, where? Are Staff responses in July 2015 negated? Should not these concerns be addressed? Will they be addressed by City Council prior to a vote on the SCEA, (if it goes first to City Council)? I am bringing this up keeping in mind the Review Authority comments made in 2013, 2014 and 2015 by yourself and David Reyes in the Design Commission hearings.

CONTINUOUS USE OF DATA FOR THE DEVELOPMENT AT 86 S. FAIR OAKS AVE.

The reason for bringing up all this information that was presented to the Design Commission in 2011, 2013, 2104, and 2015 is you seem to indicate that the Application made to the Design Commission on October 24, 2017 is somehow "new", indicating that it is a "preliminary application for a new development". I am not sure how that is possible. On the City of Pasadena Archive website, there is no Agenda listed so I cannot see who the applicant is. I do not believe it matters if the Applicant for this particular hearing date is a different name as there were different applicants for the continuation of hearings on 86 S. Fair Oaks Ave.

5

But more importantly, as others will point out in their comment letters, you use data from past hearings on the Hotel Green Apartments project, that is now called the Central Park Apartments project. Starting with your opening comments on October 24, 2017 Design Commission Hearing, you cite "a previous study of Cultural Resources" when referring to the demolition or moving of 27 trees. Even the 35% increase is predicated on the original scope of the project that was dealt with in the previous six years of Design Commission hearings.

I think it is safe to say that all the data used under the SCEA application comes from the original Hotel Green Apartments application. Therefore, the entirety of the Design Commission comments and recommendations must stay current with the project and indeed the Review Authority itself ought to stay vested with the Design Commission as specified by CEQA and reiterated by you and David Reyes. For example, there was much discussion of subordination to historic resources by commissioners (John Byrum in particular) of which the height was an important aspect. Now, instead of the 75' height being a mitigated as a subordinate to historic resources feature, the complex has an "average" height of 75', it is unclear what that means but it sounds much taller than 75'.

CONCLUSION

It is disingenuous to infer this is a "new project". Changing the name of the project, or even the applicant's name, (since it was done previously for the Hotel Green Apartments Project) to seek approval under a new review regimen, the SCEA, and the vested authority in it, is a thinly disguised attempt to circumvent all relevant issues and concerns shared by the Design Commission as well as the public and of course, the fact the FEIR that was before the Design Commission was never certified.

6

Best regards,

Jack Green
General Manager
Castle Green
99 S. Raymond Ave. Pasadena CA 91105
626-793-6314 www.castlegreen.com

Letter I-25

4.15.2021

I Think The Siting
area at The back entrance
of The Gran Hotel Apts
should remain open for
residents to gather a
feel safe & conduct
communal activities
such as dining and
exercising or just socializing
in an open air space
That is safe from intruders.

Sincerely
Peter C. Hartgen
Apt 202 of Gran Hotel
Apartments

1

Tel# 626.794.3245
4.15.2021

Letter I-26

Johnson, Kevin

From: Mo Henry <therealmohenry@gmail.com>
Sent: Tuesday, May 04, 2021 9:27 AM
To: Johnson, Kevin; Mo Henry
Subject: The Castle Green Project

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

Dear Mr. Johnson,
I am a resident and condo owner at The Castle Green on Raymond Avenue.
I am very concerned about the impact that G&K's construction will
have on our historic property. Despite the fact that some new construction approvals have been streamlined because of the SCEA rules, I implore you to consider the historical importance of our building, and the true original vision that Colonel Green had for the property. He never would have foreseen the concept of underground
parking structures, and the possible damages that could occur 120
years into the future, by digging so deeply and close to the Castle's foundation, nor would he have wanted the original building to be
put in permanent shade by a new one.
Please consider us, your current constituents, who have already invested in this wonderful property, who have been paying our taxes
and caring for our places within the constraints of the historical requirements.

1

Respectfully,
Maureen Henry
99 S Raymond Ave Unit 307
Pasadena, CA 91105
323 543-1000

Letter I-27

Johnson, Kevin

From: Rich <richhockens@yahoo.com>
Sent: Thursday, May 06, 2021 2:43 AM
To: Johnson, Kevin
Subject: Central Park Apartments / Castle Green

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you know the content is safe. Report phish using the Phish Alert Button. Learn more...<https://mydoit.cityofpasadena.net/sp?id=kb_article_view&sysparm_article=KB0010263>.

Dear Mr. Johnson,

My name is Rich Hockens and my parents own unit 203 at the Castle Green . Their unit faces west and will be directly looking at the CPA structure.

Understandable much opposition has been expressed now and over the years regarding the proposed development. While the Goldrich Kest firm should utilize their property to its fullest potential it must also consider the impact on the Castle Green , other structures, people, and environment.

Could a architectural compromise be made to limit stories , number units and the like as well as addition of trees / other plant materials to soften the view between the Castle Green and the CPA - I'm not apposed to development as long as measures are taken to the sensitivity of the particulars stated above - 1

I'm concerned the impact to the adjacent building with mentally challenged adults in blocking their view as well as on going noise of construction may be most distressing. Perhaps GK could replace those windows with double pane or other options to lessen sounds while simultaneously updating GK own real estate structure.

With some efforts by GK to minimize these effects it would make GK look most environmentally responsible to the greater good and the Pasadena community while still pursuing their endeavors!

I'm fervent working together every party can prevail and ultimately provide a positive outcome that enhances life in Pasadena!

Thank you for your time and support!

Best.

Rich Hockens

Letter I-28

Takeda, Michi

From: Doug Ingoldsby <allone@west.net>
Sent: Wednesday, May 05, 2021 7:58 AM
To: Johnson, Kevin
Subject: Development around the Green Hotel

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you know the content is safe. Report phish using the Phish Alert Button. Learn more...<https://mydoit.cityofpasadena.net/sp?id=kb_article_view&sysparm_article=KB0010263>.

I was born in Pasadena in 1949.

I love the Green Hotel.

I am OPPOSED any development that would obscure the view of this Historical building.

1

Sincerely,

Doug Ingoldsby

Letter I-29

NOTES

April 23, 2021

Dear Sirs:

I am writing this note to ask you "PLEASE" not to build any apts behind the Green Hotel.

I am 77 years old and have lived in the Green Hotel for 11 years.

Almost all people that live in the Green are over 75 years old.

1

Letter I-29

NOTES

We don't need or want all the noise and disrpatent that this would cause all the Seniors that live here. Our view would be blocked by the apts. Seniors are protected by rights and laws. Please help us!!

Thank You

Kenneth Keith

Apt #211

1

Letter I-30

4/28/21



My name is Cynthia Kelly. I live in the Green Hotel Apartments #627.

I am against the development of this new apartment complex.

Not only would this take away our parking lot, but spoil the view of Old Town & Central Park.

The construction of this development would cause considerable noise pollution, and air pollution →

1

Letter I-30

which would be harmful to tenants of the Green Hotel who have health issues. I, myself, have allergies and asthma which would be worsened by the construction of this complex.

I am against this project.

Sincerely,

Cynthia A. Kelley

1

Letter I-31

Takeda, Michi

From: Deborah Lingrey <dlingrey@gmail.com>
Sent: Wednesday, May 05, 2021 8:47 AM
To: Johnson, Kevin
Subject: Proposed development around the Hotel Green and Castle Green

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

Dear Mr. Johnson,

The Hotel Green/Castle Green and surrounding area bounded by Fair Oaks, Green, Raymond, and Dayton should be restored and preserved without the planned construction of multi-use structures.

I understand that Castle Green would remain largely untouched by this proposed project. However, the disruption to the century old architecture and landscaping, the loss of green space, and the jarring addition of the buildings (and, of course, necessary parking) would be an affront to the history of the area. There are larger questions of the wisdom of continuing to build up-and-out given water/conservation issues, infrastructure considerations, etc. as well.

Although I am currently retired and living in Arizona, I still love Pasadena. I was born at the Huntington Hospital where my dad was a pathologist. I grew up in South Pas, went to nearby Occidental College, worked part time for my dad's lab on Madison, and lived on Craig Ave. before my marriage. Even after moving away, my husband and I made many return visits, first with our children and, in recent years, to attend family and school reunions. During all these stages of my life, I have loved driving through Pasadena. There have been many changes to the city, especially in the business and shopping districts, but I have always felt that Pasadena's history, graciousness, and "vibe" have been prioritized and maintained. 1

The decisions made about this project should reflect what the city truly values. The entire Hotel Green/Castle Green area is one of Pasadena's treasures. Please protect it.

Sincerely,

Deborah Lingrey

Letter I-32

Takeda, Michi

From: Kim M <kimdance54@gmail.com>
Sent: Wednesday, May 05, 2021 7:21 AM
To: Johnson, Kevin
Subject: Stop Green Hotel development

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

Dear Mr Johnson,
As a 66 year resident I am tired of Pasadena allowing ugly unnecessary buildings to go up. Let's keep our city beautiful. Demand more from greedy developers. 1
Thank you,
Kim Mischook

Letter I-33

Takeda, Michi

From: Krista Moll <kristamoll@gmail.com>
Sent: Thursday, April 15, 2021 11:24 AM
To: Johnson, Kevin
Subject: Central Park Apartments Project

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

Hi Kevin -

I am writing today about the Central Parks Apartment Project. I think it's absolutely obnoxious to even be considering a 84 apartment, 6 level, live and commercial space at 86 S. Fair Oaks Avenue.

That area is already over congested and to overwhelm the corner that currently holds about 50 parking spots??!?? The proposed195 parking spaces is not nearly enough for the 84-168+ cars needed for the apartments alone, let alone staff and commercial workers. And the regular traffic that is already congested, especially with Station 31 just kitty corner from this proposed project. 1

I highly object to the Central Park Apartments Project. I think it will turn into another Pasadena nightmare like Marengo Avenue and other spaces where single family or smaller use turns into monstrosities.

Please stop destroying Pasadena. If you insist and the city council insist on destroying though, many more pedestrian walks and stop lights MUST be installed along Fair Oaks and Raymond in order to save lives and assist Station 31 in doing their job.

Thank you,
Krista Moll
Resident of Pasadena for 20+ years

Letter I-34

April 30, 2021

To Whom It May Concern (and I Hope to God It Concerns Someone):

I am a resident of Green Hotel Apartments and am again saddened, frustrated and angered at the looming possibility of a grisly eye sore new apartment building rising like Godzilla in the parking lot of my apartment building.

The Green Hotel is over a century old. Unlike Europe or other parts of the world, we don't have centuries old castles and churches or other landmarks. So when we have a landmark building with even presidential history that is over 100 years old we need to respect it, treasure it and protect it from forces that don't care about history and aesthetics.

I imagine there is a small argument to be made for job creation (not permanent and not a lot), more taxes for the City of Pasadena. But in the end the benefit will be to a small group of people or company, and the benefits do not outweigh the gargantuan costs.

Perhaps it sounds overly dramatic, but it's not. When you're driving or walking north on Fair Oaks from blocks below the Green Hotel Apartments you first see the top of the building with its dome and you see that mountains that Fair Oaks seem to rise to. Then, more of the building comes into view with Central Park. As you go by, it almost looks like the park and the Green go together, because the back of The Green has those tall, grand old trees. To me it's beautiful and majestic, and it's made me proud to live in the building. That view will be obliterated.

The obvious reasons and impact for the residents of The Green are: trees will come down, the view will be blocked for the residents on the

1

Letter I-34

south side of the building, parking problems, and the green and open area that residents enjoy will be taken away. Its obvious the developers couldn't care less about the residents of the Green Hotel Apartments.

For the most part, apartment buildings are not known for their architectural wonder. They're slapped up for developers to make money. The apartment building across the street on Fair Oaks was quickly built and is just another non-descript building. There are multiple blocks of newly built apartment buildings just west of Fair Oaks and below The Green. We get it. Old Town Pasadena is "Hot" property, but you need to draw a line between greed and heritage & beautiful architecture

I know, I would put money on it, that if you could post a message on the billboard in the parking lot of the Green that asked passers-by if they wanted a new apartment building that would block the view of the majestic Green Hotel and bring down those beautiful old trees they would vote "NO," they would text "NO," they would hastag "NO."

Please, please say "NO" to this project ONCE AND FOR ALL!

Most Sincerely,
Lisa Montijo
LISA MONTIJO
Unit 316

1

Letter I-35

City of Pasadena
175 N. Garfield Avenue
Pasadena, CA 91101

May 6, 2021

Attention: Kevin Johnson, Senior Planner, City of Pasadena
kevinjohnson@cityofpasadena.net

Regarding: The Proposed Central Park Apartments Project, located at
86 S. Fair Oaks Avenue, Pasadena

Dear Mr Johnson,

As a 20 year resident of the Castle Green and current HOA board member I am writing to express concern regarding the Proposed Central Park Apartments Project. I live on the west side of the building and understand from a massing study by our present HOA board chairman, John Cambianica, that the height and width of the proposed apartment building will result in the west side of the Castle Green being in shadow all year long.

Another, more major concern the owners and residents have is that due the size of the carpark and the number of floors, a hole 60-80 feet deep will be dug to lay the foundations of proposed building, which is alarming because of the close proximity to the Castle Green. We are concerned that this will have an effect on the stability of the Castle Green building and its foundations, and will lead to seismic safety issues in the future. I respectfully request that a proper study be carried out to determine the impact of digging such a deep hole in such close proximity to our building, and the potential effect on general and seismic stability of the Castle Green.

1

Lastly, there is already traffic congestion on Dayton St. A large subterranean car park of over 180 car spaces for this new project will create havoc for drivers along this small street and increase the danger to pedestrians who cross Dayton regularly to use Central Park. I believe the impact of this carpark on traffic flow and pedestrian safety should also be properly documented.

The Castle Green is one of Pasadena's most well-known landmarks and historic treasures. It appears to be threatened by an ill-conceived, poorly designed building for which the approval is being rushed through. I hope that City Planning will act to protect the Castle Green, and will require Goldrich & Kest to design a more modest block of apartments with a smaller footprint.

Yours sincerely,

Margaret Morgan, Apt 503.
HOA Treasurer.

Letter I-36

Kevin Johnson
Senior Planner, SCEA
City of Pasadena
April 5, 2021

Dear Mr. Johnson,

We are Primo and Rachel Peña and we have been living at Green Hotel Apartments for more than twenty-one years.

We like our home due to proximity to many of our needs. We are healthy for many reasons: Sunshine and fresh air from open windows giving us Vitamin D; We hear the chirping of birds, we see the beautiful architecture of Castle Green, the Huntington Memorial Hospital with red lights in the evening, the plants, trees, and flowers we smell, getting Chlorophyll from them, etc. etc.

Due to pandemic I and many residents of the Green Hotel decided to form a group (Filipino and other ethnicities such as Latino, Chinese, American, Native American, Blacks and many more) called "Maski Papaano" for short "Maski Pap's" meaning anything goes to different kinds of music. We move, dance to the tune of music. Not only we dance, exercise, move, walk around the courtyard pavement but we voluntarily bring simple snacks once in a while and we like eating, socializing with one another. And these activities are taking place in the courtyard, near the Parking lot, an open space which exactly the place you plan to build huge apartments.

You definitely will rob us of the beautiful courtyard where we develop our body, mind and spirit. Our family comes to visit and chat with us on this safe, healthy, greenery environment.

Please we beg you to stop this selfish ambition from your brothers and sisters who are also having health issues such as heart failure, diabetes, etc. and need quietness + peace. We will suffer from noise and Congestion, the fact that most of us are elderly. Kindly make us enjoy our daily lives God has given us.

So we end our letter with message of STOPPING this project you intend to build !! We believe the good Almighty God will be on our side. The triune God bless us all !!

Love and more power, Primo & Rachel Pena, 626-568-9208

Primo & Rachel Pena
RM. 524
50 E. Green St.
Pasadena, CA 91105-2039

1

Letter I-37

Kevin Johnson, Senior Planner
Planning and Community Development Department
Planning Division Design & Historic Preservation section
175 North Garfield
Pasadena CA 91101

April 10, 2021

Regarding Central Park Apartments SCEA
86 South Fair Oaks

Hello Mr. Johnson

I am writing to express my concern for the existing Historic Resources Castle Green and the Hotel Green with this new construction project and would like to request attention to the Resource Protection topic in the Daft SCEA under review.
The proposed garage is currently shown at 4 levels and the outline comes quite close to the existing structures. The underground parking is 13' (15' on plan 13' on text) from the Castle Green Dining Room for 4 levels (anticipated grading to 44' plus footing depth per figure 2.0-28.)

My comments and suggestions are to address the Protection of the Historic Resources.

Recommended Castle Green and Green Hotel Protection

Any Contractor's working on Castle Green of Green Hotel should have:
Contractor's Qualifications:

- Company literature, resume or other professional documentation that demonstrates compliance with the specified qualifications.
- List of recently completed projects including project name, location, name of owner, reference contact name and phone number, and a description of work performed by the conservator for the project. Minimum of 5 projects of similar size and complexity.

1

Independent Conservator on site and reporting to City and HP once a week. Secretary of the Interior Standards for acceptance of firm or individual.

Protection Plan for Historic Resources reviewed by the City and Pasadena Heritage (owner of easement) and signed by Independent Conservator. This would layout the plans & details including hard board protection on certain elevation elements in danger.
Existing Condition Documentation of Historic Resources: Clear photos and/or video documentation to assess if damage occurs.
Contractor to provide an Emergency Response Plan, including a phone tree for notification including Pasadena Heritage.

Closeout Submittals to include two copies of Conservation Records prepared for City and Pasadena Heritage:

Final Documentary Photography of protection
Final Existing Condition Documentation of protected items

PROTECTION MATERIALS

Furnish archival materials for protection of historic fabric. Provide necessary and related parts, devices and anchors required for complete protection installation. Rigid protection shall be provided of sufficient

protection shall be provided to prevent surface damage including from materials or products which may stain surfaces. Protection materials will permit moisture evaporation to prevent biological growths. Protection materials may include but not be limited to:

- Polyethylene Sheet: 4 mil.
- Plywood: 1/2 inch or ¾ inch fire retardant, exterior grade.
- Soft Fiberboard: 1/2 inch Homasote, Class A fire-resistant.
- Neoprene: 1/4 inch or 1/2 inch stock sizes.
- Bubble Wrap: 1/2 and 1 inch air pockets.
- Polyurethane Foam Sheets: 4 inches thick.
- "Preservation" Tape and Plastic Film Tape.
- Acid free, unbuffered paper.
- Cardboard sheet or roll: Ramboard or equal.
- Foam-core board.
- Coat wood storage crates with non-oxygen permeable film or epoxy resin (minimum of 30 days prior to packing materials).
- Breathable, weather resistant sheet: Dupont Tyvek Commercial Wrap 1162B or equal.

PROTECTION EQUIPMENT

2

- Furnish temporary equipment as required to maintain temperature and humidity required for protection of historic finishes and materials sensitive to fluctuations in temperature or humidity.
- Contractor may provide computer modeling or other predictions/projections of moisture content or thermal characteristics as necessary to confirm the environmental conditions and/or that substrate will be in a stabilized interior environment prior to application of repairs/restorations that may be adversely affected by fluctuations in temperature or humidity.
- Requirements for protection adjacent to work:
- All historic concrete and plaster will be protected from damages from sustained percussive activity, sudden impacts, abrasion, all acid-based materials and materials which may stain the surface.
- Protection materials will be installed in such a way that historic materials and finishes are not damaged. Historic materials will be protected from exposure to elements during repairs.
- Infill materials in direct contact with surrounding historic materials will be compositionally compatible.
- Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of areas of work.
- Protection materials shall not attach to historic fabric. If no other attachment is possible, indicate in Protection Plan conditions where attachment to historic fabric is unavoidable. Attach to existing joints or to non-exposed portions rather than to finished faces. Installation of protection devices that require attachment to adjacent historic surfaces shall be supervised by Conservator. Attachments to historic fabric shall be made by persons qualified to work on that material. Details of protection material shall be shown in the protection plan.
- Maintain protection devices in sound condition until completion of the Work.

- Repair or replace protection devices as necessary to maintain effectiveness of protection. In-place protection devices shall be reviewed periodically by the Conservator and any non-conformance shall be documented in Conservator's weekly field reports.
- In event of new damage, use Emergency Response Plan and inform Architect immediately and report in writing a description, nature and extent of damage and proposed method of repair. Contractor is responsible for repairs and recreation of newly damaged items to Architect's satisfaction at no additional cost to Owner and in the approved methods of the Secretary of the standards.

MONITORING

- Monitor grade at adjacent footings that are to remain. Monitor by providing spot elevations at corners and every 20 linear feet monthly for the duration of the work. Conservator is to review updated surveys weekly as part of routine field reports. Notify Architect of noted movement.
- Monitor environmental conditions of the Castle Green and Green Hotel. Monitor using temperature and humidity equipment. Conservator is to review updated surveys weekly as part of routine field reports and implement environmental modifications such as heaters, fans, or humidifiers as determined necessary by the Conservator.
- During periods of rain, make daily observations of the structure and immediately implement procedures to protect the structure and new work where water infiltration is observed. Correct and clean up water intrusion including dehumidifiers, fans, or other instrumentation required to
- correct the environmental conditions and prevent the growth of mold and mildew. Emergency Response Plan if historic materials become soaked.

2

HISTORIC FINISHES PROTECTION MONITORING:

Provide salt analysis of efflorescent materials observed using Merck indicator paper strips. Reporting:

- If chlorides are found, report presence and take precautions to stabilize internal environment. Deliquescent materials can absorb relatively large amounts of water from the atmosphere to form a temporary liquid saline solution and, as the atmosphere becomes drier, the salts recrystallize and grow with each cycle damaging presenting finishes. Internal atmospheres should not fluctuate between cold-dry and warm-moist.

These protection directives come from my work as an Architect in the Historic Preservation Field. You never think a disaster will happen until it does.

Best Regards,

Andrea Rawlings
375 Anita Dr.
Pasadena, CA

Letter I-38

Adam Relin
317 Carroll Park West
Long Beach, CA, 90814

May 4, 2021

VIA EMAIL AND U.S. MAIL

Kevin Johnson
Senior Planner, Planning & Community Development Department
175 North Garfield Avenue
Pasadena, California, 91101
(kevinjohnson@cityofpasadena.net)

RE: Central Park Apartments Draft Sustainable Communities Environmental Assessment ("DSCEA")

Dear Mr. Johnson:

As a frequent visitor to Central Park, and a patron of the various businesses in Old Town Pasadena, I am concerned about the effects of the proposed Central Park Apartments ("Project") on the park and the community. These concerns include the environmental effects of the Project on traffic, historic resources, and recreation uses. The DSCEA does not adequately describe such potential effects, and fails to include meaningful mitigation measures. The DSCEA should be revised and reissued for comment, and the Project should be reevaluated in light of the environmental effects and public comments. 1

1. The Project Scale and Design Will Have A Significant Effect on the Old Town Historic District

Before addressing specific comments on the DSCEA, a more general comment on the Project context. Old Town Pasadena is a regional shopping and entertainment destination, bringing both urban life and tax revenue to the City of Pasadena ("City"). Adding residential density near effective public transit is an excellent planning goal, but it is important to make sure that pursuing it does not result in damage to the qualities that make the area desirable to future residents and visitors. The predominance of historic buildings in the area, and their successful 2

restoration and reuse, is a significant, perhaps primary, reason that Old Town is an attraction. No one needs to travel across Southern California to shop at the Container Store or dine at Cheesecake Factory - those amenities can be found near home. People are drawn to Old Town to visit those stores and others because of the unique ambiance of the old buildings, varied storefronts, and modest scale. But these are delicate qualities that can be diminished or destroyed by incautious planning decisions. The historic value of the district is supported by the high proportion of historic buildings. Diluting that concentration will affect the resource; at some point if the historic district is surrounded by, and infilled with, an excess of larger modern projects it will lose its special quality. That it may be difficult to quantify "ambiance" does not absolve the City from considering the issue. 2

Adding the large Project immediately adjacent to the City's signature historic landmarks, in conjunction with other residential developments that have been approved or are under construction in or near the Old Town district, will significantly change the historic district. The City should evaluate these effects, which were not addressed in the Central District Specific Plan, including reducing the value of the district as a regional shopping and entertainment district, and consider reduction in the scale of the Project to keep it, and similar projects, from overwhelming the historic district.

2. Increased Traffic, Particularly on Dayton, Will Significantly Affect Central Park Users

All of the Project traffic will be moved through Dayton Ave., the small access road that borders Central Park. This street is the access point to the park for many visitors, and the safest close parking place for parents who bring their children to the play area located along Fair Oaks just near Dayton. Increasing traffic here will endanger pedestrians, and have significant noise impacts on the park. Reduced air quality, including local CO impacts, will have significant heath effects on children using the play area. The DSCEA fails to address these issues. 3

Further, the DSCEA does not provide necessary mitigation for the transportation impact of the increased traffic. The Transportation Report concludes, "Dayton Street between Fair Oaks Avenue and Raymond Avenue exceeded the adopted segment impact caps. Conditions to reduce project vehicular trips are required." No such conditions are evident in the DSCEA. The City should devise such conditions and should consider requiring access to the Project from Fair Oaks rather than Dayton.

3. The Project Will Have A Significant Impact on Historic Resources

As the DSCEA acknowledges, the Project is smack in the middle of an essential concentration of historic properties. It is not only within the Old Town historic district but actually part of a separately listed historic site included on the national and state lists and designated as a landmark by the City. In spite of this proximity, the DSCEA pretends that a massive new building will not have any effect on the historic qualities of the site.

One of the unusual and valuable things about the Hotel Green/Castle Green site is the fact that it occupies an entire block within the larger historic district. The parking lot at the Project site is modern, of course, but it is essentially open space which does not detract from the impression that the block is much as it was in the past. Unfortunately, the height and mass of the Project make it a co-equal presence on the site with the historic buildings. This changes the listed site from a place that looks very much as it was a century ago into a place that looks about half new. As the impact standards mentioned in the DSCEA explain, an addition to a historic site "needs to be subordinate to the historic building." (DSCEA, 4.0-68) In its current form the Project is not "subordinate" and this results in a significant impact. 4

Practically the only potentially significant impact acknowledged in the DSCEA is the effect of vibration from construction on the adjacent historic buildings. Even here, the document is careless with historic resources. It's simply implausible that the Hotel Green, at 20 feet from the construction, will be affected by vibration, while the Castle Green, at 40 feet, will not. Vibration caused by excavating four levels of parking, and constructing a large new building will not suddenly dissipate at 39 feet away. The mitigation measures for vibration should be expanded to include Castle Green. 5

4. The City Should Require Meaningful Transit Oriented Features

The City does not appear to be serious about achieving an actual transit orientation in this "transit oriented development" Project. The Project relies on its proximity to stations on the Gold Line in order to justify limited environmental review under CEQA. While the Project may meet the very basic residential composition and location near transit criteria for Transit Priority Projects ("TPPs") under SB 375, merely meeting the statutory definition of a TPP is not enough to effectively promote transit use. Yet the City seems willing to simply wave toward the rail 6

stations and say "there, see, it promotes transit!" If the Project includes any specific measures to advance transit use, they are not prominent in the DSCEA.

The most obvious source of helpful measures is in the list of mitigation measure from Connect Socal, included in Appendix A of the DSCEA. Mitigation Measure PMM-TRA-1 includes measures that the City might impose to reduce travel demand and increase transit use. The DSCEA explicitly rejects application of these measures, without meaningful explanation. The City should require the Project to include features from this measure, or from the many other available resources, that actually promote the use of transit. 6

Another significant way the City could promote transit use in its TPPs is to limit onsite parking. If the City expects residents at the Project to use the excellent transit facilities right on their doorstep, then those residents do not need the four levels of underground parking called for by the Project. Reducing this parking, would reduce traffic, noise, and construction impacts of the Project, as well as encouraging transit use.

5. <u>The DSCEA Does Not Adequately Describe The Project</u>

The fundamental purpose of any environmental review document is to inform the public and the decision makers of the potential effects of the project. To do this, the document must clearly describe the project. The DSCEA, however, is not clear about the Project and presents confusing and contradictory information. Some examples include the following.

a. The DSCEA does not present any context for the public to understand the history of the Project. Apparently the Project is not a new proposal at all, but rather the revision of a prior 64 unit proposal by the same developers. The DSCEA makes no mention of this history. No discussion of the issues with the environmental review for that version of the Project, or the concerns with that plan or its rejection in 2015. No explanation of how a Project for which an EIR was prepared now qualifies for limited review even though the revised Project is substantially larger. Neither the public nor the City decision makers can adequately understand the Project without explanation of these issues. 7

b. The explanation of impacts on trees is badly muddled. The impact analysis says there are 31 trees on site (DSCEA, 4.0-39). But the associated Table 4.4-1 lists only 28 trees. The Project Description says there are 21 trees on the Project site (DSCEA, 2.0-5). And Figure 2.0-4 appears to show 38 existing trees. In presenting the landscape plan, Figure 2.0-32 asserts that 19 existing 8

trees will be preserved, but actually lists only 12 preserved trees. How many trees are there? How many will be retained? How many new trees planted? Even though there is an additional review process under the City's tree ordinance, the DSCEA must be able to present these basic details to the public. Further, because of the relationship of the Project to Central Park, the landscape plan is of particular importance in evaluating the impact of the Project on the visual and recreational resources of the park. 8

c. The description of the Project is inconsistent. Is it six stories and a "mezzanine" (DSCEA, 2.0-16), or six stories and a penthouse (DSCEA, 4.0-70)? Is there both a mezzanine and a penthouse? Which assumption is reflected in the description of the building height and mass? 9

While the City's plans suggest that infill development is an appropriate use of the Project site, the scale of the Project is too large to fit comfortably into the landmark historic site or the larger historic district, resulting in effects not adequately covered in the DSCEA. The City should consider a reduced project as a way to mitigate Project impacts. 10

Thank you for the opportunity to review the DSCEA.

Very Truly Yours,

Adam Relin

Letter I-39

City of Pasadena
175 N. Garfield Avenue
Pasadena, CA 91101

May 6, 2021

Attention: Kevin Johnson, Senior Planner, City of Pasadena
kevinjohnson@cityofpasadena.net

Regarding: The Proposed Central Park Apartments Project, located at
86 S. Fair Oaks Avenue, Pasadena

Dear Mr Johnson,

As a 17 year resident of the Castle Green and current HOA board member I am writing to express concern regarding the Proposed Central Park Apartments Project. I live on the west side of the building and understand from a massing study by our present HOA board chairman, John Cambianica, that the height and width of the proposed apartment building will result in the west side of the Castle Green being in shadow all year long.

Another, more major concern the owners and residents have is that due the size of the carpark and the number of floors, a hole 60-80 feet deep will be dug to lay the foundations of proposed building, which is alarming because of the close proximity to the Castle Green. We are concerned that this will have an effect on the stability of the Castle Green building and its foundations, and will lead to seismic safety issues in the future. I respectfully request that a proper study be carried out to determine the impact of digging such a deep hole in such close proximity to our building, and the potential effect on general and seismic stability of the Castle Green.

1

Lastly, there is already traffic congestion on Dayton St. A large subterranean car park of over 180 car spaces for this new project will create havoc for drivers along this small street and increase the danger to pedestrians who cross Dayton regularly to use Central Park. I believe the impact of this carpark on traffic flow and pedestrian safety should also be properly documented.

The Castle Green is one of Pasadena's most well-known landmarks and historic treasures. It appears to be threatened by an ill-conceived, poorly designed building for which the approval is being rushed through. I hope that City Planning will act to protect the Castle Green, and will require Goldrich & Kest to design a more modest block of apartments with a smaller footprint.

Yours sincerely,

Magnus Stark, Apt 504.
Castle Green, Board of Directors

Letter I-40

Takeda, Michi

From: Patty Swenson <mpswen45@gmail.com>
Sent: Wednesday, May 05, 2021 7:11 AM
To: Johnson, Kevin
Subject: History

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you know the content is safe. Report phish using the Phish Alert Button. Learn more...<https://mydoit.cityofpasadena.net/sp?id=kb_article_view&sysparm_article=KB0010263>.

1

Please take care of the history of Pasadena. Take care of the historic Castle Green!
Patty Stifel Swenson

Sent from my iPad

Letter I-41

Johnson, Kevin

From: Edward Temm <chiefyellowbear@dslextreme.com>
Sent: Thursday, May 06, 2021 5:02 PM
To: Johnson, Kevin
Subject: Central Park Apartments 86 S. Fair Oaks Pasadena Traffic Concerns
Attachments: Dayton street 9.JPG; Dayton street 8.JPG; Dayton street 7.JPG; Dayton street 6.JPG; Dayton street 5.JPG; Dayton street 4.JPG; Dayton street 3.JPG; dayton street 2.JPG; Dayton Street 1.JPG

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

To whom it may concern:
As a resident of the block where Central Park Apartments is to be built. I have concerns over construction noise.

I am extremely concerned about the increase of traffic and safety in Old Town particularly on Dayton Street between Fair Oaks and Raymond the street which often becomes congested throughout the weekdays and weekends with limited visibility and heavy traffic, sometimes with frustrated drivers, especially at the corners of Fair Oaks also at Raymond. Accidents are not that uncommon here are several pictures of a recent one. 1
thank you

Edward Temm


7BVG079
Santa Clarita AUTOS.COM
7WYT377
SUBARU Sportsman Oahu
Public Storage


Public Storage
www.casacars.com
California
7WYT377
SUBARU Sherman Oaks
(619) 424-3435
California
7BVG079
Ernie's AUTOS.COM




Public Storage


Public Storag




COMPASS


SABATELLA
AL ESTATE,
EDESIGNED.
ARMINE SABATELLA
COMPASS


THE SABATELLA GROUP
REAL ESTATE, REDESIGNED.
CARMINE SABATELLA
carminesabatella.com | DRE 01945152
COMPASS

Letter I-42

Johnson, Kevin

From: Amy White <amyelizabethwhite@gmail.com>
Sent: Wednesday, May 05, 2021 2:19 PM
To: Johnson, Kevin
Subject: Please Don't Approve the Current Plan for Addition/Expansion of Hotel Green

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you ***know*** the content is safe. Report phish using the Phish Alert Button. Learn more....

Dear Kevin,

I'm reading about the plans for the new addition to the Hotel Green complex and am shocked it is even being considered, especially in its current form. The developer of this plan has shown they can't take proper care of what they already own so why would Pasadena give them additional opportunity to deface one of the city's historical treasures?

They claim they are following the original 1903 vision of Colonel Green. That statement alone shows they can't be trusted with the project as their plans are nothing like the vision of Castle Green. They've thrown that out there with hope that people won't want to question the idea further. 1

At minimum, thorough public consultation needs to happen including from the historical perspective, seismic safety, traffic impact and environmental impact. And do it in person! Pasadena is opening up and we can soon attend these community discussions in person. The fact it is being pushed through like this shows just how little confidence the developers have in the ability of their plan to withstand such scrutiny.

The City of Pasadena cannot consider themselves a city of "... arts, culture, history, and architecture..." and at the same time approve this plan by the developer.
Please say no to plan.
Best regards,
Amy White

Letter I-43

Takeda, Michi

From: Julie Wofford <jwoff79@gmail.com>
Sent: Wednesday, May 05, 2021 5:47 AM
To: Johnson, Kevin
Subject: Stop the development obscuring Castle Green

CAUTION: This email was delivered from the Internet. Do not click links or open attachments unless you know the content is safe. Report phish using the Phish Alert Button. Learn more...<https://mydoit.cityofpasadena.net/sp?id=kb_article_view&sysparm_article=KB0010263>.

Dear Kevin and to whom it may concern:

I just read about this proposed development that would be 11 stories high and would block the views of our iconic and treasured Pasadena landmark The Castle Green.

What is Pasadena thinking? Do they have no pride or are they just greedy? Do the people making these decisions not live on Pasadena? I beg you all to consider and preserve our beautiful city of Pasadena! I have lived in the Pasadena area for 45 years and have been proud of our Crown City.

1

Please keep Pasadena Green!!!!

Thanks for your consideration.

Regards,

Julie Wofford

Sent from my iPhone

Concerning Proposed Development on the Historically Registered Block of The Castle/Hotel Green -

How is it that one of Pasadena's top three architectural treasures, *The Castle Green* and *The Hotel Green*, designated on *The National Registry of Historic Places* – the whole city block, from Fair Oaks to Raymond Avenues, Dayton to Green Streets – is yet again being threatened by the developer *Goldrich & Kest*, who plans to build an eleven-level structure, rising seven stories above ground right in front of Pasadena's iconic Victorian gem, and has the hubris to call their development Colonel Green's *"1903 Vision?"*

This view from Fair Oaks of The Castle Green…



This current 123-year-old-view from Fair Oaks of The Castle Green with its iconic turrets will be blocked out

1

…will be replaces with something like this:



…Glass, steal and sprayed-on stucco.

And an iconic “postcard” view of Pasadena for 123 years gone in the blink of an eye, for another towering high-rise mixed-use development.

When the Goldrich & Kest claim to be completing Colonel Green’s 1903 vision, take a closer look at the vision of Colonel Green’s from the building they will be shrouding from view.

This kind of detail, shown here on the western turret of Castle Green, was Colonel Green's Vision!

Look at the surface work, the varied window framing, the wrought iron…



The current 123-year-old view of Castle Green and its iconic turrets seen from Fair Oaks and the western half of Old Pasadena will be entirely obscured by this towering new proposed development, and several century old trees cut down.

A 123-year-old "postcard" view soon to be shrouded by a wall of glass and sprayed-on stucco, four floors of subterranean parking, on an eleven-level mixed use development, seven stories above ground level right in front of this Victorian architectural gem, our Pasadena heritage, if G & K have their way.

1

And what's to happen to the 100-year-old trees?

2

And what are the seismic implications – something to be particularly mindful of, given the status of the beloved *Pasadena Public Library* – of digging a four-story deep hole a few hundred feet from our iconic treasures? The Hotel Green has already had scaffolding up for several years because of a

3

crumbling façade, which Goldrich & Kest, the current owner (of The Hotel Green, not the Castle Green), has done little more than build a scaffolding to remediate. If they want to carry forward Colonel Green's *1903 Vision*, start by taking care of the *actual* Colonel Green 1903 building they already own, which has been entirely gutted by them of most original detail, as they have shown little custodial integrity to its interior, or exterior – two of the domes are missing on their roof (replace them!), the detailed façade has crumbled all over their property and they do little or nothing to preserve or restore any of it. And now they want to dig a four-story deep hole and slap up a new ten-level building a hundred feet from a historically registered building already in their possession that's literally crumbling. 3

And why is this project being rushed through City Hall, during Covid, when public comment, if the public even knows to comment, and opposition is being allocated to email and zoom calls?

And why the accelerated review process, with the SCEA omitting or minimizing many CEQA areas of review? Why is Goldrich & Kest in such a hurry to jump the line to build this new towering high-rise development, putting their neighbors in permanent shade, when they fail to adequately maintain their current holdings in Colonel Green's *true* vision – realized in brick and mortar – in 1903, The (now crumbling, under *their* watch) Hotel Green. 4

Do the good people of Pasadena even know this is happening? That an iconic building, used in murals and postcards for well over a century to represent Pasadena – with its towering castle turrets a symbol of our city – is soon to be dominated from view from the western half of Old Pasadena and Fair Oaks – the main artery into and out of Old Pasadena – by an eleven-level, seven story, towering apartment block, to be built on a historically registered site, *whose historic designation extends beneath the actual footprint of this development,* from Fair Oaks to Raymond, from Green to Dayton. How is that even legal? 5

I whole-heartly stand in opposition to this development,

David Woodbury

Third Generation Pasadena Resident and Local Historian



The Hotel Green, c. 1903

Letter I-45

the architects CBA partnership

5.6.21

City of Pasadena
175 N. Garfield Avenue
Pasadena, CA 91101

Attention: Kevin Johnson, Senior Planner, City of Pasadena
kevinjohnson@cityofpasadena.net

Regarding: The Proposed Central Park Apartments Project, located at 86 S. Fair Oaks Avenue, Pasadena

Dear Mr. Johnson,

I am writing to express some concerns that I have in regards to the proposed Central Park Apartments Project. As a property owner, board chairman for the Homeowner's Association and member of the Architectural committee for Castle Green, I have reviewed the drawings for the proposed development and would like to bring to your attention the following items which we would appreciate the oversight of City Planning. 1

The applicant appears to be asserting that this project will complete an unrealized wing of Hotel Green per the below photo and has stated that *"the proposed design would have created a U-shaped building with a landscaped central courtyard"* and *"the wing along Fair Oaks Avenue, including the arcade and the greenhouse, was never constructed"*. 2



Although the applicant is correct in that Hotel Green had at some time in the past entertain the possibility of adding a wing along Fair Oaks, that is where the comparison ends. The below image indicates the proposed massing based on drawings submitted by the applicant. Wherein the volume shaded in red illustrates the extent of the proposed development and a substantial variance in massing that drastically reduces the interior courtyard.



2

From a design standpoint, the approach of this project is in conflict with the Secretary of Interiors Standards as it does not respect the scale and massing of the existing historic structures on the site and attempts to mimic and confuse new construction with historic buildings.

99 South Raymond Avenue, Suite 104 | Pasadena, California 91105 | t 626.294.0907 | f 626.294.0905

The aforementioned proposed narrowing of the interior courtyard is not only in conflict with the original design intention of the historic site, though also would create a condition that would greatly restrict light and cast a continual shadow on the West side of Castle Green per the below virtual model which incorporates the proposed design and existing structures on the site.



It is important to note that the software used to create the above virtual model allows for an accurate analysis of shade and shadows based on the site location, day and time of year. The shadows projected on the West face of Castle Green illustrated on the above model will occur every day of the year and are not limited to winter solstice.

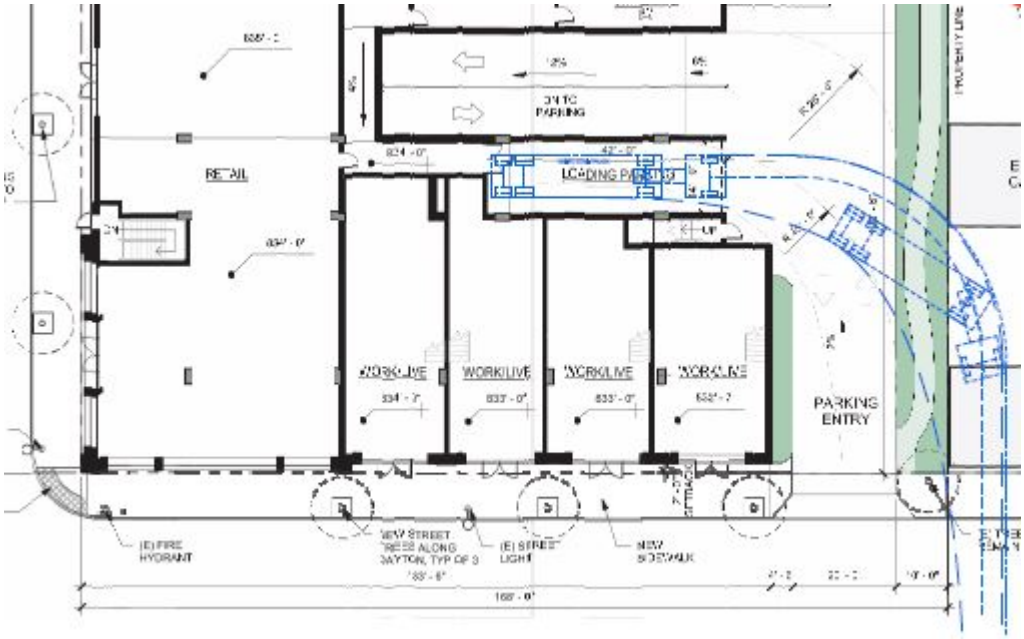
As you may also note from the above virtual model, the massing of proposed new wing entirely overpowers the West wing of Castle Green in the way of shear mass and would obstruct sight lines of Castle Green from Fair Oaks Avenue as indicated in the below image.

99 South Raymond Avenue, Suite 104 | Pasadena, California 91105 | t 626.294.0907 | f 626.294.0905



3

There has been a lot of concern expressed by Castle Green residents that traffic associated with this proposed development would negatively impact Dayton Street. Accordingly, we superimposed a truck turning radius in blue onto ARG's Site Plan and it appears that the required turning radius projects onto Castle Green's property per the below Partial Site Plan. We anticipate that Retail/Restaurant deliveries will occur throughout the day and want to ensure that delivery truck maneuverability in and out of the Loading Space will not impede resident access to the garage and result in vehicle stacking on Dayton. Will traffic engineers also be reviewing this proposal?

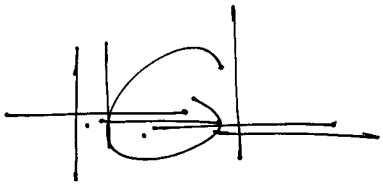


4

99 South Raymond Avenue, Suite 104 | Pasadena, California 91105 | t 626.294.0907 | f 626.294.0905

In closing, I would like to say that I appreciate that Goldrich & Kest has engaged Architectural Resources Group (ARG) based on their historical background and expect that ARG would continue to be the Architect of Record and be retained throughout the completion of this project.

Sincerely,



John Cambianica, AIA

99 South Raymond Avenue, Suite 104 | Pasadena, California 91105 | t 626.294.0907 | f 626.294.0905

APPENDIX I

Green Hotel Apartments Project Final EIR – *Not Certified*

State Clearinghouse Number: 2013031067

FINAL ENVIRONMENTAL IMPACT REPORT

City of Pasadena

Planning & Community Development Department



Green Hotel Apartments Project

June 2015

CDM Smith

Table of Contents

Section 1 Summary **1-1**

Section 2 Corrections and Additions **2-1**

Section 3 Comments and Responses **3-1**

3.1 Background 3-1
3.1.1 Draft EIR Published January 24, 2014 3-1
3.1.2 Recirculated Draft EIR Published January 20, 2015 3-2
3.2 List of Commenters 3-3
3.2.1 List of Public Agencies and Private Parties Commenting on the Draft EIR 3-3
3.2.2 List of Public Agencies and Private Parties Commenting on the Recirculated Draft EIR 3-3
3.3 Responses to Comments 3-3
3.3.1 Topical Responses to Comments on the Draft EIR 3-3
Topical Response (TR)–CR-1 Potential Impacts to Historic Resources 3-4
TR-AES-1 Potential View Impacts 3-8
TR-ALT-1 Project Alternatives 3-10
3.3.2 Individual Responses to Comments on the Draft EIR 3-29
Letter No. 1 County Sanitation Districts of Los Angeles County 3-31
Letter No. 2 Pasadena Heritage 3-37
Letter No. 3 Castle Green Homeowner's Association 3-47
Letter No. 4 Chatten-Brown & Carstens LLP 3-91
Letter No. 5 Ann Scheid 3-103
Letter No. 6 Kelly Sutherlin McLeod, FAIA 3-111
3.3.3 Comments Received at the Public Hearing on the Draft EIR 3-126
3.3.4 Individual Responses to Comments on the Recirculated Draft EIR 3-130
Letter No. 7 Ciy of San Marino 3-131
Letter No. 8 Castle Green Homeowner's Association 3-135
3.3.5 Comments Received at the Public Hearing on the Recirculated Draft EIR 3-157

Section 4 Mitigation Monitoring and Reporting Program **4-1**

Attachment 1 – Design Process Memorandum

List of Figures

Figure 2-3a	Aerial Overview – Oblique Angel	2-7
Figure 2-5	Site Plan and First Floor Layout	2-9
Figure 3.1-2	Location of On-Site Trees	2-13 & 3-83
Figure 3-1-15	Vantage Point Locations – Vantage Points 5 through 8	2-15 & 3-11
Figure 3-1.16	Vantage Point 5	2-17 & 3-13
Figure 3.1-17	Vantage Point 6	2-19 & 3-15
Figure 3.1-18	Vantage Point 7	2-21 & 3-17
Figure 3.1-19	Vantage Point 8	2-23 & 3-19
Figure 3.1-20	Vantage Point Locations – Vantage Points 9	2-25 & 3-21
Figure 3.1-21	Vantage Point 9	2-27& 3-23

List of Tables

Table 1	Summary of Project Impacts, Conditions of Approval, Mitigation Measures, and Residual Impacts	1-7
Table 2-1	Summary Disposition of Protected Trees with Project Implementation	2-3 & 3-81
Table 3-1	Summary of On-Site Trees	2-5 & 3-79
Table 3-2	Summary Disposition of Protected Trees with Project Implementation	2-11 & 3-80
Table 4-6	Reduced Height Alternative – Traffic Generation	2-33
Table 4-1	Mitigation Monitoring and Reporting Program	4-3

Section 1
Summary

Introduction

In accordance with the *California Environmental Quality Act (CEQA),* specifically, *CEQA Guidelines* Sections 15088, 15089, and 15132, the City of Pasadena (the City) has prepared the Final Environmental Impact Report (EIR) for the proposed Green Hotel Apartments Project (proposed project or project). A Final EIR is defined by Section 15362(b) of the *CEQA Guidelines* as "containing the information contained in the Draft EIR; comments, either in verbatim or in summary received in the review process; a list of persons commenting; and the responses of the Lead Agency to the comments received."

The Final EIR is organized in the following sections:

- **Section 1 – Summary**: This Section is intended to provide a summary of the CEQA requirements, including Project Location, Setting and Description information, Alternatives to the Project, Areas of Controversy, Issues to be Resolved and a Summary of the Project Impacts and Mitigation Measures.
- **Section 2 – Corrections and Additions**: This Section includes changes to text within the Draft EIR and the Recirculated Draft EIR as a result of either comments received from interested parties during the public review period or as initiated by the Lead Agency (City of Pasadena or City).
- **Section 3 – Comments and Responses**: This Section includes all comments received on the original Draft EIR during the document's 45-day public review period, which began on January 24, 2014 and was completed on March 11, 2014, and on the Recirculated Draft EIR during the document's 45-day public review period, which began on January 20, 2015 and was completed on March 5, 2015. A list of public agencies, organizations, and individuals who submitted comments on the Draft EIR and/or the Recirculated Draft EIR is provided. Responses to comments received on the Draft EIR and Recirculated Draft EIR have been prepared and are included in this Section of this Final EIR.
- **Section 4 – Mitigation Monitoring and Reporting Program**: This Section includes a list of all mitigation measures for the project and identifies the timing associated with, and entity responsible for, implementing each mitigation measure in a table format. Space is provided within the table for tracking mitigation implementation and effectiveness.

This document, along with the Draft EIR (incorporated by reference), make up the Final EIR as defined in *CEQA Guidelines*, Section 15132, which states:

> *The Final EIR shall consist of:*
>
> *(a) The Draft EIR or a revision of the Draft.*
>
> *(b) Comments and recommendations received on the Draft EIR either verbatim or in summary.*

(c) A list of persons, organizations, and public agencies commenting on the Draft EIR.

(d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.

(e) Any other information added by the Lead Agency.

Uses of the Final EIR

The Final EIR allows the public and the decision makers the opportunity to review revisions to the Draft EIR and Recirculated Draft EIR, the comments and responses to those comments, and other components of the EIR, such as the Mitigation Monitoring and Reporting Program, prior to approval of the project. The Final EIR serves as the environmental document to support approval of the proposed project, either in whole or in part.

After completing the Final EIR, and before approving the project, the Lead Agency must make the following three certifications as required by Section 15090 of the *CEQA Guidelines*:

- That the Final EIR has been completed in compliance with CEQA;
- That the Final EIR was presented to the decision-making body of the Lead Agency, and that the decision-making body reviewed and considered the information contained in the Final EIR prior to approving the project; and
- That the Final EIR reflects the Lead Agency's independent judgment and analysis.

Additionally, pursuant to Section 15093(b) of the *CEQA Guidelines*, when a Lead Agency approves a project that would result in significant unavoidable impacts that are disclosed in the Final EIR, the agency must state its reasons for supporting the approved action in writing. This Statement of Overriding Considerations is supported by substantial information in the record, which includes the Final EIR.

Project Location and Setting

The City of Pasadena (City) is located approximately ten miles northeast of the City of Los Angeles in the County of Los Angeles. Regional access to the City is provided by State Route 134 (SR 134), Interstate 210 (I-210 or Foothill Freeway), State Route 110 (SR110), and Interstate 710 (I-710). The project site is located at 86 South Fair Oaks Avenue, at the northeast corner of Fair Oaks Avenue at Dayton Street. Vehicle access points at the project site currently exist on Dayton Street and South Fair Oaks Avenue. The project site is located within a developed area of Downtown Pasadena on one of the City's main commercial streets and is surrounded by residential, commercial, retail, and recreational land uses. The project site is bordered by a one-story cafe building and the existing Green Hotel Apartments on the north, Castle Green on the east, Dayton Street and Central Park on the south, and South Fair Oaks Avenue on the west.

The project site is rectangular in shape and approximately 32,362 square feet in size. The site is currently flat and has a surface parking lot with 60 parking spaces (4 handicapped parking spaces and 56 regular parking spaces), a billboard, concrete pathways, benches, an outdoor eating area, and 20 trees (15 of which are protected under the City Trees and Tree Protection Ordinance). The 15 protected trees consist of eight Mexican fan palms, two California fan palms, one Canary Island palm, three Camphor trees, and one Indian laurel fig tree.

The project site is zoned CD-1 (Central District Specific Plan Sub-district 1, Old Pasadena Subdistrict) and has a General Plan Land Use designation of Specific Plan. The project site also is within the Old Pasadena Historic District which is listed in the National Register of Historic Places (National Register). The Castle Green, located to the east of the project site, and the existing Green Hotel Apartments buildings, located to the north of the project site, were listed together, along with the project site, in the National Register in 1982, and are therefore also listed in the California Register of Historical Resources (California Register). The Castle Green/Green Hotel Apartments listing that includes the project site is an individual listing on the National Register (not as an historic district), and the two buildings were also listed as contributors to the Old Pasadena Historic District (1983; revised, 2007). The boundaries of the Castle Green and existing Green Hotel Apartments are defined in the original National Register registration form as: "The square block bounded by Raymond Avenue on the east, Green Street on the north, Fair Oaks [A]venue on the west and Dayton Street on the south." Thus, the entire block, which includes the project site, is listed as a historical property in the National Register.

Across Dayton Street to the south is Central Park, a 9.2 acre park which is also a contributing resource to the Old Pasadena Historic District. Across Fair Oaks Avenue to the west are three to four-story mixed-use buildings and parking lots, and across Raymond Avenue to the east are one and two-story commercial uses, all of which are also within the boundaries of the Old Pasadena Historic District. The Los Angeles County Metropolitan Transportation Authority (Metro) Del Mar Gold Line Light Rail Station is located less than a quarter of a mile to the southeast of the project site along Raymond Avenue just north of Del Mar Boulevard.

Project Objectives

The objectives for the proposed project include the following:

- Provide new apartments to assist in satisfying the increasing demand for this product type in the City of Pasadena, and particularly in the Central District and within easy walking distance of jobs and the Metro Gold Line.
- Provide new restaurant, commercial, and retail shops in Old Pasadena, thereby increasing tax revenues throughout the City.
- Provide multi-family housing within a transit-oriented district and within the immediate vicinity of a Metro Gold Line station.
- Provide affordable multi-family housing to the City's underserved affordable market demand, particularly within the Central District and within walking distance of service oriented jobs.
- Provide the residents of the adjacent existing Green Hotel Apartments appropriate parking with direct ingress/egress.
- Build out the third parcel of the Castle Green/existing Green Hotel Apartments in a manner that is based on the original turn of the 20th century vision, which has been underutilized as surface parking since the 1950's, to thereby create a compatible new gateway framing an entrance to Old Pasadena.
- Broaden the retail connection on Fair Oaks Avenue to Colorado Boulevard by providing retail services along the street frontage.

- Create a mixed-use development that faces, compliments, and engages with the open space to the south of the site.
- Preserve views of the park from the south-facing units of the existing Green Hotel Apartments by providing an open space corridor between the Castle Green and the proposed project.

Project Characteristics

The proposed project involves construction and operation of a six-story mixed-use building with 64 residential units and 5,000 square feet of commercial space on an existing surface parking lot currently occupied by a billboard, 60 parking spaces and landscaping at 86 South Fair Oaks Avenue in Pasadena. The project site is 32,362 square feet and the proposed multi-story mixed-use building would be 76,980 square feet in size.

The ground floor would consist of 5,000 square feet of commercial space and 20 parking spaces, with 11 of the 20 parking spaces "tucked under" the building. In addition, 15 bicycle parking spaces (4 open rack and 11 enclosed) would be provided on the ground floor. Residential units would be located on the second through sixth floors. The proposed project would provide 9,600 square feet of private open space and recreational uses, which would consist of 2,880 square feet of open space (including a pool), a 1,050 square-foot gym, and 5,670 square feet of open space provided in the courtyard on the ground floor.

Parking for the project would be provided in compliance with City's Zoning Code and would be accommodated with 20 parking spaces on the ground floor and two levels of underground parking providing 147 parking spaces. The City's Zoning Code requires the provision of a minimum of 107 spaces for the new building as well as replacement of the 60 existing spaces on-site, which serve the existing Green Hotel Apartments. The proposed building would have a height of 75 feet and would comprise 76,980 square feet of gross floor area (2.38 floor area ratio). The height, floor area ratio, and setbacks meet the development standards for the CD-1 zoning district.

The driveway to the project site would be located along Dayton Street and would provide access to the surface and underground parking. Both ingress and egress would be available from Dayton Street. Pedestrian access to the residential lobby and commercial uses would be available off of Fair Oaks Avenue.

Construction of the proposed project would require the removal of 10 of the 15 trees protected under the City's ordinance.[1] The City's Tree Protection Ordinance requires protected trees to be replaced, but allows for several replacement alternatives. If all protected trees to be removed are proposed to be replaced with non-palm trees, they may be replaced with 76 non-palm trees of a minimum 24-inch box size or 48 non-palm trees of a minimum 36-inch box size. Alternatively, if protected palm species are proposed to be replaced with new palm trees, the aggregate height of replacement palm trees must total 167.5 feet, and the remaining removed non-palm trees may be replaced with either 40 24-inch box trees or 24 36-inch box trees.

The Tree Replacement Matrix adopted by the City Council in 2010 also indicates that protected specimen trees must be replaced with specimen or native trees on the list of protected native and

[1] In addition to the 15 protected trees located within the project site, there are three protected trees located directly adjacent to the project site, as shown in Figure 3.1-2 of the Final EIR and accounted for in Table 3-2 of the Final EIR (Tree Nos. 7, 22, and 23). Those three protected trees would remain in-place with project implementation.

specimen trees. The four protected non-palm trees proposed to be removed are on the list of specimen trees; therefore the trees planted to replace them must be on the list of protected native or specimen trees. The City's Tree Protection Ordinance also states that "the developer may request to pay a fee instead of planting on site up to 50 percent of the required number of replacement trees."

A total of 24 new 36-inch box trees and new palm trees totaling 176 feet in height would be planted on-site, thereby meeting the required replacement trees per the City's Tree Protection Ordinance. Three existing palm trees would be transplanted on-site to naturally draining soil and the new trees would be planted in either naturally draining soil or planters above the subterranean parking. Planters would be raised to provide a portion of the required five-foot planter depth above the grade. Therefore, the proposed project would meet the requirements of the City's Tree Protection Ordinance. Removal of protected trees requires adherence to the ordinance through the review and approval of applications for each removed tree and findings are required to be made to ensure the removals meet the ordinance. The requested tree removals will be reviewed in conjunction with the design review that is required for the proposed project.

Construction activities associated with the proposed project are anticipated to include demolition, site preparation, excavation, grading, construction of the new mixed-use building, application of coatings, paving, painting/striping, installation of lighting/security lighting, and landscaping. Construction would occur in one phase lasting approximately 28 months, beginning in August 2014 and completing in December 2016. Site clearing and grubbing activities would last for approximately five days, demolition of the existing parking lot would occur over a period of approximately one month, grading of the project site is anticipated to take approximately three months, building sub-phase (i.e., construction of the building and underground parking levels) would last for 16 months, application of architectural coatings would last approximately 10 months, and asphalt application would last approximately two months, with some construction phases overlapping. Construction staging would occur on-site and construction of the proposed project would require a maximum of 40 construction workers. Demolition of the existing parking lot would produce approximately 620 cubic yards (cy) of debris. Grading and excavation on the project site would produce approximately 30,000 cy of soil for export.

Alternatives to the Project

CEQA requires that an environmental impact report (EIR) describe a range of reasonable alternatives to a proposed project that could feasibly avoid or lessen any significant environmental impacts, while attaining the basic objectives of the project. Comparative analysis of the impacts of these alternatives is required. In response to the significant impacts associated with the proposed project, the City developed and considered the following alternatives to the project:

- Alternative 1 – No Project

  The No Project Alternative is the No Build Alternative and assumes that the proposed building would not be constructed; the site would remain in its current state and continue to be occupied by a billboard and utilized for parking by residents of the existing Green Hotel Apartments building.

- Alternative 2 – Reduced Height

  The Reduced Height Alternative assumes the construction of a mixed-use building, much like the proposed building; however, two fewer floors would be constructed thereby reducing the

number of residential units from 64 to 42 and reducing the required number of parking spaces from 166 to 131. A total of 5,000 square feet of commercial space would remain within the ground floor of the building under the Reduced Height Alternative.

Four other alternatives were considered but rejected as infeasible, as outlined further in Section 4.0, Alternatives.

The *CEQA Guidelines* require that an environmentally superior alternative be identified from the alternatives considered in an EIR. The No Project Alternative would result in no environmental impacts and therefore would be the Environmentally Superior Alternative to the proposed project. However, as required by *CEQA Guidelines* Section 15126.6(e)(2), if the No Project Alternative is identified as the Environmentally Superior Alternative, a second build alternative must be identified as the Environmentally Superior Alternative. As such, Alternative 2, the Reduced Height Alternative, would be the Environmentally Superior Alternative to the proposed project because this alternative would reduce the severity of the significant and unavoidable traffic impact along the Dayton Street segment between Fair Oaks Avenue and Raymond Avenue.

Areas of Known Controversy

The *CEQA Guidelines* require a Draft EIR to identify areas of controversy known to the lead agency, including issues raised by other agencies and the public. Comments were received from public agencies and interested parties in response to the circulated Notice of Preparation (NOP). In compliance with *CEQA Guidelines*, the City held two scoping meetings on April 8 and April 15, 2013, to solicit comments and to inform the public of the proposed EIR. Comments were also received in response to the published NOP (provided in Appendix A), which identified environmental topics that local and regional agencies recommended for analysis in the Draft EIR. The following environmental topics of potential controversy were identified during the scoping meetings and/or NOP process:

- Aesthetic and landscaping changes through the removal of trees/canopy trees and survival of new and transplanted trees;
- Ingress/Egress along Dayton Street;
- Fire Safety and emergency access along Dayton Street;
- Increased traffic from project implementation;
- Density and height of project relative to surrounding land uses and buildings;
- Historical significance of entire block on which the project site is located;
- Impact on views from surrounding buildings;
- Alternatives to the proposed design;
- Air quality impacts to sensitive receptors, and specifically the neighboring Castle Green, the existing Green Hotel Apartments, and Central Park;
- Unreinforced masonry walls of Castle Green Apartments could be impacted by excavation, vibration, and other construction activities; and

- Loss of soil during construction could cause displacement of Castle Green.

As a result of the comments received during the scoping process, the following environmental topics were evaluated in depth in this Draft EIR:

- Aesthetics;
- Air Quality;
- Cultural Resources;
- Greenhouse Gases;
- Noise and Vibration; and
- Transportation and Circulation.

Issues to be Resolved

The *CEQA Guidelines* require an EIR to present issues to be resolved by the lead agency. These issues include the choice between alternatives and whether or how to mitigate potentially significant environmental impacts. The major issues to be resolved by the City of Pasadena, as the Lead Agency for the project include the following:

- Whether the recommended mitigation measures should be adopted or modified;
- Whether additional mitigation measures need to be applied to the project; and
- Whether the project or an alternative should be approved.

Summary of Project Impacts, Conditions of Approval, and Mitigation Measures

A summary of the environmental impacts associated with implementation of the proposed project, conditions of approval (COA) and mitigation measures (MM) included to avoid or lessen the severity of potentially significant environmental impacts, and residual impacts, is provided in Table 1, Summary of Project Impacts, Conditions of Approval, Mitigation Measures, and Residual Impacts, below.

Table 1 Summary of Project Impacts, Conditions of Approval, Mitigation Measures, and Residual Impacts

Significance Threshold and Project Impacts	Mitigation Measures	Residual Impact
Aesthetics		
The project would introduce a new 6-story building on a site located within a built-out environment adjacent to two existing six- and seven-story buildings. The project would not have a substantial adverse effect on a scenic vista (i.e., blocking views of the San Gabriel Mountains from public vantage points or from the adjacent uses).	No mitigation is required	Less than significant impact
The project would introduce a new building on a site covered with mature trees and utilized only for surface parking. However, the project	No mitigation is required	Less than significant impact

would not substantially degrade the existing visual character or quality of the site and its surroundings.		
The project would create a new source of increased levels of ambient lighting and glare in the immediate vicinity of the site; however, light emanating from the new building would be consistent with the ambient nighttime illumination levels of existing development and proposed exterior lighting would be shielded and oriented in a manner that will prevent spillage or glare onto surrounding uses.	No mitigation is required	Less than significant impact
The project would result in new shadows being cast on light-sensitive uses; however, the project site is in an urban environment, immediately adjacent to existing buildings of comparable massing and height.	No mitigation is required	Less than significant impact
Air Quality		
The project would create emissions during construction and operation but would not conflict with implementation of the applicable air quality plan.	No mitigation is required	No impact
The project would create emissions from operational/area sources and from increased vehicle trips , but would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.	No mitigation is required	Less than significant impact
The project would generate emissions from operational/area sources and from increased vehicle trips but would not result in a cumulatively considerable net increase of any nonattainment criteria pollutant.	No mitigation is required	Less than significant impact
The project construction would generate emissions that would not exceed, but would nearly approach, the $PM_{2.5}$ emissions thresholds; as such, mitigation is included to ensure that the project would not expose sensitive receptors to substantial pollutant concentrations during construction.	**MM AQ-1**: Construction Equipment Engine Requirements. The construction contractor shall ensure that off-road construction equipment be equipped with engines that meet the model year 2007 or Tier 3 emission standards for off-road compression-ignition (diesel) engines (13 CCR 2420-2425.1). Older model year engine may also be used if they are retrofit with a diesel particulate filter to reduce PM emissions to the applicable emission standards. **MM AQ-2**: Construction Equipment Limitations. The construction contractor shall ensure that the cumulative hours of operation for all off-road diesel equipment do not exceed 60 hours per day.	Less than significant impact
The project would generate odors from construction equipment and potentially from commercial uses during operations; however, the project would not create objectionable odors affecting a substantial number of people.	No mitigation is required	Less than significant impact
Cultural Resources[2]		
The project is adjacent to but would not	No mitigation is required	Less than

[2] As part of the Final EIR, an additional condition of approval, COA-CULT-1, was incorporated into the project to address unanticipated archaeological finds during project construction. As described in Section 2 below, it was already concluded in the Initial Study/Notice of Preparation that implementation of the proposed project would not result in significant impacts to archaeological or paleontological resources. The addition of COA-CULT-1 does not change that earlier conclusion; hence, it is not a mitigation measure and is therefore not listed in this table.

involve demolition or physical alteration of the historic Hotel Green or Castle Green Apartments or any other historic structures.		significant impact
The project involves new construction adjacent to existing historic resources and would not involve relocation of a historic resource.	No mitigation is required.	Less than significant impact
The project involves new construction adjacent to existing historic resources and would not involve conversion, rehabilitation or alteration of a significant resource and would comply with the Standards 9 and 10 of the Secretary of the Interior's Standards for Rehabilitation.	No mitigation is required	Less than significant impact
The project would involve the construction of a new building adjacent to existing historic resources; however, the new construction would not reduce the integrity or significance of important resources on the site or in the vicinity. The historic character and integrity of the Castle Green and existing Green Hotel Apartments would remain intact.	No mitigation is required	Less than significant impact
Greenhouse Gases		
The project would generate greenhouse gas emissions as a result of vehicles traveling to and from the apartments, natural gas combustion from space heating, disposal of solid waste, and electricity used directly by the building and indirectly to supply water to the site and to treat wastewater; however, these emissions would not exceed the SCQAMD's proposed screening-level significant threshold for commercial land uses.	No mitigation is required	Less than significant impact
The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses.	No mitigation is required	No impact
Noise and Vibration		
The project could expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Maximum construction noise levels (which would occur occasionally and intermittently when equipment would work closest to the sensitive receptors at the property line at full power) are estimated at 91 dBA at the existing Green Hotel Apartments and 81 dBA at Castle Green at the ground floor. However average construction noise levels would be 75 dBA and 74 dBA, respectively. Noise levels would be slightly lower at elevations above the ground floor because of increased distance between the source and receptor. Since the maximum noise levels to be generated during construction is 80 dBA at 100 feet from the noise source, construction noise levels would not exceed the City's Noise Ordinance limit for construction noise of 85 dBA at a distance of 100 feet. However, mitigation is included to minimize noise levels to neighboring properties to the maximum extent feasible.	**COA NOISE-1**: Noise Barriers. Before the start of pavement demolition, the contractor shall erect a 20-foot-high temporary noise barrier, such as a curtain of durable flexible composite material with sound-absorptive material on one or both sides and solid wall composed of $^{5}/_{8}$-inch plywood or heavier, on the northern and eastern sides of the project site. The noise barrier shall be installed without any gaps and with the sound absorptive side facing the construction activity area. The barrier shall be maintained and any damage that may occur be promptly repaired. The barrier shall remain in place until the completion of outdoor construction requiring use of diesel-powered equipment. **COA NOISE-2**: Noise Reduction Measures. Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, the following noise-reduction measures shall be included in the construction plans or specifications: ▪ The construction contractor shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. ▪ The construction contractor shall place all stationary construction equipment so that the	Less than significant impact

	equipment is as far as reasonably feasible from noise-sensitive receptors and so emitted noise is directed away from noise-sensitive receptors. ▪ The construction contractor shall locate equipment staging in areas that will create the greatest distance between staging area noise sources and noise-sensitive receptors. **COA Noise-3**: Adherence to Noise Restrictions Ordinance. The project shall adhere to all applicable requirements of the Noise Restrictions Ordinance during project construction and operation. A Construction Related Noise Plan is required as part of the Construction Staging Plan and must be reviewed by the Building Division and the Department of Transportation and approved prior to the issuance of a grading permit. This plan should show the location of any construction equipment and how the noise from this equipment will be mitigated by such methods as: temporary noise attenuation barriers; preferential location of equipment; and use of current technology and noise suppression equipment. **MM NOISE-1**: Construction Time Limits. Prior to issuance of grading and/or building permits, contractor specifications shall include a note indicating that noise-generating construction activities shall be limited to between the hours of 7:00 AM and 7:00 PM Monday through Friday and between the hours of 8:00 AM and 5:00 PM Saturday. On Sundays and Federal holidays, no noise-generating construction activities shall be permitted.	
The proposed project would contribute operational (post-construction) noise to the existing environment through (1) the addition of traffic on local streets, (2) on-site stationary sources, and (3) on-site outdoor activities. The primary noise source to the project site and surrounding buildings is traffic on Fair Oaks Avenue. The proposed building would block a substantial portion of the traffic noise to the project site, the existing Green Hotel Apartments, and Castle Green. The resultant traffic noise level at Castle Green and the existing Green Hotel Apartments residences would be less than the existing ambient noise level. Operational noise sources associated with the proposed residential uses would include, but would not be limited to mechanical equipment (e.g., heating, ventilating, and air conditioning [HVAC] units and swimming pool pumps); landscape maintenance equipment; vehicles in the surface parking area; vehicles entering and leaving the subterranean parking area; and outdoor activities at the swimming pool area. The project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	**COA NOISE-3**: Adherence to Noise Restrictions Ordinance. The project shall adhere to all applicable requirements of the Noise Restrictions Ordinance during project construction and operation. A Construction Related Noise Plan is required as part of the Construction Staging Plan and must be reviewed by the Building Division and the Department of Transportation and approved prior to the issuance of a grading permit. This plan should show the location of any construction equipment and how the noise from this equipment will be mitigated by such methods as: temporary noise attenuation barriers; preferential location of equipment; and use of current technology and noise suppression equipment. **COA NOISE-4**: HVAC Noise Levels. Prior to the issuance of building permits, the Applicant shall provide data to the Director of Planning and Community Development demonstrating that the noise level from heating, ventilation, and air conditioning (HVAC) units, swimming pool equipment, and similar mechanical equipment when measured inside any dwelling unit on the same property or 20 feet from the outside of the dwelling unit in which the noise source or sources may be located would be less than 50 dBA. **COA NOISE-5**: Exterior to Interior Noise Reduction. Prior to the issuance of building permits, the applicant shall present data to the Director of Planning and Community Development demonstrating that the exterior-to-interior noise reduction for residential units facing Fair Oaks	Less than significant impact

	Avenue would be at least 24 A-weighted decibels (dBA). **COA NOISE-6**: Noise Notification. Prior to the issuance of a Certificate of Occupancy for the project, the applicant shall present information to the Director of Planning and Community Development demonstrating that appropriate sale or lease transfer documents for residential units include an advisory that the residence is located in the Central District, an area where there is a potential for noise from commercial and nighttime activities. The following language is provided as an example: *All potential buyers and/or renters of residential property in the Green Hotel Apartments, which is in Pasadena's Central District Specific Plan area, are hereby notified that they may be subject to audible noise levels attributed to business and entertainment-related activities common to such areas, including amplified sound, music, delivery vehicles, pedestrian and vehicular traffic, and other urban noise* **MM NOISE 2**: Noise Restrictions within the Common Outdoor Area. Prior to the issuance of an occupancy permit, the Applicant shall provide evidence to the Director of Planning and Community Development demonstrating that the building's Covenants, Conditions and Restrictions (CC&Rs) or equivalent regulations include a prohibition on the use of radios, televisions, "boom boxes", and similar devices in the pool area and other outdoor common areas unless the devices are used with headphones, ear buds, or similar device and that signs with such restrictions are posted at the pool area. **MM NOISE-3**: Pool Hours of Operation. Prior to the issuance of an occupancy permit, the Applicant shall provide evidence to the Director of Planning and Community Development demonstrating that the building's CC&Rs or equivalent regulations include a prohibition on the use of the pool area between 10:00 p.m. and 5:00 a.m. and that signs with pool hours are posted at the pool area.	
The project would generate noise during construction and during operation. However, construction and operational noise would not expose persons or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	**COA NOISE-3**: Adherence to Noise Restrictions Ordinance. The project shall adhere to all applicable requirements of the Noise Restrictions Ordinance during project construction and operation. A Construction Related Noise Plan is required as part of the Construction Staging Plan and must be reviewed by the Building Division and the Department of Transportation and approved prior to the issuance of a grading permit. This plan should show the location of any construction equipment and how the noise from this equipment will be mitigated by such methods as: temporary noise attenuation barriers; preferential location of equipment; and use of current technology and noise suppression equipment.	Less than significant impact
Construction of the proposed project has the potential to generate vibration to the adjacent structures and their occupants. Construction of the proposed project would not require pile driving or blasting, which are generally the sources of the most severe vibration. In addition, vibratory compactors would not be	**MM NOISE-4**: Consult with Structural Engineer and Project Historical Architect. Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, and to the satisfaction of the City of Pasadena, the applicant shall retain a Professional Structural Engineer with experience in structural vibration analysis and monitoring for	Less than significant impact

used during project construction. However, conventional heavy construction equipment would be used for demolition of the existing parking lot and adjacent sidewalks, for excavation of the two levels of subterranean parking, and for export of demolished and excavated materials. Because structural damage considerations require limiting vibration levels to 0.12 ppv in/sec or a similar level, the perception of vibration by persons in the existing Green Hotel Apartments would fall within the barely perceptible to distinctly perceptible range. Given the sensitivity of the surrounding uses, the project has the potential to expose persons and structures to excessive groundborne vibration or groundborne noise levels.	historic buildings and a Project Historical Architect as a team to perform the following tasks: ▪ Review the project plans for demolition and construction; ▪ Survey the project site and the existing Green Hotel Apartment building and the 84 South Fair Oaks Avenue structure, including geological testing, if required; and ▪ Prepare and submit a report to the Director of Planning and Community Development to include, but not be limited to, the following: ○ Description of existing conditions at the existing Green Hotel Apartment building and the 84 South Fair Oaks Avenue structure; ○ Vibration level limits based on building conditions, soil conditions, and planned demolition and construction methods to ensure vibration levels would be below 0.12 ppv in/sec, the potential for damage to the existing Green Hotel Apartment building and the 84 South Fair Oaks Avenue structure; ○ Specific measures to be taken during construction to ensure the specified vibration level limits are not exceeded; and ○ A monitoring plan to be implemented during demolition and construction that includes post-construction and post-demolition surveys of the existing Green Hotel Apartment building and the 84 South Fair Oaks Avenue structure. ○ Examples of measures that may be specified for implementation during demolition or construction include, but are not limited to - Prohibition of certain types of impact equipment; - Requirement for lighter tracked or wheeled equipment; - Specifying demolition by non-impact methods, such as sawing concrete; - Phasing operations to avoid simultaneous vibration sources; and - Installation of vibration measuring devices to guide decision making for subsequent activities. **MM NOISE-5**: Post-Construction Survey and Documentation. To the satisfaction of the City of Pasadena, at the conclusion of vibration-causing activities, in the unanticipated event of discovery of vibration-caused damage, the Structural Engineer and the Project Historical Architect shall document any damage to the existing Green Hotel Apartment building and the 84 South Fair Oaks Avenue structure caused by construction of the project and shall recommend necessary repairs. The project applicant shall be responsible for any repairs associated with vibration-caused damage as a result of construction of the project. Any repairs shall be undertaken and completed as required to conform to the Secretary of

	the Interior's Standards for the Treatment of Historic Properties (36 Code of Federal Regulations 68), and shall apply the California Historical Building Code (California Code of Regulations, Title 24, Part 8) and other applicable codes.	
Transportation and Circulation		
The project is consistent with the policies in the Mobility Element of the City's General Plan. However, the project would introduce new vehicle trips onto the Dayton Street segment between Fair Oaks Avenue and Raymond Avenue. The increased number of vehicle trips would result in a significant traffic impact to this street segment. As such, while no Mobility Element inconsistencies would occur, the increased traffic introduced along Dayton Street between Fair Oaks Avenue and Raymond Avenue would constitute a significant impact.	No feasible mitigation.	Significant and unavoidable
The project would generate new vehicle trips, although not to such an extent at designated congestion management program street segments and intersections such that impacts would be significant. As such, the project would not conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.	No mitigation is required.	No impact
The anticipated maximum queue length for the westbound left-turn at Fair Oaks Ave/Dayton Street would not exceed the available storage length of the westbound traffic lane on Dayton Street. Additionally, the project would incorporate regulatory signage so that westbound traffic along Dayton Street would not block the project driveway. Therefore, the project would not result in a safety hazard due to the project's design.	**COA TRANS-1**: Regulatory Signage. Regulatory signage shall be installed at the project driveway's intersection with Dayton Street to prevent motorists from blocking the driveway. This signage shall conform to Pasadena Police Department signage standards for signage installed along driveways with blocked driveways violations and any violations shall be subject to citations by PD.	Less than significant impact
The project would provide emergency access along Fair Oaks Avenue and Dayton Street, and as such, would not result in inadequate emergency access.	No mitigation is required	Less than significant impact
The project would result in an increased number of vehicle trips and would temporarily affect Metro bus stops during construction. However, the project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	**MM TRANS-1**: Coordination with Metro. The construction contractor shall contact and notify Metro Bus Operations Control Special Events Coordinator at 213-922-4632 a minimum of 10 working days prior to any construction activities that may impact Metro bus lines. Additionally, the construction contractor shall contact and include other bus services, such as ARS and Foothill Transit, in construction outreach efforts that may be affected by construction activities. A quarterly compliance report submitted by the construction contractor would satisfy Metro's monitoring requirements. **MM TRANS-2**: Maintain Pedestrian Access. Construction activity shall not be allowed to block or interfere with pedestrian access to the existing transit stop located along Fair Oaks Avenue, near the corner of Fair Oaks Avenue and Dayton Street.	Less than significant impact

This page is intentionally left blank.

Section 2
Corrections and Additions

The following corrections and additions are set forth to update the Draft Environmental Impact Report (EIR) and the Recirculated Draft EIR for the proposed Green Hotel Apartments Project (proposed project) in response to the comments received during the public review period for each document. The following corrections and additions have been reviewed in relation to the standards in Section 15088.5(a) and (b) of the *California Environmental Quality Act (CEQA) Guidelines* regarding when recirculation of a Draft EIR is required prior to certification. Sections 15088.5(a) and (b) of the *CEQA Guidelines* state:

> *(a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation include, for example, a disclosure showing that:*
>
> > *(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.*
> >
> > *(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.*
> >
> > *(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponent declines to adopt it.*
> >
> > *(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.*
> >
> > *(b) Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.*

The corrections and additions to the Draft EIR and the Recirculated Draft EIR document included herein do not constitute new significant information requiring recirculation of the Draft EIR beyond what was accomplished through the Recirculated Draft EIR already completed for the project.

Corrections and Additions

Changes to the Draft EIR the Recirculated Draft EIR are identified below by the corresponding Draft EIR the Recirculated Draft EIR section and subsection, if applicable, and the page number. Additions are shown in <u>underline</u> and deletions in ~~double strikeout~~ format.

Executive Summary

The Executive Summary of the Draft EIR is replaced by Section 1, Summary, as contained in this Final EIR document.

Section 2
Project Description

The first paragraph in Section 2.2 of the Project Description on page 2-1 of the Draft EIR has been revised to acknowledge that access to the project site currently exists on Dayton Street and Fair Oaks Avenue, as presented below and also included in Section 2, Corrections and Additions, of the Final EIR:.

> The project site is located within the City of Pasadena (the City), which is located approximately 10 miles northeast of the City of Los Angeles in the County of Los Angeles (Figure 2-1, Regional Location). Regional access to the City is provided by State Route 134 (SR 134), Interstate 210 (I-210 or Foothill Freeway), State Route 110 (SR 110), and Interstate 710 (I-710). The project site is located at 86 South Fair Oaks Avenue, at the northeast corner of Fair Oaks Avenue at Dayton Street. Vehicle access points at the project site currently exist on Dayton Street and South Fair Oaks Avenue. The project site is bordered by a one-story commercial building and the existing Green Hotel Apartments on the north, Castle Green on the east, Dayton Street on the south, and South Fair Oaks Avenue on the west, as shown in Figure 2-2, Local Vicinity and Figure 2-3, Aerial Overview.

Table 2-1 Summary of On-Site Protected Trees, on page 2-2 of the Draft EIR has been replaced as follows:

~~Genus & Species~~	~~Common Name~~	~~Estimated Age (years)~~	~~Diameter~~	~~Height~~	~~Remain~~	~~Relocate~~	~~Remove & Replace~~
~~Cinnamomum camphora~~	~~Camphor~~	~~70~~	~~36″~~	~~45′~~			~~X~~
~~Cinnamomum camphora~~	~~Camphor~~	~~70~~	~~23″~~	~~45′~~			~~X~~
~~Cinnamomum camphora~~	~~Camphor~~	~~100~~	~~50″~~	~~45′~~			~~X~~
~~Washingtonia filifera~~	~~California fan palm~~	~~80~~	~~36″~~	~~65′~~	~~X~~		
~~Washingtonia filifera~~	~~California fan palm~~	~~80~~	~~32.5″~~	~~60′~~		~~X~~	
~~Ficus microcarpa~~	~~Indian laurel fig~~	~~65~~	~~40″~~	~~40′~~			~~X~~
~~Phoenix canariensis~~	~~Canary Island palm~~	~~105~~	~~30″~~	~~65′~~		~~X~~	
~~Washingtonia robusta~~ ‡	~~Mexican fan palm~~	~~75~~	~~17″~~	~~50′~~			~~X~~
~~Washingtonia robusta~~ ‡	~~Mexican fan palm~~	~~75~~	~~16″~~	~~45′~~			~~X~~
~~Washingtonia robusta~~ ‡	~~Mexican fan palm~~	~~75~~	~~16″~~	~~50′~~			~~X~~
~~Washingtonia~~	~~Mexican fan~~	~~75~~	~~17″~~	~~50′~~			~~X~~

~~robusta~~‡	~~palm~~						
~~Washingtonia robusta~~‡	~~Mexican fan palm~~	~~85~~	~~21"~~	~~75'~~		~~X~~	
~~Washingtonia robusta~~‡	~~Mexican fan palm~~	~~45~~	~~18"~~	~~30'~~	~~X~~		
~~Washingtonia robusta~~‡	~~Mexican fan palm~~	~~85~~	~~16"~~	~~60'~~			~~X~~
~~Washingtonia robusta~~‡	~~Mexican fan palm~~	~~65~~	~~16"~~	~~75'~~			~~X~~

Table 2-1 Summary Disposition of Protected Trees with Project Implementation

Genus & Species	Common Name	Diameter (Inches)	Height (Feet)	Remain in Place	Relocate within Project Site	Remove/ Mitigate Through Replacement
Cinnamomum camphora	Camphor	36	45			X
Cinnamomum camphora	Camphor	23	45			X
Cinnamomum Camphora	Camphor	50	45			X
Washingtonia Filifera	California Fan Palm	36	65	X		
Cinnamomum camphora	Camphor	23	60	X		
Washingtonia Filifera	California Fan Palm	32.5	60		X	
Ficus Microcarpa	Indian Laurel Fig	40	40			X
Phoenix Canariensis	Canary Island Date Palm	30	65		X	
Syagrus Romanzoffiana	Queen Palm	~11	~12	X		
Syagrus Romanzoffiana	Queen Palm	~11	~15	X		
Washingtonia Robusta	Mexican Fan Palm	17	~50			X
Washingtonia Robusta	Mexican Fan Palm	16	~45			X
Washingtonia Robusta	Mexican Fan Palm	16	~50			X
Washingtonia Robusta	Mexican Fan Palm	17	~50			X
Washingtonia Robusta X	Mexican Fan Palm	21	75		X	
Washingtonia Robusta X	Mexican Fan Palm	18	~30	X		
Washingtonia Robusta	Mexican Fan Palm	16	~65			X
Washingtonia Robusta	Mexican Fan Palm	16	~75			X

Figure 2-3a, Aerial Overview – Oblique Angle, is added to the Draft EIR after Figure 2-3 on page 2-9, as shown on the following page herein.

The second complete paragraph on page 2-14 of the Draft EIR has been revised to read as follows:

> The proposed project would provide 9,600 square feet of private open space and recreational uses, which would consist of 2,880 square feet of open space (including a pool), a 1,050 square-foot gym, and 5,670 square feet of open space provided in the courtyard on the ground floor. Landscaping for the proposed project would include the following trees: marina, crape myrtle, olive tree, and pink trumpet tree along with drought tolerant ground cover and shrubs.

Figure 2-5, Site Plan and First Floor Layout, on page 2-19 of the Draft EIR is replaced with the figure included on page 2-7 herein.

Section 3.1
Aesthetics

The last sentence of the second paragraph on page 3.1-3 of the Draft EIR is revised to read as follows:

> There are no distant views of the San Gabriel Mountains available within the vast majority of the project site, as views to the north are blocked by the existing Green Hotel Apartments building; however, a narrow view window of the mountains is available at the western edge of the site when looking north along Fair Oaks Avenue, with the breadth of that view being constrained by existing multi-story buildings that line both sides of the street.

Table 3-1 Summary of On-Site Trees, on page 3.1-4 of the Draft EIR has been replaced as follows:

~~Tree #~~	~~Genus & Species~~	~~Common Name~~	~~Diameter~~	~~Height~~
~~50~~	~~Cinnamomum camphora (protected)~~	~~Camphor~~	~~36 inches~~	~~45 feet~~
~~51~~	~~Cinnamomum camphora (protected)~~	~~Camphor~~	~~23 inches~~	~~45 feet~~
~~52~~	~~Cinnamomum camphora (protected)~~	~~Camphor~~	~~50 inches~~	~~45 feet~~
~~53~~	~~Washingtonia filifera (protected)~~	~~California fan palm~~	~~36 inches~~	~~65 feet~~
~~54~~	~~Washingtonia filifera (protected)~~	~~California fan palm~~	~~32.5 inches~~	~~60 feet~~
~~55~~	~~Ficus microcarpa (protected)~~	~~Indian laurel fig~~	~~40 inches~~	~~40 feet~~
~~67~~	~~Phoenix canariensis (protected)~~	~~Canary Island palm~~	~~30 inches~~	~~65 feet~~
~~65~~	~~Washingtonia robusta (protected)~~	~~Mexican fan palm~~	~~17 inches~~	~~50 feet~~
~~71~~	~~Washingtonia robusta (non-protected)~~	~~Mexican fan palm~~	~~16 inches~~	~~45 feet~~
~~72~~	~~Washingtonia robusta (non-protected)~~	~~Mexican fan palm~~	~~16 inches~~	~~50 feet~~
~~77~~	~~Washingtonia robusta (non-protected)~~	~~Mexican fan palm~~	~~17 inches~~	~~50 feet~~
~~78~~	~~Washingtonia robusta (non-protected)~~	~~Mexican fan palm~~	~~21 inches~~	~~75 feet~~
~~79~~	~~Washingtonia robusta (non-protected)~~	~~Mexican fan palm~~	~~18 inches~~	~~30 feet~~
~~80~~	~~Washingtonia robusta (non-protected)~~	~~Mexican fan palm~~	~~16 inches~~	~~60 feet~~
~~81~~	~~Washingtonia robusta (non-protected)~~	~~Mexican fan palm~~	~~16 inches~~	~~75 feet~~

Table 3-1 Summary of On-Site Trees

Tree #	Genus & Species	Common Name	Diameter (Inches)	Height (Feet)	Protected Status
1	Cinnamomum camphora	Camphor	36	45	Protected Specimen Tree
2	Cinnamomum camphora	Camphor	23	45	Protected Specimen Tree
3	Pinus Canariensis	Canary Island Pine	19	65	Non-Protected Tree
4	Pinus Canariensis	Canary Island Pine	18	60	Non-Protected Tree
5	Cinnamomum Camphora	Camphor	50	45	Protected Specimen Tree
6	Washingtonia Filifera	California Fan Palm	36	65	Protected Specimen Tree
7	Cinnamomum camphora[1]	Camphor	23	60	Protected Specimen Tree
9	Magnolia Grandiglora	Southern Magnolia	15	35	Non-Protected Tree
10	Ulmus Parvifolia	Chinese Elm	14.5	30	Non-Protected Tree
11	Washingtonia Filifera	California Fan Palm	32.5	60	Protected Specimen Tree
12	Ficus Microcarpa	Indian Laurel Fig	40	40	Protected Specimen Tree
13	Phoenix Canariensis	Canary Island Date Palm	30	65	Protected Specimen Tree
14	Phoenix Canariensis	Canary Island Date Palm	~36	8	Non-Protected Tree
22	Syagrus Romanzoffiana[1]	Queen Palm	~11	~12	Protected Street Tree
23	Syagrus Romanzoffiana[1]	Queen Palm	~11	~15	Protected Street Tree
28	Washingtonia Robusta	Mexican Fan Palm	17	~50	Protected Mature Tree
29	Washingtonia Robusta	Mexican Fan Palm	16	~45	Protected Mature Tree
30	Washingtonia Robusta	Mexican Fan Palm	16	~50	Protected Mature Tree
31	Washingtonia Robusta	Mexican Fan Palm	17	~50	Protected Mature Tree
35	Washingtonia Robusta X	Mexican Fan Palm	21	75	Protected Mature Tree
36	Washingtonia Robusta X	Mexican Fan Palm	18	~30	Protected Mature Tree
37	Washingtonia Robusta	Mexican Fan Palm	16	~65	Protected Mature Tree
38	Washingtonia Robusta	Mexican Fan Palm	16	~75	Protected Mature Tree

Note: 1. Although the canopy of this tree extends to or into the project site, the trunk of the tree is located outside the site boundary (i.e., off-site).

This page is intentionally left blank.

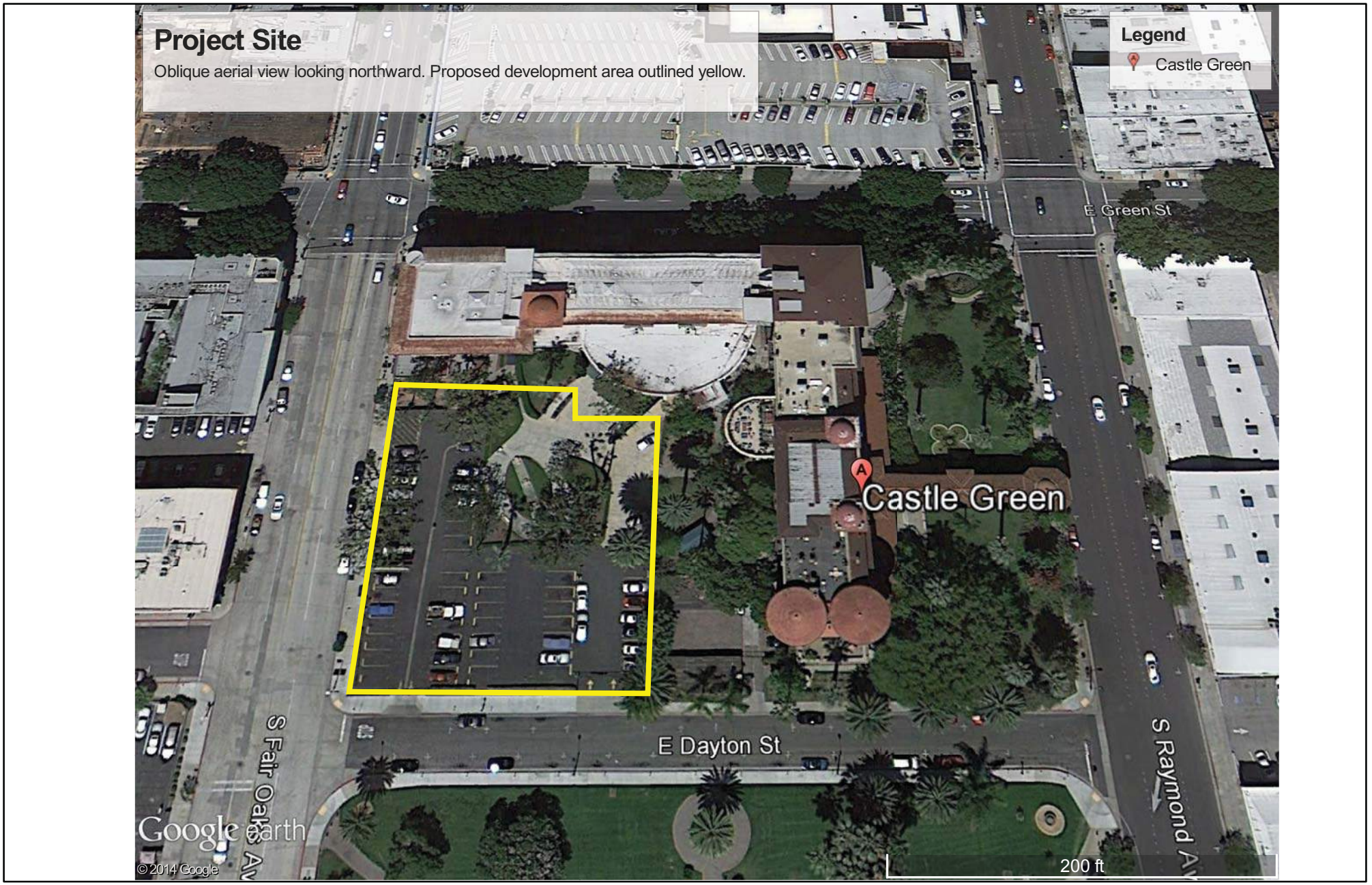
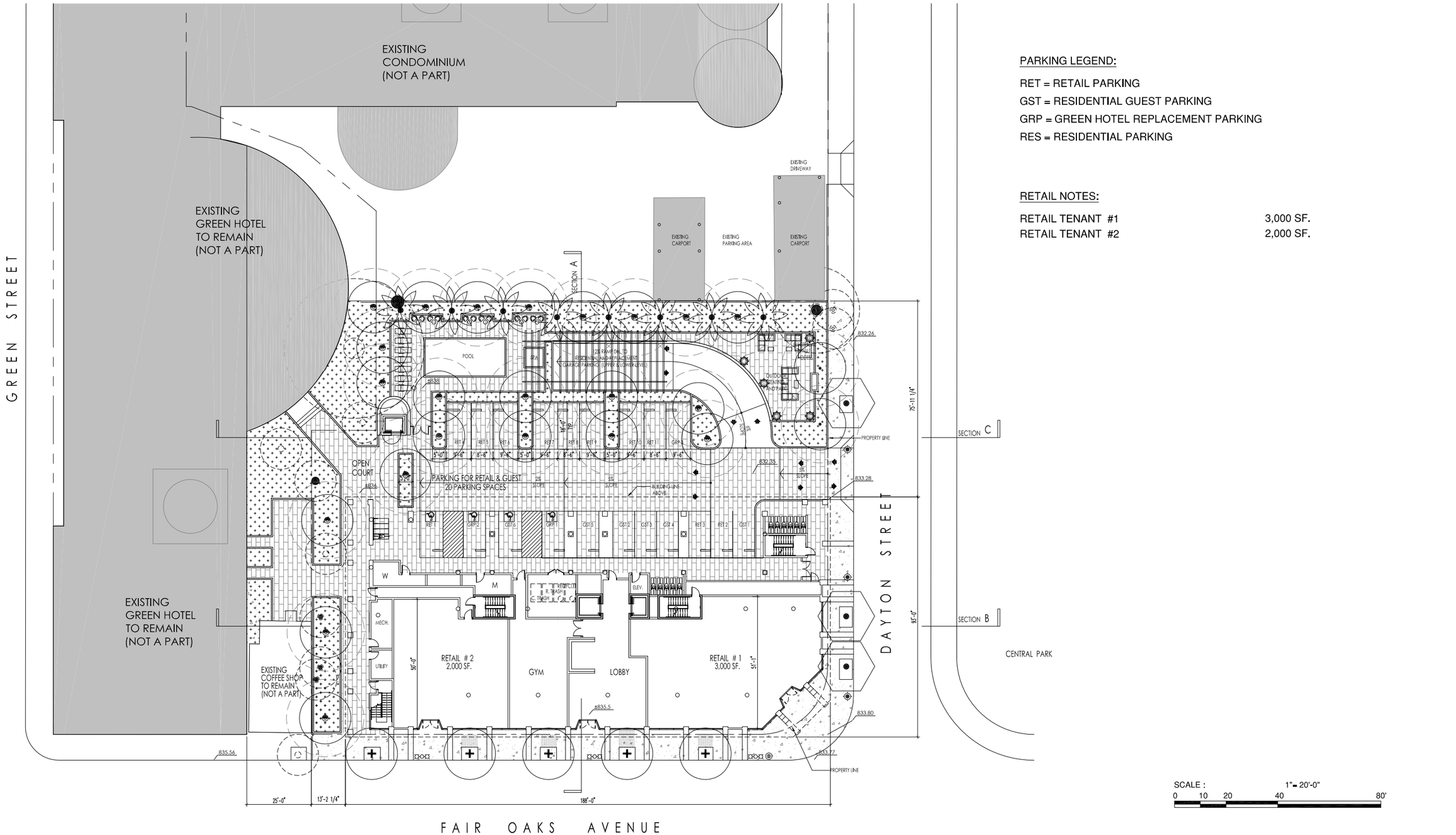


Figure 2-3a
Aerial Overview – Oblique Angle

This page is intentionally left blank.



PARKING LEGEND:

RET = RETAIL PARKING
GST = RESIDENTIAL GUEST PARKING
GRP = GREEN HOTEL REPLACEMENT PARKING
RES = RESIDENTIAL PARKING

RETAIL NOTES:

RETAIL TENANT #1	3,000 SF.
RETAIL TENANT #2	2,000 SF.

SCALE : 1"= 20'-0"
0 10 20 40 80'

N

Figure 2-5
Site Plan and First Floor Layout
Green Hotel Apartments Final EIR

This page is intentionally left blank.

Figure 3.1-2, Location of On-Site Trees, on page 3.1-5 of the Draft EIR is replaced with the updated figure included on page 2-11 herein.

Table 3-2 Summary of Relocated/Replaced Protected Trees, on page 3.1-26 of the Draft EIR is replaced as follows:

~~Tree #~~	~~Genus & Species~~	~~Common Name~~	~~Diameter~~	~~Height~~	~~Remain~~	~~Relocate~~	~~Replace~~
~~50~~	~~Cinnamomum camphora~~	~~Camphor~~	~~36"~~	~~45'~~			~~X~~
~~51~~	~~Cinnamomum camphora~~	~~Camphor~~	~~23"~~	~~45'~~			~~X~~
~~52~~	~~Cinnamomum camphora~~	~~Camphor~~	~~50"~~	~~45'~~			~~X~~
~~53~~	~~Washingtonia filifera~~	~~California fan palm~~	~~36"~~	~~65'~~	~~X~~		
~~54~~	~~Washingtonia filifera~~	~~California fan palm~~	~~32.5"~~	~~60'~~		~~X~~	
~~55~~	~~Ficus microcarpa~~	~~Indian laurel palm~~	~~40"~~	~~40'~~			~~X~~
~~67~~	~~Phoenix canariensis~~	~~Canary Island palm~~	~~30"~~	~~65'~~		~~X~~	
~~65~~	~~Washingtonia robusta~~[1]	~~Mexican fan palm~~	~~17"~~	~~50'~~			~~X~~
~~71~~	~~Washingtonia robusta~~[1]	~~Mexican fan palm~~	~~16"~~	~~45'~~			~~X~~
~~72~~	~~Washingtonia robusta~~[1]	~~Mexican fan palm~~	~~16"~~	~~50'~~			~~X~~
~~77~~	~~Washingtonia robusta~~[1]	~~Mexican fan palm~~	~~17"~~	~~50'~~			~~X~~
~~78~~	~~Washingtonia robusta~~[1]	~~Mexican fan palm~~	~~21"~~	~~75'~~		~~X~~	
~~79~~	~~Washingtonia robusta~~[1]	~~Mexican fan palm~~	~~18"~~	~~30'~~	~~X~~		
~~80~~	~~Washingtonia robusta~~[1]	~~Mexican fan palm~~	~~16"~~	~~60'~~			~~X~~
~~81~~	~~Washingtonia robusta~~[1]	~~Mexican fan palm~~	~~16"~~	~~75'~~			~~X~~

~~Notes:~~ [1] ~~Diameter at breast height (dbh)~~

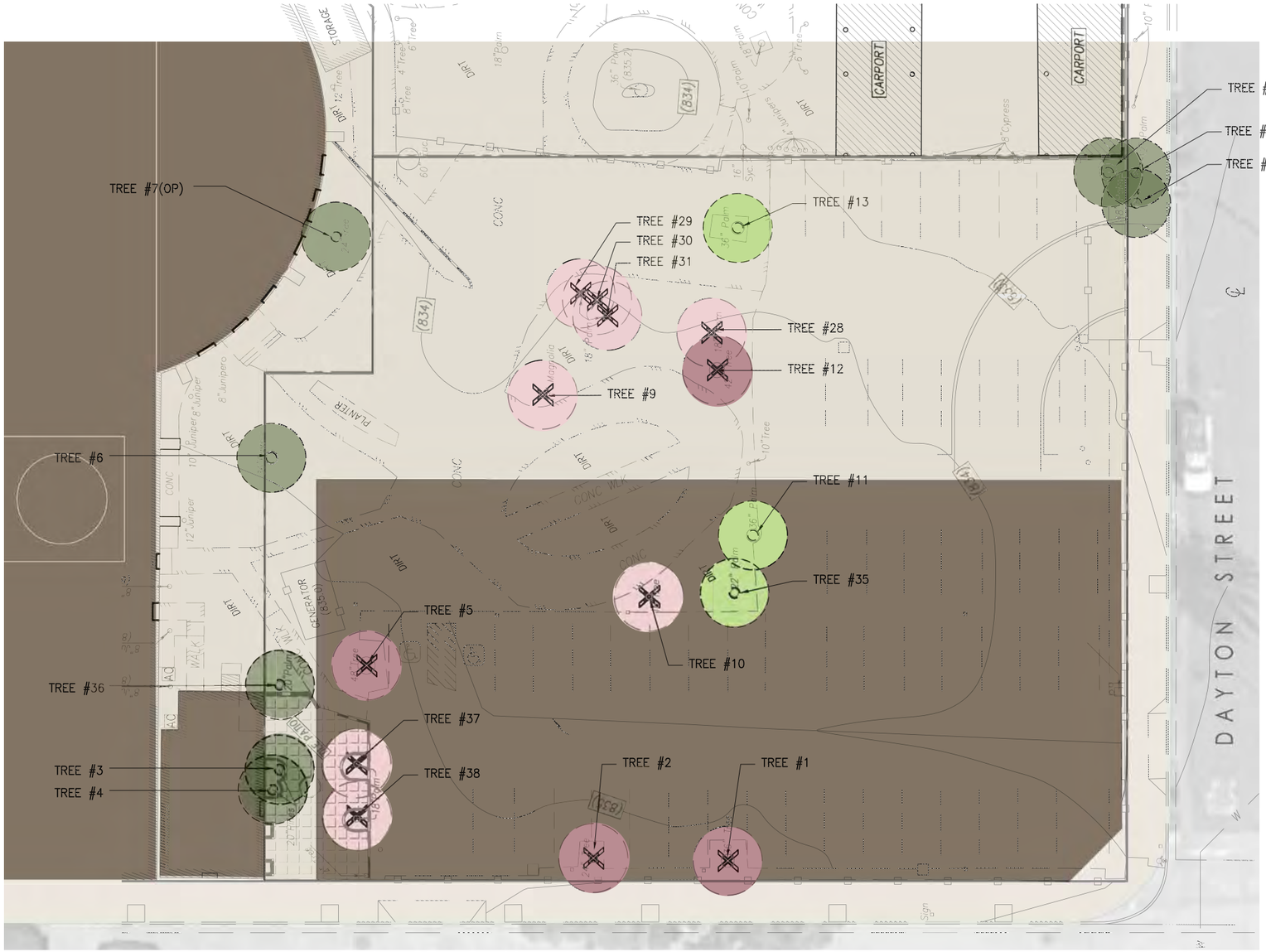
Table 3-2 Summary Disposition of ~~Relocated/Replaced~~ Protected Trees with Project Implementation

Tree #	Genus & Species	Common Name	Diameter (Inches)	Height (Feet)	Remain in Place	Relocate within Project Site	Remove/ Mitigate Through Replacement
1	Cinnamomum camphora	Camphor	36	45			X
2	Cinnamomum camphora	Camphor	23	45			X
5	Cinnamomum Camphora	Camphor	50	45			X
6	Washingtonia Filifera	California Fan Palm	36	65	X		
7	Cinnamomum camphora	Camphor	23	60	X		
11	Washingtonia Filifera	California Fan Palm	32.5	60		X	
12	Ficus Microcarpa	Indian Laurel Fig	40	40			X
13	Phoenix Canariensis	Canary Island Date Palm	30	65		X	
22	Syagrus Romanzoffiana	Queen Palm	~11	~12	X		
23	Syagrus Romanzoffiana	Queen Palm	~11	~15	X		
28	Washingtonia Robusta	Mexican Fan Palm	17	~50			X
29	Washingtonia Robusta	Mexican Fan Palm	16	~45			X
30	Washingtonia Robusta	Mexican Fan Palm	16	~50			X
31	Washingtonia Robusta	Mexican Fan Palm	17	~50			X
35	Washingtonia Robusta X	Mexican Fan Palm	21	75		X	
36	Washingtonia Robusta X	Mexican Fan Palm	18	~30	X		

Table 3-2 Summary Disposition of ~~Relocated/Replaced~~ Protected Trees with Project Implementation

Tree #	Genus & Species	Common Name	Diameter (Inches)	Height (Feet)	Remain in Place	Relocate within Project Site	Remove/ Mitigate Through Replacement
37	Washingtonia Robusta	Mexican Fan Palm	16	~65			X
38	Washingtonia Robusta	Mexican Fan Palm	16	~75			X

The figures on the pages 2-15 through 2-27, included herein, Figure 3.1-15 through Figure 3.1-21, have been added to Section 3.1, Aesthetics, of the Draft EIR:



PROTECTED TREES TO BE REMOVED

NON-PROTECTED TREE TO BE REMOVED
(SEE A1.15 FOR NON- PROTECTED TREE LEGEND)

PROTECTED TREE TO BE BOXED AND TRANSPLANTED ON THE SITE

EXISTING NPMRCARCB TREE TO BE SAVED.

SCALE: 1/16"=1'–0"

Figure 3.1-2
Location of On-Site Trees

This page is intentionally left blank.

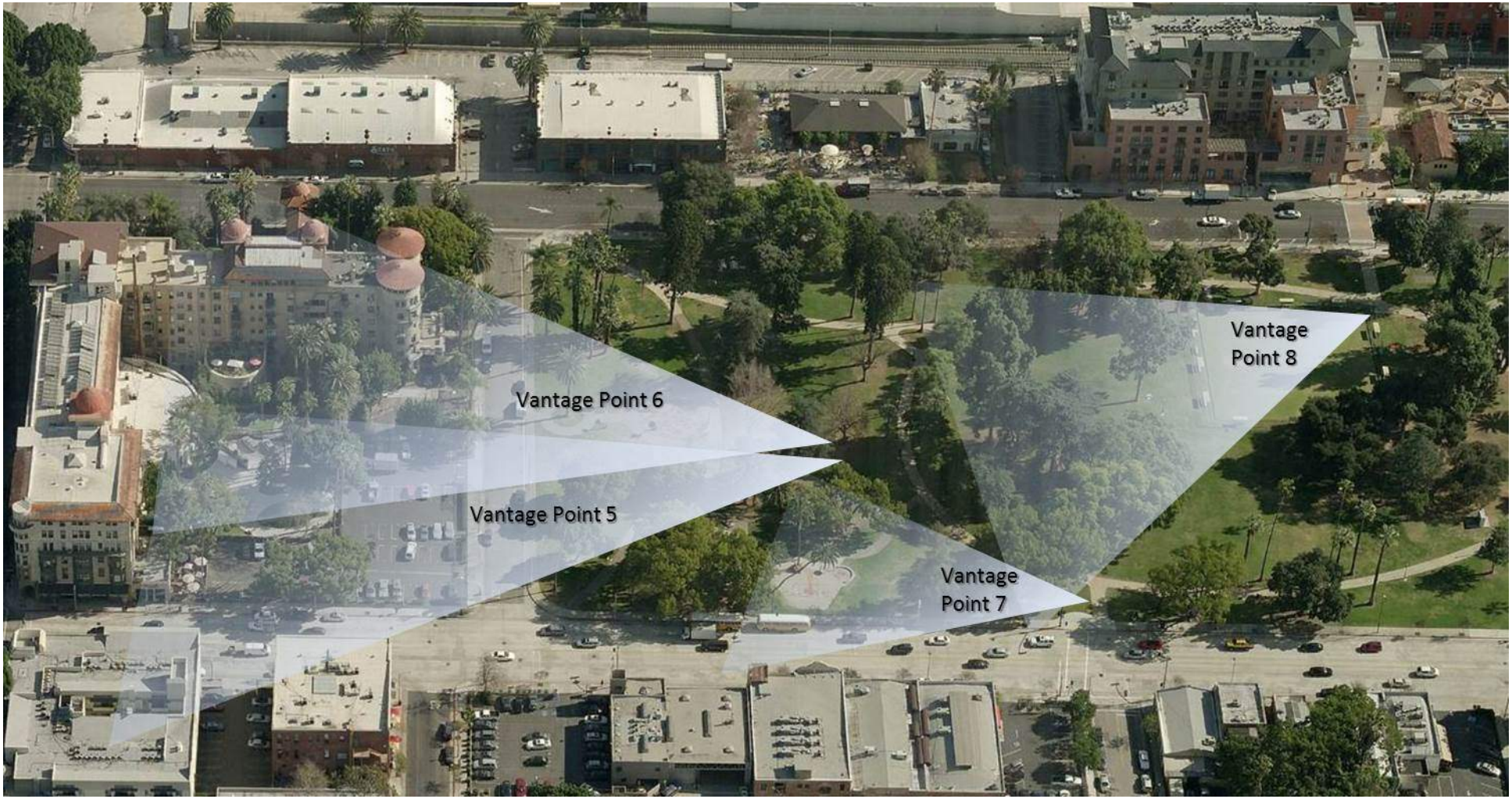


Figure 3.1-15
Vantage Point Locations – Vantage Points 5 through 8

This page is intentionally left blank.

Before



After



Figure 3.1-16
Vantage Point 5

This page is intentionally left blank.

B e f o r e



A f t e r



Figure 3.1-17
Vantage Point 6

This page is intentionally left blank.

B e f o r e



A f t e r



Figure 3.1-18
Vantage Point 7

This page is intentionally left blank.

Before



After



Figure 3.1-19
Vantage Point 8

This page is intentionally left blank.

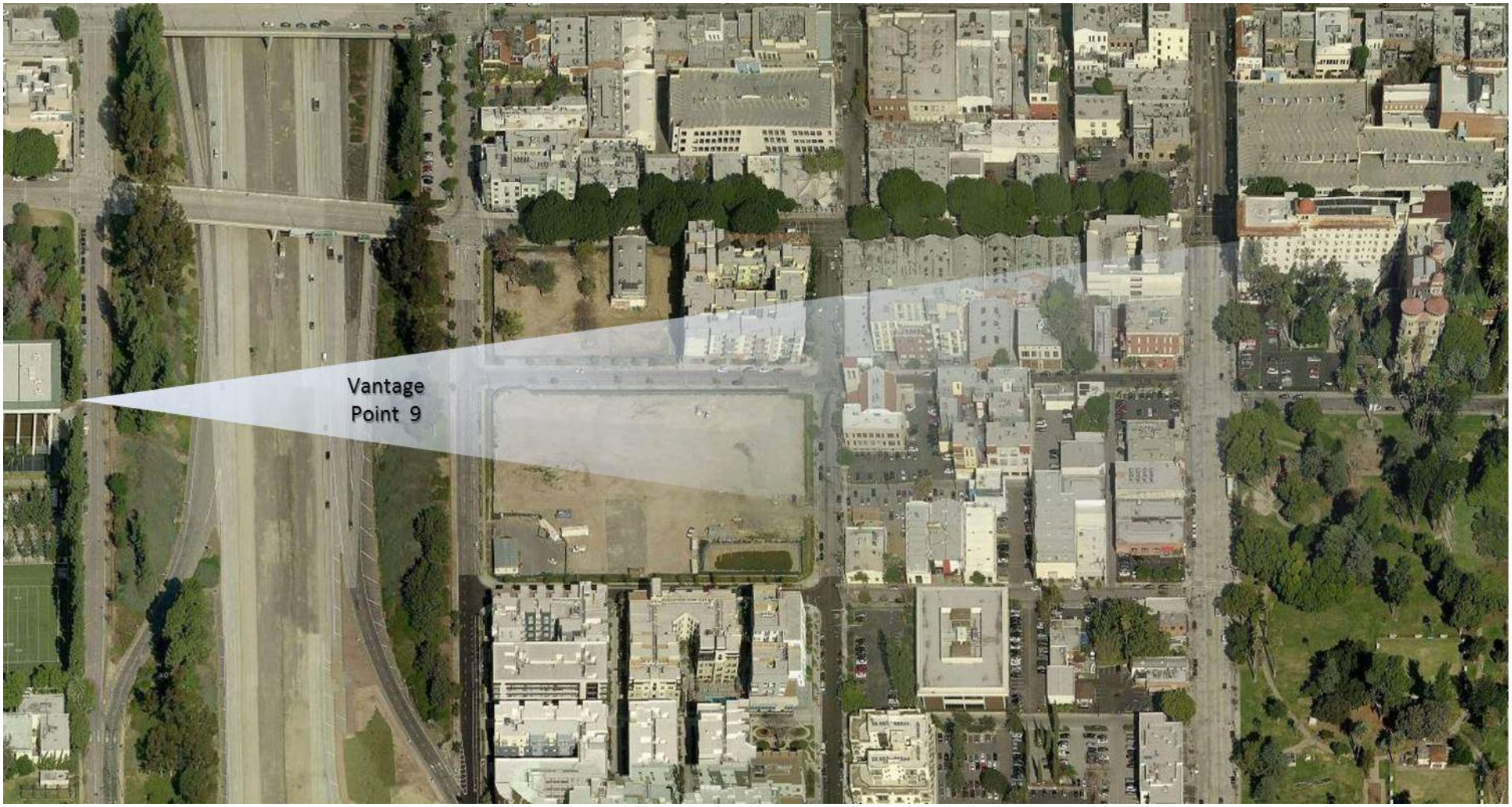


Figure 3.1-20
Vantage Point Locations – Vantage Point 9

This page is intentionally left blank.

B e f o r e



A f t e r

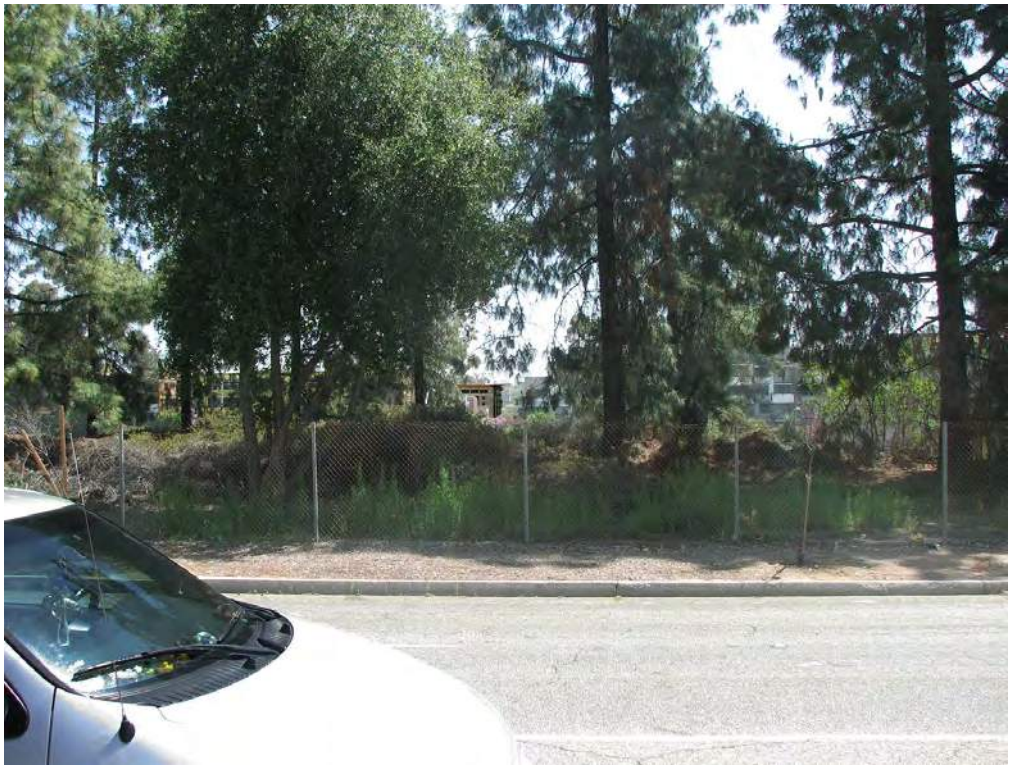


Figure 3.1-21
Vantage Point 9

This page is intentionally left blank.

Section 3.3
Cultural Resources

The second paragraph on page 3.3-1 of the Draft EIR is updated as follows:

> The IS/NOP for the proposed project is included in Appendix A of this EIR. The IS/NOP determined that the proposed project would result in a less than significant impact to archaeological and paleontological resources. Therefore these resource topics are not further evaluated in the Draft EIR. Additionally, the following Condition of Approval (COA) is incorporated into the project to address unanticipated archaeological finds during project construction:
>
> **COA-CULT-1: Unanticipated Archaeological Finds**
>
> A targeted monitoring program by a qualified professional archaeologist versed in historic archaeology shall be implemented during construction. While the archaeological monitor need not be present throughout construction, the targeted archaeological monitoring program shall minimally include the following:
>
> - Prior to grading, the archeological consultant shall acquire and review a records search from the South Central Coastal Information Center (SCCIC) and review the cultural/historic resource reports prepared for the project to identify any areas of archaeological sensitivity onsite.
> - On the first day of the grading phase and/or prior grading activities, the archaeological consultant shall conduct a meeting with the construction crew to assist the crew in identifying potentially significant cultural resources and to identify any potential related concerns. If any potential resources are identified when the monitor is not on site, the monitor shall be called immediately and permitted to examine the area prior to additional disturbances.
> - The archaeological consultant shall monitor the first two days of grading activities and initial activities associated with the removal of basements, foundations, and/or concrete slabs.
> - The archaeological consultant shall monitor the disturbance (e.g., grading, trenching, etc.) of any archaeologically sensitive areas identified through records review and/or preliminary investigation. To minimize costs, efforts will be made to schedule such disturbance while the archaeological consultant is otherwise present onsite.
> - The archaeological consultant shall prepare a summary report at the completion of monitoring for submittal to the SCCIC.
>
> The archaeological monitor shall have the authority to halt any activities impacting archaeological resources and the monitor/archaeological consultant must be permitted to adequately evaluate the find. If materials are found to be important, measures must be taken to preserve such materials in place or relocate the materials off site for further study.

Section 3.5
Noise and Vibration

The first and second paragraphs on page 3.5-21 of the Draft EIR are revised to read as follows:

> However, demolition and construction activities could occur closer than 25 feet to the existing Green Hotel Apartment building and attached single-story structure (i.e., 84 South Fair Oaks Avenue). Based on FTA and Caltrans methodologies, if large bulldozers, loaded trucks, or similar equipment were to operate within 20 feet of the existing Green Hotel Apartments building or the 84 South Fair Oaks Avenue structure, the vibration level could exceed the 0.12 ppv in/sec significance threshold (see Table 3.5-6). Data from testing at one particular site (see Table 11 of Appendix G) indicates the 0.12 ppv in/sec threshold could also be exceeded with some construction equipment at distances greater than 20 feet. Because the exact limits of equipment use, types of equipment to be used, and soil conditions are not known, without implementation of mitigation, vibration generated during demolition and construction of the proposed project could result in a potentially significant impact to the existing Green Hotel Apartment building and attached single-story structure (i.e., 84 South Fair Oaks Avenue). The Castle Green building is approximately 75 feet from the project site; at this distance, the potential for structural vibration impacts would be less than significant.
>
> Because structural damage considerations require limiting vibration levels to 0.12 ppv in/sec or a similar level (as may be established through implementation of Mitigation Measures NOISE-4 and NOISE-5), the perception of vibration by persons in the existing Green Hotel Apartments and attached single-story structure (i.e., 84 South Fair Oaks Avenue) would fall within the barely perceptible to distinctly perceptible range. This impact would be less than significant.

Mitigation Measure MM-NOISE-4, included on pages 3.5-21 and 3.5-22 of the Draft EIR, is revised to read as follows:

> **MM-NOISE-4: Consult with Structural Engineer and Project Historical Architect**
>
> Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, and to the satisfaction of the City of Pasadena, the applicant shall retain a Professional Structural Engineer with experience in structural vibration analysis and monitoring for historic buildings and a Project Historical Architect as a team to perform the following tasks:

- Review the project plans for demolition and construction;
- Survey the project site and the existing Green Hotel Apartments building and the 84 South Fair Oaks Avenue structure, including geological testing, if required; and
- Prepare and submit a report to the Director of Planning and Community Development to include, but not be limited to, the following:
  - Description of existing conditions at the existing Green Hotel Apartments building and the 84 South Fair Oaks Avenue structure;
  - Vibration level limits based on building conditions, soil conditions, and planned demolition and construction methods to ensure vibration levels would be below 0.12 ppv in/sec, the potential for damage to the existing Green Hotel Apartments building and the 84 South Fair Oaks Avenue structure;

- Specific measures to be taken during construction to ensure the specified vibration level limits are not exceeded; and
- A monitoring plan to be implemented during demolition and construction that includes post-construction and post-demolition surveys of the existing Green Hotel Apartments building and the 84 South Fair Oaks Avenue structure.
- Examples of measures that may be specified for implementation during demolition or construction include, but are not limited to
    - Prohibition of certain types of impact equipment;
    - Requirement for lighter tracked or wheeled equipment;
    - Specifying demolition by non-impact methods, such as sawing concrete;
    - Phasing operations to avoid simultaneous vibration sources; and
    - Installation of vibration measuring devices to guide decision making for subsequent activities.

Mitigation Measure MM-NOISE-5, on page 3.5-22 of the Draft EIR, is revised to read as follows:

> **MM-NOISE-5: Post-Construction Survey and Documentation**
>
> To the satisfaction of the City of Pasadena, at the conclusion of vibration-causing activities, in the unanticipated event of discovery of vibration-caused damage, the Structural Engineer and the Project Historical Architect shall document any damage to the existing Green Hotel Apartments~~s~~ building and the 84 South Fair Oaks Avenue structure caused by construction of the project and shall recommend necessary repairs. The project applicant shall be responsible for any repairs associated with vibration-caused damage as a result of construction of the project. Any such repairs shall be undertaken and completed as required to conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 Code of Federal Regulations 68), and shall apply the California Historical Building Code (California Code of Regulations, Title 24, Part 8) and other applicable codes.

The Residual Impacts summary paragraph on page 3.5-22 of the Draft EIR is revised to read as follows:

> Mitigation Measure NOSIE-4 is a performance standard requirement which would ensure that vibration levels at the existing Green Hotel Apartments~~s~~ building and the 84 South Fair Oaks Avenue structure do not exceed 0.12 ppv in/sec or an alternative threshold as determined by a professional structural engineer. With implementation of mitigation measures identified above, groundborne vibration impacts from construction and operation of the proposed project would be less than significant.

Section 3.6
Transportation and Circulation

The last bullet on page 3.6-21 of the Draft EIR is updated as follows:

- Dayton Street between Fair Oaks Avenue and Raymond Avenue: ~~313~~ 626 daily trips

The last row on Table 3.6-10. Roadway Segment Average Daily Traffic Analysis – Existing (2013) Conditions, on page 3.6-43 of the Draft EIR is updated as follows:

Dayton St. between Fair Oaks Ave. and Raymond Ave.	883	~~313~~626	~~35.4~~ 70.9	Soft measures required; Extensive physical improvements may be required; Project alternatives may be considered

The text in the paragraph following Table 3.6-10 on page 3.6-43 of the Draft EIR is updated as follows:

> As shown in Table 3.6-10, implementation of the proposed project would result in a 0.8 percent increase in daily traffic on Fair Oaks Avenue between Green Street and Dayton Street, a 2.7 percent increase on Raymond Avenue between Green Street and Dayton Street, a 1.6 percent increase on Raymond Avenue between Dayton Street and Del Mar Boulevard, and a ~~35.4~~ 70.9 percent increase on Dayton Street between Fair Oaks Avenue and Raymond Avenue. According to the City's street segment thresholds (Table 3.6-5), the percent increase associated with the Dayton Street roadway segment between Fair Oaks Avenue and Raymond Avenue would be subject to "soft" measures, extensive physical improvements may be required, and alternatives to the project may be considered. The Raymond Avenue roadway segment between Green Street and Dayton Street would be subject to "soft" measures, which are implemented as conditions of approval and are typically the payment of fees to fund overall general transportation and circulation improvements in the project vicinity. However, as determined by City DOT, there are no feasible mitigation measures available to reduce street segment impacts to below levels of significance along Dayton Street between Fair Oaks Avenue and Raymond Avenue. Therefore, significant and unavoidable segment impacts will remain along this segment. The remaining roadway segments are subject to staff review and conditions and with staff approval impacts would be less than significant.

Section 4
Alternatives

The text in Section 4.4.4, Smaller Scale Alternative, on page 4-5 of the Draft EIR is updated as follows:

> The Smaller Scale Alternative would involve the construction of up to 1,080 square feet of retail/commercial with no residential units or up to six residential units with 80 square feet of retail. ~~The Smaller Scale Alternative would involve the construction of a 13-residential unit building with no ground-floor commercial.~~ The intent of this alternative would be to build a project that would result in less than significant traffic impacts to the Dayton Street segment between Fair Oaks Avenue and Raymond Avenue. Implementation of such an alternative, however, is determined to be infeasible because the cost of constructing only 1,080 square feet of retail with no residential units, or the combination of ~~13~~ six residential units with 80 square feet of retail/commercial is such that returns on investments made into the project would not be realized; as such, this alternative is financially infeasible.

The text in the last two paragraphs on page 4-13 of the Draft EIR is updated as follows:

> As discussed in Section 3.6, Transportation and Traffic, in this EIR, one significant and unavoidable impact would result from implementation of the proposed project. As identified

in the Traffic Impact Study prepared for the project, the proposed project had a ~~35.4~~ 70.9 percent segment impact on Dayton Street between Fair Oaks Avenue and Raymond Avenue. This ~~35.4~~ 70.9 percent segment impact would occur because the Dayton Street segment between Fair Oaks Avenue and Raymond Avenue currently receives approximately 883 average daily trips; implementation of the proposed project would result in approximately 313 new trips on this Dayton Street segment, thereby resulting in a ~~35.4~~ 70.9 percent increase in the number of vehicles traveling along Dayton Street between Fair Oaks Avenue and Raymond Avenue on any given day.

Table 4-6 in Section 4.6 of the Draft EIR is updated beyond the changes showing in Section 4.6 of the Recirculated Draft EIR to clarify that the indication of 239 average daily trips occurring on Dayton Street between Fair Oak Avenue/Raymond Avenue is replaced by the value of 479 (i.e., the 239 should have been shown in stikeout text in the Recirculated DEIR) as follows:

Table 4-6 Reduced Height Alternative – Traffic Generation

Street Segment	Existing Traffic	Daily Project Traffic	Percent (%) Increase
Fair Oaks Avenue between Green Street/Dayton Street	20,690	132	0.6
Raymond Avenue between Green Street/Dayton Street	6,879	144	2.1
Raymond Avenue between Dayton Street/Del Mar Avenue	7,664	96	1.3
Dayton Street between Fair Oaks Avenue/Raymond Avenue	883	~~239~~ 479	~~27.1~~ 54.2

Section 5.2
Significant Unavoidable Impacts

The second sentence in Section 5.2 of the Draft EIR is updated beyond the changes showing in Section 5.2 of the Recirculated Draft EIR as follows:

The proposed project would add ~~313~~ 626 daily trips to this ~~intersection~~ segment, thereby resulting in a significant and unavoidable traffic impact to this street segment ~~to do~~ due to the increased number of vehicles traveling on this segment.

This page is intentionally left blank.

Section 3
Comments and Responses

According to the *California Environmental Quality Act (CEQA) Guidelines*, Section 15132, the Final EIR shall consist of the following items: 1) the Draft EIR or a revision of the Draft EIR; 2) comments and recommendations received on the Draft EIR either verbatim or in summary; 3) a list of persons, organizations and public agencies commenting on the Draft EIR; 4) responses of the Lead Agency to significant environmental points raised in the review and consultation process; and 5) any other information added by the Lead Agency.

3.1 Background

3.1.1 Draft EIR Published January 24, 2014

The Draft EIR for the Green Hotel Apartment Project was published on January 24, 2014, and was circulated for a 45-day public comment period in accordance with CEQA Guidelines Section 15088.5. Public notice was mailed to property owners within 500 feet of the project site and to all individuals requesting notice for this and all other EIRs within the City of Pasadena, including all speakers at the scoping meetings that were held for this EIR on April 8 and 15, 2013. Public notice was also posted at the office of the Los Angeles County Clerk and was sent to the State Clearinghouse (a division of the Governor's Office of Planning and Research). The 45-day review period provided interested public agencies, groups, and individuals the opportunity to comment on the contents and accuracy of the document. Copies of the Draft EIR were made available to the public at the City Hall Planning Division counter, the Pasadena Library, and posted online. The public comment period for the Draft EIR ended on March 11, 2014. In addition to written comments received during the 45-day review period, oral comments were taken at the Design Commission public hearing held on March 11, 2014. Public comments on the Draft EIR received by the City are included in this Final EIR, and responses to those comments have been prepared to address the concerns raised.

A total of six comment letters were received on the Draft EIR. A list of commenters is provided below. The comment letters have been numbered and organized into the following categories:

- Public Agencies;
- Private and Local Organizations; and
- Individuals.

The original bracketed comment letters are provided followed by a numbered response to each bracketed comment. Individual comments within each letter are numbered and the response is given a matching number. Additionally, a summary of comments occurring at the City of Pasadena Design Commission public hearing of March 11, 2014, and responses to those comments, are included herein. For certain issue areas where a number of similar type comments were received, such as related to historic resources impacts, view impacts, and project alternatives, topical responses are provided at the beginning to the responses to comments section and relevant individual comments are referred to the applicable topical response.

Where responses to comments on the Draft EIR result in changes to the Draft EIR, these changes are noted and the resulting changes are identified in Section 2, Corrections and Additions, of this Final EIR document.

3.1.2 Recirculated Draft EIR Published January 20, 2015

Subsequent to the publication and circulation for public review of the Draft EIR, City of Pasadena Planning and Community Development staff determined that important new information regarding the Draft EIR analysis of the Green Hotel Apartments Project had become available, which warranted the publication and distribution of a Recirculated Draft EIR for the project. The important new information presented in the Recirculated Draft EIR pertained to the proposed project's traffic impact on Dayton Street between Fair Oaks Avenue and Raymond Avenue. More specifically, the important new information consisted of a correction to the amount of project-related trips indicated in the Draft EIR as occurring on Dayton Street. That correction resulted in an increase in the severity of the significant traffic impact on Dayton Street that was previously disclosed in the Draft EIR, and also required certain revisions to two of the alternatives in the Draft EIR, as related to traffic impacts on Dayton Street. No other aspects of the original Draft EIR, including the project description, environmental setting, impacts, mitigation measures, and alternatives, have materially changed. As such, consistent with Section 15088.5 of the California Environmental Quality Act (CEQA) Guidelines, the Recirculated Draft EIR only included the traffic-related information that was updated/revised from the Draft EIR.

Similar to the Draft EIR process described above, the Recirculated Draft EIR was circulated for a 45-day review period to provide interested public agencies, groups, and individuals the opportunity to comment on the contents and accuracy of the document. Copies of the Recirculated Draft EIR were made available to the public on January 20, 2015 at the Pasadena Permit Center Design & Historic Preservation Division counter, the Pasadena Central Library, and posted online. The public comment period for the Recirculated Draft EIR ended on March 5, 2015. In addition to written comments received during the 45-day review period, oral comments were taken at a Design Commission public hearing held on February 24, 2015. Public comments on the Recirculated Draft EIR received by the City are included in this Final EIR, along with the aforementioned comments on the Draft EIR, and responses to those comments have been prepared to address the concerns raised.

A total of two comment letters were received on the Recirculated Draft EIR. A list of commenters is provided below. The comment letters have been numbered and organized into the following categories:[1]

- Public Agencies; and
- Private and Local Organizations.

Similar to above for the Draft EIR, the original bracketed comment letters are provided followed by a numbered response to each bracketed comment. Individual comments within each letter are numbered and the response is given a matching number. Additionally, a summary of comments occurring at the City of Pasadena Design Commission public hearing of February 24, 2015, and responses to those comments, are included herein. Unlike the Draft EIR, there were no groups of

[1] Unlike the Draft EIR, no comment letters were received on the Recirculated Draft EIR from individuals; hence, that category is not listed relative to the Recirculated Draft EIR.

comments on the Recirculated Draft EIR that warranted the preparation of topical responses; hence, only individual written responses to comments on the Recirculated Draft EIR are provided herein.

It should also be noted that only one of the responses to comments on the Recirculated Draft EIR requires changes to the original Draft EIR beyond those changes already reflected in underline or strikeout text in the Recirculated Draft EIR. That single additional change is identified in Section 2, Corrections and Additions, of this Final EIR document, along with the changes to the Draft EIR that are associated with comments received on the Draft EIR.

3.2 List of Commenters

3.2.1 List of Public Agencies and Private Parties Commenting on the Draft EIR

The following agencies, organizations and individuals provided written comments on the Draft EIR:

Public Agencies

Letter No. 1 County Sanitation Districts of Los Angeles County (March 11, 2014)

Private and Local Organizations

Letter No. 2 Pasadena Heritage (March 11, 2014)

Letter No. 3 Castle Green Homeowners Association (March 8 and 9, 2014)

Letter No. 4 Chatten-Brown & Carstens *on behalf of Castle Green Homeowners Association* (March 10, 2014)

Individuals

Letter No. 5 Ann Scheid (March 11, 2014)

Letter No. 6 Kelly Sutherlin McLeod (March 11, 2014)

3.2.2 List of Public Agencies and Private Parties Commenting on the Recirculated Draft EIR

The following agency and organization provided written comments on the Recirculated Draft EIR:

Public Agencies

Letter No. 7 City of San Marino (January 26, 2015)

Private and Local Organizations

Letter No. 8 Castle Green Homeowners Association (March 2, 2015)

3.3 Responses to Comments

3.3.1 Topical Responses to Comments on the Draft EIR

Several similar type comments on the Draft EIR were received regarding potential impacts to existing historic resources near the project site, viewshed impacts, and project alternatives. The following topical responses provide an overall response for each of those issue areas, to which the relevant comments are referred in the individual responses to comments section that follows.

TR-CR-1 Potential Impacts to Historic Resources

Comments on the Draft EIR were received relative to the proposed project meeting the "*Secretary of the Interior's Standards for Rehabilitation & Guidelines for Rehabilitating Historic Buildings*," in The Secretary of the Interior's Standards for the Treatment of Historic Properties, by Kay D. Weeks and Anne E. Grimmer, National Park Service, Washington, D.C., 1995.

The Secretary of the Interior's Standards for the Treatment of Historic Properties (including Standards for Rehabilitation) are codified in 36 CFR §§ 68.3 and 67.7 and are only directly applicable to "areas under the jurisdiction of the National Park Service." (See 36 CFR § 1.1) The intent of these standards is to "set forth standards for the treatment of historic properties containing standards for preservation, rehabilitation, restoration and reconstruction. These standards apply to all proposed grant-in-aid development projects assisted through the National Historic Preservation Fund. 36 CFR § 67 focuses on 'certified historic structures' as defined by IRS Code 1986. Those regulations are used in the Preservation Tax Incentives Program…" (36 CFR § 68.1) As noted in the Secretary of the Interior's Guidelines for Preserving, Rehabilitating Restoring & Reconstructing Historic Buildings: "The Secretary of the Interior's Standards for Treatment of Historic Properties are only regulatory for projects receiving federal grant-in-aid funds otherwise, the Standards and Guidelines are intended only as general guidance for work on any historic building…"(emphasis added.) Further, "[t]he Standards are neither technical nor prescriptive..." These regulations and the associated guidelines make it clear that even when these standards are applicable to a project, they do not require precise conformity with each and every subsection of the standards. As noted in the Guidelines and the regulations themselves, the standards provide various "options" and are "depend[ent] upon the property's significance, existing physical condition, the extent of documentation" and must "consider "the economic and technical feasibility of each project." (Secretary of the Interior's Guidelines, page 19; 36 CFR § 68.3.) As also noted in the associated Guidelines, "latitude is given in the Standards for Rehabilitation and Guidelines for Rehabilitation to replace extensively deteriorated, damaged, or missing features using either traditional or substitute materials."

These Guidelines and Regulations are not part of the CEQA process. CEQA requires analysis of physical impacts to the environment, not a regulatory consistency analysis. As discussed in case law "an inconsistency between a project and other land use controls does not in itself mandate a finding of significance." (*Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal.App.4th 1170.) A significant effect must be correlated to change in the "existing physical conditions." (CEQA Guidelines Section 15126.2.) "The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. An iron clad definition of significant effect is not always possible because the significance of an activity may vary with the setting." 14 Cal. Code Regs. § 15064(b). Therefore, "a lead agency has the discretion to determine whether to classify an impact described in an EIR as 'significant,' depending on the nature of the area affected." *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477. The only relationship of the Secretary of the Interior Standards to the CEQA process are discussed under CEQA Guidelines Section 15064.5(b)(3): "Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource." (See also CEQA Guidelines Section 15126.4.) Even in this instance the CEQA Guidelines do not define compliance with the Secretary of the Interior's Standards as the exclusive method of mitigation. While consistency analysis is not

required under CEQA, projects such as this undergoing Design Review under Pasadena Municipal Code Section 17.61.030.K(2) must be found to be consistent with the Secretary of the Interiors Standards for the Treatment of Historic Properties prior to approval of Design Review. This finding, however, does not need to be made in the CEQA environmental analysis.

Standard 9 of the Secretary of the Interior's Standards reads, in part, that "related new construction will not destroy historic materials, features, and spatial relationships that characterize the property and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment."

The related new construction associated with the currently proposed project does not destroy historic materials and features because it is apart from, and does not touch or intervene in, any historic buildings on the adjacent properties. As documented in the Draft EIR, specifically in Section 3.3 and Appendices D and E (i.e., cultural resources technical report and tree aging report, respectively), the existing spaces and plants on the project property were found not to be significant character-defining features, and do not contribute to the adjacent historic resources. The documentation, analysis, and conclusions in the cultural resources technical report demonstrate that there are two trees that may date from the period of significance of the historic property, but the open space and its features (i.e., landscaping) do not retain integrity as a contributing part of the site. The open space was similar to the existing condition by 1950, and was a parking lot when the property was listed on the National Register of Historic Places.

The most significant spatial relationships of the adjacent historic resources (i.e., Castle Green and the existing Green Hotel Apartments) are its facades on the public rights of way (Raymond Avenue, Green Street, and Fair Oaks Avenue), and facing south to De Lacey Avenue and Central Park. The addition of the proposed building does not "destroy" these spatial relationships. There is no impact on the street-facing facades on Raymond Avenue, Green Street, or Fair Oaks Avenue. The west end of the south facade of the Green Hotel Apartments building would be partially blocked from some points of view at the south and west, although the extent of such view impacts would be limited by the fact that areas west of the project site are highly developed and predominantly occupied by multi-story buildings that already block views of the site, and the areas south of the site include Central Park, with numerous large trees, and existing development adjacent to the park, all of which limits views of the project site. The footprint of the proposed building is distant from the east side of the Castle Green, and does not touch the west end of the south wall of the Green Hotel (i.e., the existing Green Hotel Apartments building). In circumnavigating the perimeter of the adjacent historic property and the project site, all of the facades of the historic buildings remain open to view from a public right-of-way, and from Central Park. Views of the west bays of the existing Green Hotel Apartments would be obstructed. However, those west bays would still be viewable obliquely from the public right-of-way. No part of the existing buildings on the block would be obscured by the proposed project except for the west end of the south façade of the Hotel Green (existing Green Hotel Apartments), and that part of the facade would remain visible from the Fair Oaks Avenue sidewalk and from points on the project site. The existing city block, relationships of buildings to the streets, relationships of buildings to the remaining historic open space fronting Raymond Avenue on the adjacent historic property (Castle Green), and relationships to Central Park are not destroyed; the configuration of the proposed project causes little change to character-defining spatial relationships.

Preservation Brief 14, New Exterior Additions to Historic Buildings: Preservation Concerns," by Anne E. Grimmer and Kay D. Weeks, the National Park Service, Washington, D.C., 2010, addresses

concerns regarding additions to historic buildings. Although the proposed project is a stand-alone building and not an addition, the principals and guidance provided in Preservation Brief 14 are appropriate for related new construction adjacent to historic buildings and located within historic districts.

Preservation Brief 14 reads, in part, that "most historic districts or neighborhoods are listed in the National Register of Historic Places for their significance within a particular time frame. This period of significance of historic districts as well as individually-listed properties may sometimes lead to a misunderstanding that inclusion in the National Register may prohibit any physical change outside of a certain historical period—particularly in the form of exterior additions. National Register listing does not mean that a building or district is frozen in time and that no change can be made without compromising the historical significance. It does mean, however, that a new addition to a historic building should preserve its historic character." This guidance is in keeping with the Secretary of the Interior's Standard 9 which governs the design of additions and related new construction to historic buildings and requires additions to avoid destroying character-defining historic materials, features and spatial relationships. It also requires related new construction to be compatible with, yet differentiated from, the historic resource. It is clear that Standard 9 and the guidance for Standard 9 are for the purpose of assisting in the appropriate design of additions to historic buildings and infill within historic districts, and not in disallowing such additions.

Preservation Brief 14 goes on to state that "a new addition should always be subordinate to the historic building; it should not compete in size, scale or design with the historic building. An addition that bears no relationship to the proportions and massing of the historic building—in other words, one that overpowers the historic form and changes the scale will usually compromise the historic character as well. The appropriate size for a new addition varies from building to building; it could never be stated in a square or cubic footage ratio, but the historic building's existing proportions, site, and setting can help set some general parameters for enlargement." Preservation Brief 14 also includes photographs and illustrations of numerous examples of compatible new construction that are attached to or touching historic buildings and that are as tall or are taller than the historic building. There is no universal, objective set of criteria that will define compatibility and subordination.

In accordance with Preservation Brief 14 and Standard 9, the proposed new building recalls the existing historic buildings on the block in general massing, volume and relationship to the street but with a smaller footprint and slightly reduced height. The proposed building is nine feet shorter than the adjacent Hotel Green, and placed as far west as possible, away from the Castle Green's west façade. The lower height and smaller footprint ensure that the new building would be subordinate to the adjacent historic buildings and sited so as to leave exterior facades almost as visible on all sides as they are now, with the exception of views from due west and south along Fair Oaks Avenue. See further discussion of views in Topical Response TR-AES-1.

Preservation Brief 14 also encourages new construction on secondary or rear facades, stating that "constructing the new addition on a secondary side or rear elevation—in addition to material preservation—will also preserve the historic character… because a secondary elevation is usually simpler and less distinctive, the addition will have less of a physical and visual impact on the historic building. Such placement will help to preserve the building's historic form and relationship to its site and setting." While the west facing façade of the Castle Green and south facing façade of the Hotel Green were not intended to be rear facades, the simple detailing of these facades is secondary to the more elaborately articulated and publicly oriented facades facing Green Street and

Raymond Avenue. Placement of the new building at the southwest corner of the property is, therefore, the most appropriate location to preserve the historic character of the adjacent historic resources.

Preservation Brief 14 states that an addition should not fill a "planned void on a highly-visible elevation (such as a U-shaped plan…)." The existing "void" that the proposed project would fill was not intentionally planned as open space. Instead, the original development scheme included an attached west wing that would have occupied the general location of the proposed project. This unbuilt historic scheme is not a significant condition that can be restored, but it does demonstrate that a compatible infill building in the originally proposed location would not destroy intentionally planned spatial characteristics of the existing block. Rather, the project would reinforce the originally planned spatial characteristics of the Hotel Green complex.

As detailed in the Design Process Memorandum, dated August 1, 2014, and included as Attachment 1 to this Final EIR, the project applicant worked closely with historic architects Architectural Resources Group, Inc. to develop a design for the proposed project that most closely matches the footprint for the originally planned Fair Oaks Avenue frontage of the Hotel Green (i.e., existing Green Hotel Apartments). When it was first proposed in 1902, it was conceived as an L-shaped block that would span the Green Street as well as the Fair Oaks Avenue frontage. However, only the Green Street block was completed. The current proposed project would place a new apartment building in the general configuration of the unrealized Fair Oaks Avenue block that hotel owner Colonel George Gill Green proposed in 1902.

In order to adhere as closely as possible to Col. Green's intentions, historic illustrations and newspaper articles were referenced to determine the appropriate height, massing, design and placement of the newly proposed building. The height of the proposed Fair Oaks block was six stories, consistent with the other blocks of the hotel and equal to the height of the Castle Green/West Annex so as to balance it visually. The first floor of the building was proposed to meet the sidewalk on Fair Oaks Avenue, with a small setback on Dayton Street to the south. The project applicant also commissioned a professional surveyor to determine the measurements of the existing buildings so that the relative heights of the historic buildings and the proposed building could be accurately compared. Having accurate figures for the size of the historic buildings was necessary so that the discussion of relative heights could have a factual basis. Additionally, the project was designed to preserve as much as feasible of the width of the garden as a buffer between the new building and the Castle Green, as well as to maintain light and views for the south-facing apartments in the Hotel Green. The proposed Project was modified multiple times, with the unit count reduced from 68 to 64 units, the unit mix adjusted to further reduce the volume, and the total gross square footage reduced from 103,350 square feet (in 2008) to 75,770 square feet (in 2014).

Exterior materials and finishes, fenestration and detailing for the proposed new building were not analyzed relative to design, compatibility, and differentiation with respect to adjacent historic resources. These are building design issues that are required to be reviewed in the project's Design Review process. Pursuant to Pasadena Zoning Code Section 17.61.030, the Design Commission may require changes to the preliminary design of a building that has received land use entitlements with regard to "density, height, open space, parking or loading, and sign requirements, as long as the conditions are not more restrictive than those prescribed by applicable zoning district regulations or a valid Adjustment Permit, Conditional Use Permit, …or other legislative or zoning entitlements." (Pasadena Municipal Code ("PMC"), Title 17, § 17.61.030.I(5)(a)). The Design Commission cannot approve the final design of the project unless it can make all of the following findings: (1) the design is

consistent with the purposes of the City's design review chapter, and (2) the design is consistent with the Central District Design Guidelines. In addition, for alteration to a designated or qualifying historic resource in the Central District, a finding of consistency with the Secretary's Standards must also be made. As a result of these finding requirements and the role of the Design Commission as dictated by the PMC, any such changes necessary to enable such findings must already be part of the project design at that later point. The City's process of analyzing the potential environmental effects of a project to the preliminary level of design review generally known at the time of initial land use approval consideration does not leave to Design Review a duty to mitigate any impacts. Instead, the City's process requires the Design Commission to ensure the continued integrity of the previously adopted environmental and land use analysis through the required design review findings, which ensure that further design iterations do not create new significant effects, and to require that the project design continue to be revised until those findings can be made.

Secretary of the Interior's Standard 10 reads: "New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired." The proposed project easily meets Standard 10 because if the proposed project were constructed, per the project description, and subsequently all of that work were demolished, the existing adjacent historic property will remain intact and untouched.

CEQA Guidelines state that a "substantial adverse change in the significance of an historical resource means that the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." If the proposed project were constructed, the historic buildings on site, and adjacent, would retain integrity. Even with changes to views of the Hotel Green and Castle Green, those buildings are not physically changed, and their visibility from the streets that surround them as well as from Central Park is not a substantial adverse change; the property continues to convey its significance through its materials and features, and through its visual relationship to the site and setting.

Aside from analyses of whether or not the project meets the Secretary of the Interior's Standards for Rehabilitation, the National Register property retains its eligibility for the National Register of Historic Places and for the California Register of Historical Resources. This threshold is important in concluding that there is no substantial adverse change to the cultural resource. No impact has been proposed or demonstrated that would reduce the integrity of the Hotel Green and Castle Green such that the property is no longer eligible for designation as a historic landmark**.** The features that would be removed from the project site – landscaping, paving, fencing and a billboard – are not historic and their removal would therefore not result in substantial adverse change to a historic resource.

TR-AES-1 Potential View Impacts

Comments on the Draft EIR were received relative to the potential view impacts of the proposed project and the analysis conclusion that such impacts would be less than significant. The following expands upon the methodology explained in the Draft EIR and the basis of the analysis conclusions.

As described in Section 3.1.4 of the Draft EIR, the assessment of visual and aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. This evaluation measures the existing visual resources and how implementation of the proposed project would alter those resources, thereby analyzing the nature of

the anticipated changes. The project site was observed and photographically documented, as was the surrounding area, to assist in the analysis.

Photosimulations were prepared in order to provide the Draft EIR reader with a general understanding of how the existing appearance of the project site, as viewed from various locations nearby, would change with project implementation. As shown in Figure 3.1-3 on page 3.1-13 of the Draft EIR, the four vantage points selected for the visual simulations represent locations in close proximity to the site, where the visibility of project development would be very prominent. The associated visual simulations presented in Figures 3.1-4, 3.1-5, 3.1-6, and 3.1-11 in the Draft EIR provide a conservative, arguably worst-case, disclosure of project impacts from those four vantage points close to the project site, but are representative of the overall visual impacts of the project. The analysis in Section 3.1 of the Draft EIR includes consideration of visual/aesthetic impacts from other locations in the general vicinity of the project site, such as those shown in Figures 3.1-7 through 3.1-10 and 3.1-13, that also represent the fact that project implementation would not obstruct or modify views from several other nearby locations.

Several comments received on the Draft EIR indicated that view impacts from other locations not addressed in the Draft EIR should be evaluated, including additional views from within Central Park south of the site and additional views from west of the site, such as from the former Ambassador West campus. In response to such comments, additional vantage points were evaluated in conjunction with preparation of the Final EIR. Figures 3.1-15 through 3.1-21, presented on the following pages, show the visual impacts of the project as viewed from those additional vantage points, which are described below.

Figure 3.1-15 shows the viewpoint locations and direction of views for the additional vantage points considered in the Central Park area south of the project site. Of note is the location and density of mature trees within the park, which substantially screens and limits northward views of the project site and adjacent Castle Green and existing Green Hotel Apartments.

Figure 3.1-16 presents before and after views of the project site from Vantage Point 5, and shows that, based on the north-south axis of the proposed building, much of the existing Green Hotel Apartments building would still be visible from that location.

Figure 3.1-17 presents before and after views of the project site from Vantage Point 6, and, similar to Vantage Point 5, indicates that the orientation of the proposed building and 158-foot separation between the proposed building and Castle Green would maintain a wide view corridor towards the existing Green Hotel Apartments building and views of Castle Green and existing vegetation immediately west of Castle Green outside the project site would be unobstructed by the project.

Figure 3.1-18 presents before and after views of the project site from Vantage Point 7, and indicates that as one moves southward, deeper into Central Park, the visibility of the site and adjacent existing structures becomes much more limited, being obscured and dominated by the trees and landscaping within the park.

Figure 3.1-19 presents before and after views of the project site from Vantage Point 8. Similar to above, the farther south one moves into Central Park, the more limited views toward the project site become, with only a small portion of the upper story building elements being visible from this location.

Figure 3.1-20 shows the viewpoint location and direction of views for the additional vantage point at the eastern edge of the former Ambassador West campus. Of note is the amount of intervening visual obstructions between this vantage point and the project site, including mature landscaping along the edge of the vantage point site and along the nearby freeway, and the many multi-story structures west of the project site. As shown in Figure 3.1-21, the visibility of the project building from Vantage Point 9 would be minimal (and, in actuality, would likely be less than shown due to the intervening natural haze that occurs over distance, as evidenced by the appearance of the existing buildings in the background).

The additional evaluation of view impacts provided above further supports the Draft EIR conclusion that while certain existing views immediate to the project site would be altered by project development, the existing view characteristics of the overall project vicinity would not substantially change and the view impacts of the project would be less than significant.

Please also see Topical Response TR-CR-1 above regarding how and why impacts of views towards Castle Green and the existing Green Hotel Apartments do not constitute a significant impact on historic resources.

TR-ALT-1 Project Alternatives

Comments on the Draft EIR were received regarding project alternatives, particularly in regards to the range of alternatives considered in the Draft EIR, and whether an additional reduced size alternative should be considered, including as related to the significant traffic impact on Dayton Street.

Range of Alternatives

As indicated in Section 4.1 of the Draft EIR, Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines requires an environmental impact report (EIR) to describe a range of reasonable alternatives to the project, or to the location of the project, "which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparable merits of the alternatives." The analysis of alternatives shall focus on alternatives "which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly."

Six alternatives were considered for the proposed project, four of which were determined to be infeasible, as described in Section 4.4 of the Draft EIR, and two that were evaluated in Section 4.6 of the Draft EIR. The four alternatives determined to be infeasible are discussed in the Draft EIR at pp. 4-3 to 4-5, and included:

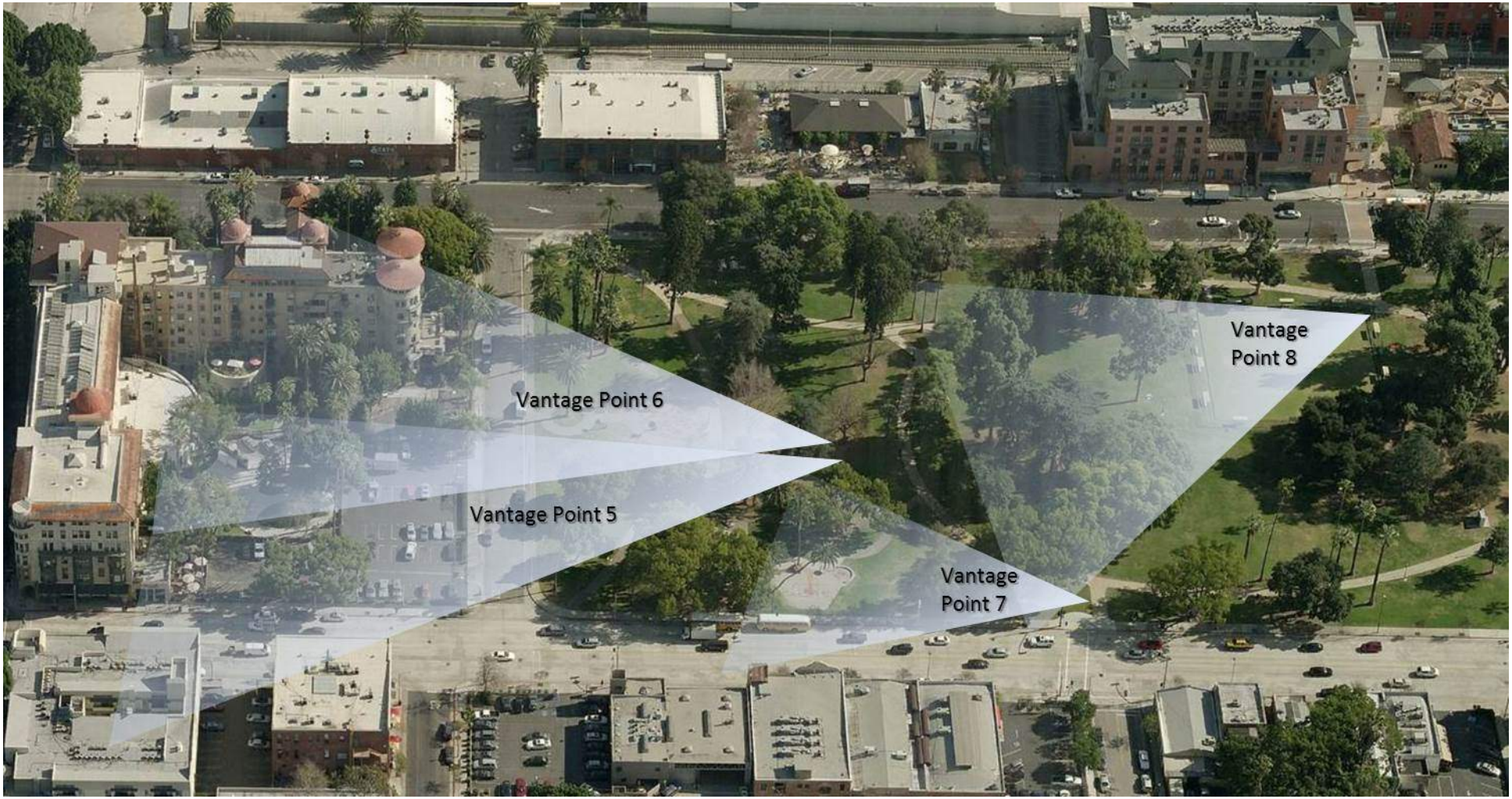


Figure 3.1-15
Vantage Point Locations – Vantage Points 5 through 8

This page is intentionally left blank.

Before



After



Figure 3.1-16
Vantage Point 5

This page is intentionally left blank.

B e f o r e



A f t e r



Figure 3.1-17
Vantage Point 6

This page is intentionally left blank.

B e f o r e



A f t e r



Figure 3.1-18
Vantage Point 7

This page is intentionally left blank.

Before



After



Figure 3.1-19
Vantage Point 8

This page is intentionally left blank.

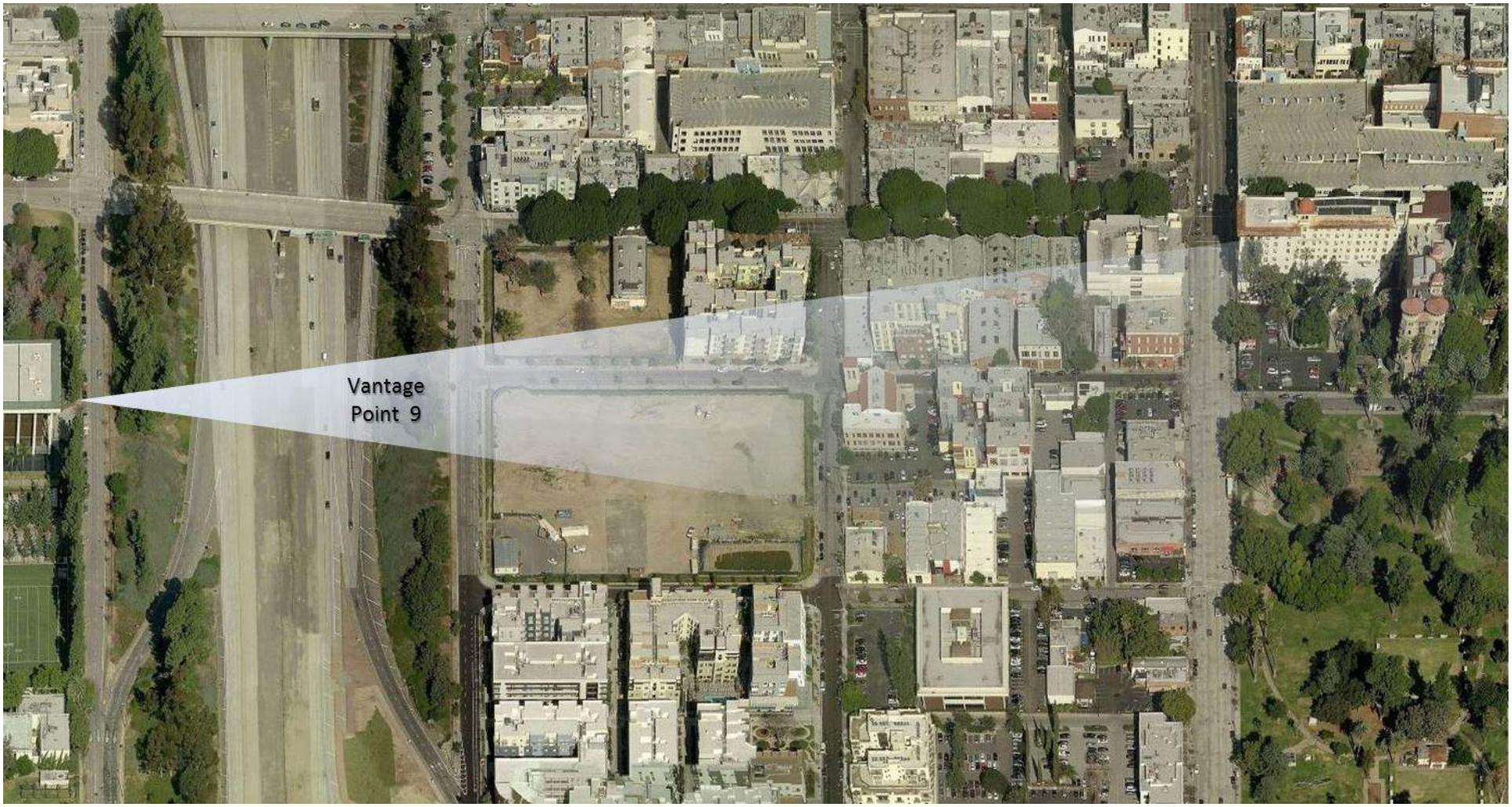


Figure 3.1-20
Vantage Point Locations – Vantage Point 9

This page is intentionally left blank.

B e f o r e



A f t e r

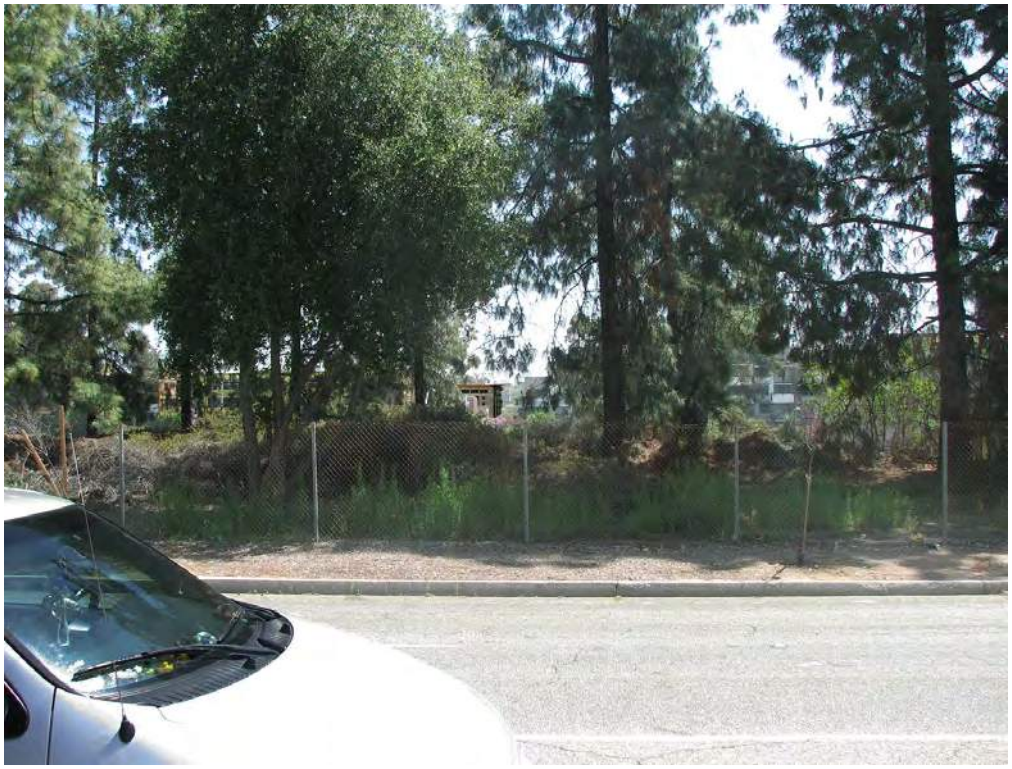


Figure 3.1-21
Vantage Point 9

This page is intentionally left blank.

Alternate Access Alternative - An alternative where access to parking would be provided along Fair Oaks Avenue was considered. As described on page 4-4 of the Draft EIR, vehicles traveling southbound on Fair Oaks Avenue would not be permitted to turn left into the parking garage, and vehicles exiting the parking garage would not be able to turn left out of the structure. Left-turns would not be permitted due to the high volume of traffic on Fair Oaks Avenue. As such, southbound traffic would still need to use Dayton Street to access the site by turning left on Green Street, then turning right on Raymond Avenue, Dayton Street, Fair Oaks Avenue, and finally turning right into underground parking, the number of vehicles traveling on the Dayton Street segment between Fair Oaks Avenue and Raymond Avenue would still remain high and would not alleviate the significant impact otherwise associated with the currently proposed project.

Off-Site Parking Alternative - The Off-Site Parking Alternative would involve construction of the residences and ground-floor commercial only; no underground or at-grade parking would be provided at the site. Instead, parking would be provided at one of two nearby parking structures, and residents, tenants and visitors would access the project site on foot. As described on pages 4-4 and 4-5 of the Draft EIR, the ability to provide the 32 parking spaces located off-site under this alternative would require a perpetual lease for the off-site parking from a site within a travel distance of 1,000 feet. Capacity at the two nearby parking structures has been reached and they are therefore not available, thereby making it infeasible to provide off-site parking within 1,000 feet of the project site.

Alternate Site Alternative - The Alternative Site Alternative would involve the construction of the same project, a 64-unit residential project with 5,000 square feet of ground-floor commercial space, on a different site in the project area. The closest vacant site of similar size to the project is located approximately one and one-half blocks to the east at 100 East Green Street, which is at the intersection of East Green Street and Arroyo Parkway. However, the project applicant does not own or have control over other project sites in the project area, and the one vacant site that is located in the vicinity of the project is not for sale or able to be purchased at this time.

Smaller Scale Alternative - The Smaller Scale Alternative would involve the construction of a 6 residential unit building with no ground-floor commercial. Implementation of such an alternative, however, is determined to be infeasible because the cost of constructing 6 residential units is such that returns on investments made into the project would not be realized.[2]

The two alternatives that were carried forth in the comparative impacts evaluation in Section 4.6 included the following:

No Project Alternative – As required by Section 15126.6(e) of the CEQA Guidelines, the Draft EIR included evaluation of the No Project Alternative. Under the No Project Alternative the existing billboard would remain on site and residents of the existing Green Hotel

[2] Although the Draft EIR identified the Smaller Scale Alternative as having 13 residential dwelling units, that number was reduced to 6 residential dwelling units for reasons explained in the Recirculated Draft EIR.

Apartments would continue to lease parking spaces from the 60-space parking lot. No development of the site would be anticipated.

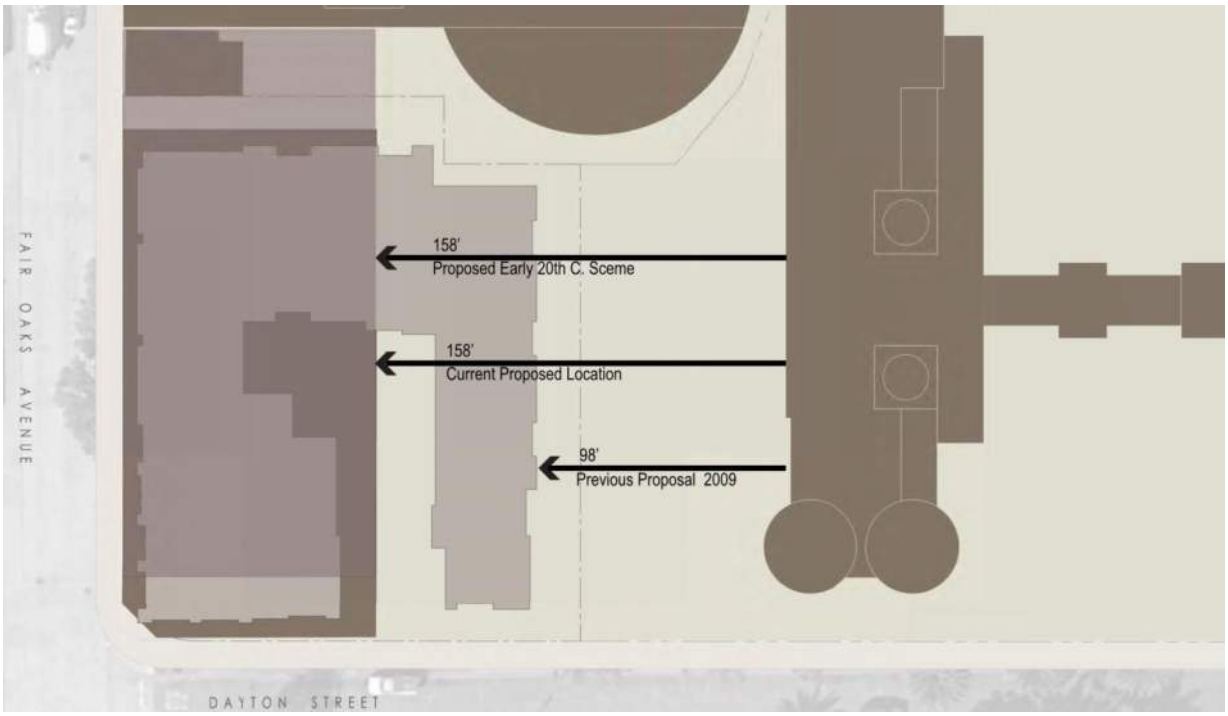
Reduced Height Alternative - The Reduced Height Alternative would involve the construction of a residential and commercial building on the same footprint as the proposed building; however, the top two floors of the building would be eliminated thereby reducing the overall height of the building to four stories. The resulting project would include 5,000 square feet of ground-floor commercial and 42 residential units with a total of 131 underground parking spaces. Setbacks along Fair Oaks Avenue and Dayton Street, as well as distances from the existing Green Hotel Apartments and Castle Green would be the same as those of the proposed project, as the building would occupy the same footprint.

As such, a range of six alternatives to the currently proposed project were considered in the Draft EIR, including two reduced-size alternatives proposing less development than that of the project. Additionally, it is important to note that the current project proposal is, in itself, a reduced-size alternative – twice over – compared to the originally proposed project. As indicated in Section 1.3 of the Draft EIR, the project applicant submitted in 2007 an application to the City of Pasadena for a Preapplication Conference for the construction of a six-story, 103,350-square-foot mixed-use project consisting of 8,000 square feet of ground-floor commercial space and 68 residential units with parking for 179 vehicles. The building was a contemporary design that was U-shaped in plan with the building footprint essentially covering the entire lot. In 2010, an application for Preliminary Consultation (the first phase of the design review process) was submitted, which reduced the building to 97,086 square feet and the number of residential units to 64 (commercial space was proposed to remain at 8,000 square feet). The design remained contemporary, although modified from the previous contemporary design. The plan of the building was also modified but essentially remained covering the entire project site with a slightly increased setback from the easterly property line adjacent to the Castle Green. In response to comments provided by both the Design Commission and the public, the design of the proposed project was modified to be more consistent with a late-nineteenth-century design for an addition to the Hotel Green that was planned for this parcel. In 2011, a second application for Preliminary Consultation was submitted which further reduced the size of the building to 84,797 square feet, with the commercial space reduced to 7,450 square feet and the number of units remaining at 64. The design was revised to be more traditional in character and to limit the building footprint to the westerly portion of the project site. The current proposal on which the analysis in this EIR is based further reduces the overall building size to 76,980 square feet and the commercial space to 5,000 square feet, while retaining the residential unit count at 64. The previously proposed more traditional building character has been further refined and the building footprint remains limited to the westerly portion of the project site, set back 158 feet from the Castle Green. Most importantly, the project is evaluated in this EIR based on the thresholds contained in Appendix G of the CEQA Guidelines, and under the guidance of historical experts, as reflected in the historical resources technical report contained in Appendix D of this EIR. This EIR is required to analyze the effects of the project on the environment as proposed, rather than answering the question of what design is the most harmonious.

It should also be noted that aforementioned refinements to the original project proposal and the associated refinements to the building area footprint brought the basic location and layout of the proposed building into alignment with the original development plan envisioned in for the Hotel Green complex in 1903. As shown in Figures 3.3-4 and 3.3-5 on page 3.3-11 of the Draft EIR, the west wing of the Hotel Green was envisioned to reflect a U-shaped building layout, with the current

Castle Green building being the east side of the U, the existing Green Hotel Apartments building being the north side of the U, and west side of the U being a north-south oriented building along Fair Oaks Avenue. The orientation and location of the currently proposed project building are generally comparable to those of that west segment of the U. The diagram below shows how the earlier project design concept in 2009 was revised to bring the building footprint into closer alignment with the Hotel Green development concept of the early 20th Century.

Several comments on the Draft EIR were received asking for an alternative to be added that reflects the original 1903 development concept for the Hotel Green site when, in fact, the current project proposal already does that by generally matching the site location, height and mass as depicted in historical renderings (see, in particular, Figures 3.3-4 and 3.3-5 on page 3.3-11 of the Draft EIR, which depict the development concept for the Hotel Green U-shaped complex as envisioned in 1903, as compared to Figure 2-11 and 2-12 on pages 2-31 and 2-33 of the Draft EIR depicting the location, height, and mass of the proposed building, which represents the west leg of the U-shaped complex, in relationship to the previously completed legs of the Hotel Green complex).



Some comments on the Draft EIR were received asking for a reduced-size alternative that proposes some combination of reduced dwelling units and reduced retail development that could possibly avoid the significant traffic impact on Dayton Street anticipated to occur with the proposed project. The following table provides a detailed breakdown of potential residential-retail development combinations and the associated traffic impact on Dayton Street, with scenarios in which street segment impacts to Dayton Street would be less than significant. As shown, very few residential units and very little retail development could occur either alone (i.e., all residential with no retail or all retail with no residential) or in combination without triggering a significant traffic impact on Dayton Street.

Apartment (DU)	Spec Retail per 1000 sf	Daily Project Traffic	Existing Traffic	% Increase At Dayton	Impacted? (yes/no)	Comments
0	1.080	43	883	4.9	no	No du and 1,080 sf retail
0	1.000	40	883	4.5	no	
0	0.900	36	883	4.1	no	
0	0.800	32	883	3.6	no	
0	0.700	28	883	3.2	no	
0	0.600	24	883	2.7	no	
0	0.500	20	883	2.3	no	
0	0.400	16	883	1.8	no	
0	0.300	12	883	1.4	no	
0	0.200	8	883	0.9	no	
0	0.100	4	883	0.5	no	
0	0.000	0	883	0.0	no	
1	0.200	15	883	1.7	no	
2	0.300	25	883	2.9	no	
3	0.400	36	883	4.1	no	
3	0.450	38	883	4.3	no	
3	0.475	39	883	4.4	no	
3	0.500	40	883	4.5	no	
3	0.550	42	883	4.8	no	
3	0.560	42	883	4.8	no	
3	0.570	43	883	4.9	no	
3	0.580	43	883	4.9	no	Impact at 4.9% or less with 3 du & 580 sf retail
4	0.420	43	883	4.9	no	Impact at 4.9% or less with 4 du & 420 sf retail
5	0.250	43	883	4.9	no	Impact at 4.9% or less with 5 du & 250 sf retail
6	0.080	43	883	4.9	no	Impact at 4.9% or less with 6 du & 80 sf retail

The development mixes from 0-6 residential units listed in the table above were dismissed from consideration for the same reason the Smaller Scale Alternative was dismissed from consideration in the Draft EIR—they are not feasible. Based on the above, it is concluded that the Draft EIR for the proposed project has already considered a reasonable range of project alternatives in compliance with CEQA requirements.

The consideration of alternatives must permit informed agency decision-making and informed public participation, and the information presented in this EIR accomplishes that objective. (State CEQA Guidelines, § 15126.6 (a).) An EIR that discusses a range of alternatives to a proposed project does not need to separately discuss reduced sizes of the alternatives analyzed, since construction of a reduced project is inherent in the analysis of the alternative. (*City of Rancho Palos Verdes v. City Council* (1976) 59 Cal.App.3d 869, 892-893; *Sequoyah Hills Homeowners' Association v. City of Oakland* (1993) 23 Cal.App.4th 704, 713-714 [EIR that analyzed one reduced density alternative with a revised site plan

to mitigate significant effects, and a second further "decreased density alternative," was not required to analyze yet another alternative that would be an "exercise in futility" because it would not eliminate a significant impact].)

Identification of an off-site alternative is not required. This is the case because, "(A)lthough CEQA requires that an EIR identify alternatives to a project, it does not expressly require a discussion of alternative project locations. (§§ 21001, subd. (g), 21002.1, subd. (a), 21061.) The CEQA Guidelines require a description of 'a range of reasonable alternatives to the project, **or** to the location of the project,' implying that an agency may evaluate on-site alternatives, off-site alternatives, or both. (CEQA Guidelines, § 15126.6, subd. (a).)" (*Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, 491, emphasis added.) Further, identification of suitable locations for particular types of uses is a planning decision that is addressed when land use plans such as the General Plan, Central District Specific Plan, and Zoning Code are adopted. Once those policy decisions set appropriate uses for a site, and an application is consistent therewith, one application should not trigger ad hoc reconsideration of plan policies. (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 573.)

3.3.2 Individual Responses to Comments on the Draft EIR

The following provides individual responses to comments received on the Draft EIR published on January 24, 2014, with a copy of each comment letter bracketed to identify the individual comments for which the attendant written responses are then presented.

This page is intentionally left blank.

Letter No. 1

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

March 11, 2014

Ref File No.: 2860440

Mr. Kevin Johnson, Planner
Planning and Development Department
City of Pasadena
175 North Garfield Avenue
Pasadena, CA 91101-1704

Dear Mr. Johnson:

Green Hotel Apartments

The County Sanitation Districts of Los Angeles County (Districts) received a Draft Environmental Impact Report for the subject project on January 27, 2014. The proposed development is located within the jurisdictional boundaries of District No. 16. We offer the following comments and updates:

1. Previous comments submitted by the Districts in correspondence dated April 23, 2013 (copy enclosed), to your agency, still apply to the subject project with the following updated information. **1**

2. The Whittier Narrows Water Reclamation Plant (WRP) currently processes an average flow of 8.1 million gallons per day (mgd). The Los Coyotes WRP currently processes an average flow of 20.7 mgd.

3. All other information concerning Districts' facilities and sewerage service contained in the document is current.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Grace Robinson Hyde

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

Enclosure

cc: M. Tremblay
J. Ganz

DOC: #2916956.D16

Recycled Paper

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON CHAN
Chief Engineer and General Manager

April 23, 2013

Ref. File No: 2546630

Mr. Kevin Johnson, Planner
Design & Historic Preservation Section
City of Pasadena
175 N. Garfield Avenue
Pasadena, CA 91101

Dear Mr. Johnson:

Green Hotel Apartments

The County Sanitation Districts of Los Angeles County (Districts) received a Notice of Preparation of a Draft Environmental Impact Report for the subject project on March 25, 2013. The proposed development is located within the jurisdictional boundaries of District No. 16. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' Arroyo Seco Section 4 Trunk Sewer, located in Garfield Avenue at the Pasadena Freeway. This 21-inch diameter trunk sewer has a design capacity of 13.4 million gallons per day (mgd) and conveyed a peak flow of 2.2 mgd when last measured in 2010.

2. The wastewater generated by the proposed project will be treated at the Whittier Narrows Water Reclamation Plant (WRP) located near the City of South El Monte, or the Los Coyotes WRP located in the City of Cerritos. The Whittier Narrows WRP has a design capacity of 15 mgd and currently processes an average flow of 8.0 mgd. The Los Coyotes WRP has a design capacity of 37.5 mgd and currently processes an average flow of 22.0 mgd.

3. The expected average wastewater flow from the project site is 10,484 gallons per day. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, Wastewater & Sewer Systems, Will Serve Program, and click on the Table 1, Loadings for Each Class of Land Use link.

4. The Districts are authorized by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System or increasing the strength or quantity of wastewater attributable to a particular parcel or operation already connected. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is issued. For a copy of the Connection Fee Information Sheet, go to www.lacsd.org, Wastewater &

Recycled Paper

Sewer Systems, Will Serve Program, and click on the appropriate link. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at extension 2727.

5. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CAA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Grace Robinson Chan

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR: ar

c: M. Tremblay
J. Ganz

This page is intentionally left blank.

Letter No. 1 County Sanitation Districts of Los Angeles County

County Sanitation Districts of Los Angeles County
1955 Workman Mill Road
P.O. Box 4998
Whittier, California 90607
Adriana Raza, Customer Service Specialist, Facilities Planning Department
March 11, 2014

Responses

Response 1-1

Potential impacts associated with wastewater generation and treatment were addressed in Section II.20, Utilities and Service Systems, of the Initial Study contained in Appendix A of the Draft EIR. Preparation of the Initial Study took into consideration information provided by the County Sanitation Districts of Los Angeles in the correspondence dated April 23, 2013 sent to Mr. Kevin Johnson of the City of Pasadena (i.e., the attachment to the Draft EIR comment letter from County Sanitation Districts). The conclusion of the Initial Study evaluation was that implementation of the proposed project would result in less than significant impacts related to wastewater. The comments and updated information provided in the County Sanitation Districts' comment letter dated March 11, 2013 do not change that conclusion.

This page is intentionally left blank.

651 South Saint John Avenue
Pasadena, California 91105 2913
Telephone 626 441 6333
Facsimile 626 441 2917
www.pasadenaheritage.org

Letter No. 2

PASADENA HERITAGE

Members of the Design Commission
City of Pasadena
175 North Garfield Avenue
Pasadena, California 91109

March 11, 2014

Re: Draft Environmental Impact Report
86 S. Fair Oaks Ave. (Hotel Green Apartments)

Dear Honorable Commissioners:

As part of our efforts to monitor the proposed Hotel Green Apartments project, Pasadena Heritage has reviewed the Draft EIR and prepared the following comments for your consideration and to be included in the record.

Section 3.1 Aesthetics

Sub-section 3.1.6 Project Impacts
The discussion and conclusions of this section indicate that the proposed project would have no significant aesthetic impacts. We disagree.

It is obvious that a major new six-story building on the corner of the block will essentially prevent the public from viewing the southern and western facades of the historic buildings. This is clearly illustrated in the vantage point photos. This is a significant aesthetic impact and should be identified as a significant and unavoidable impact as there is no real mitigation for aesthetic impacts that would be caused by the Project or the Alternative, although the impact would be somewhat lessened with the smaller Alternative. Specifically: 1

From Vantage Point 1, the proposed project would obstruct virtually all views of the existing Hotel Green and would be a significant impact.

From Vantage Point 3, photo-simulation #3 clearly shows how the proposed project would block views of the Castle Green and its tree canopy from the west; this would be a significant impact.

From Vantage Point 4, the proposed project would greatly alter the existing visually prominent landscaping and would be a significant impact.

From Vantage Points 1 and 2, removal of the historic trees would cause substantial damage to scenic resources and would be an additional significant impact. Mitigation measures should include compliance with the Tree Protection Ordinance. 1

Creates a new source of substantial shade (page 3.1-28)
Shading is an important environmental issue because of its importance to physical comfort and the expectations residents of the existing Hotel Green have for direct sunlight. The height and scale of the proposed project would result in new shadows and virtually perpetual shade on the lower floors that would impact the Green Hotel. 2

Sub-section 3.1.7 Cumulative Impacts
Compliance with the City's General Plan, Urban Design Principles, Design Guidelines, and Zoning Ordinance should be required mitigation measures to ensure that visual impacts from new cumulative development projects are minimized and to achieve the City's objectives for aesthetic conditions. 3

Section 3.3 Cultural Resources

Sub-section 3.3.6 Project Impacts
The Secretary of the Interior's Rehabilitation Standard (9) states that "related new construction will not destroy historic materials, features, and spatial relationships that characterize the property and ... will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment."

Current analysis discussed in *Compatibility* (page 3.3-29) does not adequately address questions of materials in the discussion of compatibility requirements outlined by the Secretary of Interior's Standards. More information or direction is needed here. 4

The proposed project would significantly alter the spatial relationships on the property as an open space would be filled-in with a major new building. Circulation patterns and primary uses of open space on the property will significantly change.

By constructing a new six-story building in an area historically characterized by open space and recreational use, the proposed project will block views and impact the visual integrity of an existing historic resource by obscuring the south façade of the historic Hotel Green and partially obscuring the west façade of the Castle Green. As the document notes, both facades have historically been unobstructed. More analysis and direction on how a greater level of compatibility can be achieved is needed.

With the emphasis in the district on the pedestrian experience at street level, the proposed 9-foot height difference between the existing historic buildings and the currently proposed new building is not significant enough when viewed from the pedestrian perspective for the new building to read as subordinate. In response to this, the Lower Height Alternative would reduce the negative impacts but not fully mitigate them. 4

Section 3.5 Noise and Vibration Impacts

The Noise and Vibration Impact Analysis prepared by Bonterra Consulting states that "demolition and construction activities could occur closer than 25 feet to the existing Hotel Green Apartment building, which is a fragile, historic structure" and that "vibration generated during construction would result in a significant impact to the existing Hotel Green Apartments." Damage is obviously most likely to occur where new construction is close to the existing historic structures. What specific measures will be taken to protect the small one-story building at 84 S. Fair Oaks Ave. and the historic Hotel Green apartments? 5

The Final EIR should include clear and enforceable measures prior to and during construction to prevent potential structural impacts to the historic resources immediately adjacent to the construction site that may arise from excavation, vibration, and other construction activities. These should include not only measures to limit vibration levels, but also measures to prevent damage in the case that vibration levels are exceeded, including specific shoring and monitoring plans.

Section 4.0 Alternatives

Sub-section 4.4.1 Alternative Access Alternative
The discussion of this alternative shows a dramatic reduction in traffic projected on Dayton Street but an exact comparison of trips on Dayton Street is not clear from this analysis. The conclusion to eliminate this alternative is not substantiated. 6

Sub-section 4.6.2 Reduced Height Alternative
We agree that Alternative 2, the Reduced Height Alternative, is an Environmentally Superior Alternative, as it would reduce construction and vibration impacts, reduce aesthetic impacts on public visibility of historic structures, reduce the shade and shadow impacts on the existing buildings, and reduce the severity of the traffic impacts on Dayton Street. 7

It should be recommended to the City Council that Alternative 2 must be adopted as the Environmentally Superior Alternative.

Executive Summary

Adjustments to the Executive Summary should be made to reflect all specific comments listed above. 8

Thank you for the opportunity to provide our comments. We look forward to reviewing and commenting on the Final EIR when it becomes available.

Sincerely,

Susan N. Mossmann
Executive Director

Jesse Lattig
Preservation Director

Letter No. 2 Pasadena Heritage

Pasadena Heritage
651 South Saint John Avenue
Pasadena, California 91105
Susan N. Mossmann, Executive Director
Jesse Lattig, Preservation Director
March 11, 2014

Responses

Response 2-1

Please see Topical Response TR-AES-1 regarding the approach to, and conclusions of, the visual impacts analysis in the Draft EIR.

The comment is incorrect in stating that, from Vantage Point 1, the proposed project would obstruct virtually all views of the existing Hotel Green Apartments. The viewshed for Vantage Point 1 on page 3.1-14 of the Draft EIR is looking northwest from within Central Park and this vantage point does not include views of the existing Green Hotel Apartments. The primary view from this vantage point is of the Doty Block at the northwest corner of Fair Oaks Avenue and Dayton Street. There is a 158-foot separation between the west side of Castle Green and the east side of the proposed project building. As such, substantial portions of the existing Hotel Green Apartments would still be visible in views looking north from within Central Park following completion of the proposed project. That is evidenced in the new additional Vantage Points 5 and 6 in Topical Response TR-AES-1.

Regarding the comment about Vantage Point 3, yes, implementation of the proposed project would block the existing view of Castle Green and its tree canopy from that particular view corridor directly west of the project site; however, that single worst-case view impact does not constitute a significant impact for the project overall. As demonstrated throughout the remainder of the discussion in Section3.1 of the Draft EIR and supplemented by the additional visual simulations and responses to comments in this Final EIR, the majority of existing views of Castle Green from other areas surrounding the block would not be affected by implementation of the project.

Relative to the comment about Vantage Point 4, yes, portions of the landscaping visible in that particular worst-case viewshed looking south along Fair Oaks Avenue at Green Street would no longer appear with project implementation, but that alone does not constitute a significant impact for the project overall. Views of the vast majority of the most notable landscaping in the vicinity of the project site, such as that shown in Figures 3.1-7, 3.1-8, 3.1-10, 3.1-12, 3.1-13, and 3.1-14 would be unaffected by project implementation.

Regarding the last portion of the comment, the trees to be removed from the project site are not historic resources, as documented in Section 3.3 and Appendix E of the Draft EIR. Also, it is not necessary to include a mitigation measure requiring compliance with the Tree Protection Ordinance because compliance with existing Code requirements does not constitute mitigation under CEQA. In addition, the project, as proposed, would meet the requirements of the City Trees and Tree Protection Ordinance, as discussed on pages 3.1-26 and 3.1-27 of the Draft EIR.

Response 2-2

The figures contained in Appendix B of the Draft EIR indicate Project would have no shade impact on the existing Green Hotel Apartments at summer solstice and very limited shade impacts at winter solstice, with exception of mid- to late-afternoon hours. It should also be noted that the proposed project is located in an urbanized area with several existing multi-story buildings that have shading impacts on adjacent structures during different times of year and time of day. Such is the case at the existing Green Hotel Apartments where, as shown in Figures B-10 through B-12, the building is subject to shading impacts from the Castle Green building during morning hours at winter solstice. Further, while local governments may protect views and provide for light and air through the adoption of height limits, California case law does not recognize a right to air, light or an unobstructed view (*Pacifica Homeowners' Assn. v. Wesley Palms Retirement Community* (1986) 178 Cal.App.3d 1147, 1152) and the project does not exceed the City's height limit.

Response 2-3

Individual development projects within Pasadena are evaluated in light of the City's General Plan, Urban Design Principles, Design Guidelines, and Zoning Ordinance, as appropriate during the applicable entitlement and approval processes. Compliance with the City's various planning documents and codes is not a mitigation for aesthetics impacts, but rather if potential impacts are identified during the approval processes, including required CEQA review, then project-specific mitigation measures are formulated. In this case, the proposed project would not result in any significant aesthetics impacts, as documented in Section 3.1 of the Draft EIR. Specifically, implementation of the project would not have a substantial adverse effect on a scenic vista, would not substantially degrade the existing visual character or quality of the site and its surroundings, and would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. See also the discussion in Topical Response TR-CR-1 regarding the role of the Design Commission in ensuring the continued integrity of the analysis herein through the required design review finding.

Response 2-4

Please see Topical Response TR-CR-1 regarding the Draft EIR analysis of impacts to historic resources.

Response 2-5

The analysis presented in Section 3.5 of the Draft EIR addresses potential vibration impacts to buildings near project site. As indicated on page 3.5-21 of the Draft EIR, the Castle Green building is approximately 75 feet from the project site, and, at this distance, the potential for structural vibration impacts would be less than significant; however, the potential for construction activities to occur closer than 25 feet to the existing Green Hotel Apartment building poses the potential for significant vibration impacts, in which case Mitigation Measures MM-NOISE-4 and MM-NOISE-4 are presented on that page for reducing the potential vibration impact to a level that is less than significant. Because the existing single-story structure that is connected to the southwest portion of the existing Green Hotel Apartments building (i.e., at 84 South Fair Oaks Avenue) would have the same potential for vibration-related impacts as the existing Green Hotel Apartments building, the discussion on pages 3.5-21 and 3.5-22 of the Draft EIR is hereby revised to clarify that fact, as follows:

However, demolition and construction activities could occur closer than 25 feet to the existing Green Hotel Apartments building and attached single-story structure (i.e., 84 South Fair Oaks Avenue). Based on FTA and Caltrans methodologies, if large bulldozers, loaded trucks, or similar equipment were to operate within 20 feet of the existing Green Hotel Apartments building or the 84 South Fair Oaks Avenue structure, the vibration level could exceed the 0.12 ppv in/sec significance threshold (see Table 3.5-6). Data from testing at one particular site (see Table 11 of Appendix G) indicates the 0.12 ppv in/sec threshold could also be exceeded with some construction equipment at distances greater than 20 feet. Because the exact limits of equipment use, types of equipment to be used, and soil conditions are not known, without implementation of mitigation, vibration generated during demolition and construction of the proposed project could result in a potentially significant impact to the existing Green Hotel Apartments building and the 84 South Fair Oaks Avenue structure. The Castle Green building is approximately 75 feet from the project site; at this distance, the potential for structural vibration impacts would be less than significant.

Because structural damage considerations require limiting vibration levels to 0.12 ppv in/sec or a similar level (as may be established through implementation of Mitigation Measures NOISE-4 and NOISE-5), the perception of vibration by persons in the existing Green Hotel Apartments and the 84 South Fair Oaks Avenue structure would fall within the barely perceptible to distinctly perceptible range. This impact would be less than significant.

Operation of the proposed project involves residential and retail uses, which would not generate groundborne vibration or noise producing activities and impacts would be less than significant.

Mitigation Measures

The following mitigation measures would reduce potentially significant construction impacts to a less than significant level:

MM-NOISE-4: Consult with Structural Engineer and Project Historical Architect

Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, and to the satisfaction of the City of Pasadena, the applicant shall retain a Professional Structural Engineer with experience in structural vibration analysis and monitoring for historic buildings and a Project Historical Architect as a team to perform the following tasks:

- Review the project plans for demolition and construction;
- Survey the project site and the existing Green Hotel Apartments building and the 84 South Fair Oaks Avenue structure, including geological testing, if required; and
- Prepare and submit a report to the Director of Planning and Community Development to include, but not be limited to, the following:
  - Description of existing conditions at the existing Green Hotel Apartments building and the 84 South Fair Oaks Avenue structure;

- Vibration level limits based on building conditions, soil conditions, and planned demolition and construction methods to ensure vibration levels would be below 0.12 ppv in/sec, the potential for damage to the existing Green Hotel Apartments building and the 84 South Fair Oaks Avenue structure;
- Specific measures to be taken during construction to ensure the specified vibration level limits are not exceeded; and
- A monitoring plan to be implemented during demolition and construction that includes post-construction and post-demolition surveys of the existing Green Hotel Apartments building and the 84 South Fair Oaks Avenue structure.
- Examples of measures that may be specified for implementation during demolition or construction include, but are not limited to:
    - Prohibition of certain types of impact equipment;
    - Requirement for lighter tracked or wheeled equipment;
    - Specifying demolition by non-impact methods, such as sawing concrete;
    - Phasing operations to avoid simultaneous vibration sources; and
    - Installation of vibration measuring devices to guide decision making for subsequent activities.

MM-NOISE-5: Post-Construction Survey and Documentation

To the satisfaction of the City of Pasadena, at the conclusion of vibration-causing activities, in the unanticipated event of discovery of vibration-caused damage, the Structural Engineer and the Project Historical Architect shall document any damage to the existing Green Hotel Apartments building and the 84 South Fair Oaks Avenue structure and shall recommend necessary repairs. The project applicant shall be responsible for any repairs associated with vibration-caused damage. Repairs shall be undertaken and completed as required to conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 Code of Federal Regulations 68), and shall apply the California Historical Building Code (California Code of Regulations, Title 24, Part 8) and other applicable codes.

Residual Impacts

Mitigation Measure NOISE-4 is a performance standard requirement which would ensure that vibration levels at the existing Green Hotel Apartments building and the 84 South Fair Oaks Avenue structure do not exceed 0.12 ppv in/sec or an alternative threshold as determined by a professional structural engineer. With implementation of mitigation measures identified above, groundborne vibration impacts from construction and operation of the proposed project would be less than significant.

Regarding the commenter's suggestion that the Final EIR include clear and enforceable measures prior to and during construction to prevent potential structural impacts to the historic resources, Mitigation Measure MM-NOISE-4 is included in the EIR for that very purpose. All mitigation measures in the Final EIR will be included in the Mitigation Monitoring and Reporting Program (MMRP) for the project, which will help ensure that the measures are, in fact, implemented. As specified within MM-NOISE-4, there are several provisions for the monitoring of vibration levels during planned demolition construction to ensure that vibration levels remain below the level where damage could occur. It is anticipated that shoring would be used if and where appropriate as determined by the project structural engineer.

Response 2-6

The Alternate Access Alternative was considered that would substitute the project driveway on Dayton Street with a right-turn in, and right-turn out driveway on Fair Oaks Avenue. Vehicles traveling southbound on Fair Oaks Avenue would not be permitted to turn left into the parking garage. Vehicles exiting the parking garage would not be able to make a left-turn out of the structure. The southbound traffic would still need to use Dayton Street to access the project site by turning left on Green Street, then turning right on Raymond Avenue, right on Dayton Street, right on Fair Oaks Avenue, and finally turning right into the project driveway. The number of vehicles traveling on Dayton Street between Fair Oaks Avenue and Raymond Avenue would still remain significant (approximately 235) and would not reduce the significant traffic impact identified for the proposed project.

Existing traffic volumes on Dayton Street are so low that even the addition of 44 new trips would trigger the impact threshold and result in a significant and unavoidable traffic impact to this street segment. It is estimated that with access on Fair Oaks Avenue, there would be approximately 235 daily vehicle trips added to Dayton Street, as shown in the table below. For this reason, the Alternate Access Alternative was eliminated from further consideration and evaluation in the Draft EIR.

Average Daily Traffic Volumes (ADT) Analysis for Dayton Street
Project Driveway on Dayton Street vs. Fair Oaks Avenue

Street Segment	Existing Traffic	Daily Project Trips	Percent Increase
Dayton Street between Fair Oaks Avenue and Raymond Avenue *(Project driveway on Dayton Street as proposed)*	883	626	70.9%
Dayton Street between Fair Oaks Avenue and Raymond Avenue *(Project driveway on Fair Oaks Avenue as indicated in the Alternative Access Alternative)*	883	235	26.6%

As a secondary matter, the City's Fire Department has recommended that the project access be located on Dayton Street to avoid interference with emergency access.

Fair Oaks Avenue access would also result in adverse impacts to pedestrian safety as Fair Oaks Avenue is a major arterial through pedestrian-oriented Old Pasadena and has high pedestrian traffic volumes.

Response 2-7

The commenter's concurrence with the Draft EIR's conclusion that Alternative 2 is the Environmentally Superior Alternative is so noted. The Design Commission will take into consideration the conclusions of the Draft EIR in their deliberations on the Project.

Response 2-8

Responses are provided for each comment above; adjustments to the Executive Summary are not warranted.

Castle Green Homeowners Association
Green Hotel Apartments DEIR, Executive Summary Table ES-1 Summary of Project Impacts, Conditions of Approval, Mitigation Measures, and Residual Impacts.

March 9, 2014

It should be noted that upon review of the Draft EIR and Table ES-1, it is clear that all impacts have not been investigated, many are missing and some of those identified are not properly and appropriately addressed and analyzed. Mitigation measures are also missing, incomplete or omitted and must be part of a revised EIR. Some mitigation measures identified are not properly and appropriately addressed and analyzed. **1**

AESTHETICS – (general statement).
All "less than significant impact" conclusions need to be revisited. **2**

AESTHETICS – BOX 1.
This contains an incorrect description of the existing Castle Green - it is not a seven story building, but a six story building per City code, per the Fire Department and per the State Historic Building Code Board. This point has been made since the 2008 review, but again the height of the Castle Green is exaggerated. The project elevations fail to delineate this fact, and need revision (as noted in 2013 & 2010). Similar 6 story height for the project is causing many significant impacts, and some that have not been identified in the DEIR. **3**

AESTHETICS – BOX 2.
The existing site description includes landscaped recreational area, with picnic tables and the occasional wedding ceremony, all under the great and large tree canopy. It is also surface parking and contains mature trees.
The project does substantially degrade the existing condition, but not all existing condition impacts are recognized in this Draft, so "less than significant impact" is premature. **4**

AESTHETICS – BOX 3.
Is it possible the concentration of all 639 *additional* daily car trips around the 'open area' of the Project could result in light and glare impacts The headlights in use from evening until morning will certainly illuminate this area unlike anything that exists, yet no study or analysis of this possibility is made. **5**

AESTHETICS – BOX 4.
There are NO buildings presently or to be built adjacent to this site that would cast such shadows onto the two existing historic structures as does the Project. The "explain it away" excuse that it's in an urban environment does not properly or adequately address this specific condition. However, the loss of daylight and breeze from this Project *will* result in higher energy use to the existing structures on the block, yet this is not acknowledged or studied in the DIER. This was also brought up in the IS. **6**

AIR QUALITY (general comment).
There is no mention of the significant loss or reduction of existing airflow to the breeze-dependent Castle Green, with units designed for cross-building ventilation. While this may not be the appropriate category to mention this, it is an impact that needs to be studied. **7**

CULTURAL RESOURCES – (general statement)
All "less than significant impact" conclusions need to be revisited. **8**

CULTURAL RESOURCES – BOX 1.
Demolition of the site results in loss of "protected trees," and likely historic trees. However, in the 6 years of this project, the City and Applicant have failed to study the historic nature of the trees and existing site features. In theory, this is a loss of the structure of nature – the large tree canopy of mostly "protected trees." Have the tree canopy and/or remaining landscape features "Acquired Significance" per Standard 4? **9**

CULTURAL RESOURCES – BOX 2.
It does involve relocation of 5 protected trees, most of which could actually be historic (see BOX 1 comment above). Do trees count as a historic resource? **10**

CULTURAL RESOURCES – BOX 3.
Demolition will destroy the characteristic tree canopy. But most dominant feature of the Project is its height. The Project does NOT comply with Standard #9. In saying new construction "shall be compatible," Standard 9 does not *say, imply or characterize* the *similar height for the Project* is compatible with similar existing heights of the existing buildings. It is not. The height issue is inadequately addressed and analyzed in the DEIR. Protecting the historic integrity of the existing Hotel Green buildings is not achieved by duplicating their height. It should also be noted that Alternative 2 expressly reduces height to be more appropriate. This should be taken to heart. **11**

CULTURAL RESOURCES – BOX 4.
This contains the false statement that the new 6-story building would not reduce the integrity of the existing buildings. In fact, the almost equal height of the Project will dominate the entire Fair Oaks street elevation and most views (studied and omitted) of the historic block contrary to the Secretary of Interior Standard requirements. This is not consistent with Standard #10 **12**

That many impacts from the Project are ignored and/or inadequately studied also raises possibilities of conflict. **13**

GREENHOUSE GASES – BOX 1.
With the concentration of all existing trips and the *additional* 639 daily trips focused within the 6-story walls of the Project and the existing historic structures, excessive exhaust and vehicle gases could negatively affect the new and existing residents facing the single Dayton driveway area. This is not properly or adequately address and analyzed. While stated to not exceed the AQMD's threshold for "commercial land uses," how do emissions stack up to the *residential land uses* that overwhelmingly are predominant at and surround this site? Should this be studied? How can the "less than significant impact" determination be made with this incomplete review? **14**

NOISE AND VIBRATION – (general statement).
All "less than significant impact" conclusions need to be revisited. And all noise and vibration mitigation, known or yet to be addressed and analyzed, must apply to all structures on the block – the existing Green Hotel Apartments, the Castle Green and the small one-story Fair Oaks structure. **15**

NOISE AND VIBRATION – BOX 1.
MM Noise-1 Mitigation measure hours fail to take into account the residential nature of this site. Noise-generating construction should be limited to more constrained time periods: either 7:00 AM – 5:00 PM or 8:00 AM to 6:00 PM on Manday-Friday; Saturday time range should be 9:00 AM to 5:00 PM, or limited to only 28 Saturdays at 8:00 AM – 5:00 Pm with scheduled notice to existing residents. **16**

NOISE AND VIBRATION – BOX 2.
The Table states the primary source of noise to the project site is Fair Oaks Avenue traffic. However, this Project generates and concentrates 5-times the exiting ADT traffic on Dayton Street. It also concentrates all additional 639 daily trips and replacement traffic (not adequately addresses trips for the 60 existing spaces and for the existing Castle Green driveway spaces). This extreme increase in concentrated vehicular trips and impacts could result in a substantial permanent increase in ambient noise, and may not be "less than existing ambient noise level " as this segment states. This is not adequately analyzed to conclude there will "less than significant impact." **17**

Also in this segment, COA Noise-4 must include the Castle Green in noise notification, as in all mitigation measures. MM Noise-3 must also include noise restrictions on continued pool use *after* 8:00 PM and *before* 7:00 AM per hours of operation. **18**

NOISE AND VIBRATION – BOX 4.
"The project has the potential to expose the persons and structures to excessive groundborne vibration and groundborne noise levels," especially given the sensitivity of the surrounding uses. Yet it is considered a "less than significant impact? Mitigation measures must not just be stated, but be studied and analyzed in the DEIR, as this is a significantly sensitive block. Testing of mitigation methods (not just geological testing) prior to demolition work must be part of mitigation measures. **19**

Historic structure monitoring for all existing structures on the block during construction must be studied and required as part of this report. **20**

The stated mitigation measures (MM Noise-4 and MM Noise 5) exclude the Castle Green, and only protect the existing Green Hotel Apartments. Again, all mitigation measures must equally address the Castle Green along with the existing Green Hotel Apartments. **21**

TRANSPORTATION AND CIRCULATION – (general statement).
All "less than significant impact" conclusions need to be revisited. Serious deficiencies in the traffic Study exist, of which some are noted below. **22**

TRANSPORTATION AND CIRCULATION – BOX 1.
New vehicle trips would constitute a ADT levels on Dayton segment "five times higher than the City's threshold of a significant impact," beyond significant yet with no properly or adequately addressed, analyzed or porposed mitigation measure that must be included in this report. This segment further states these beyond significant trips would create "no Mobility Element inconsistencies. It also appears that existing trips affecting Dayton Street may not have been included in all traffic studies. Clearly "no feasible mitigation" is false, as nothing has been studied. **23**

TRANSPORTATION AND CIRCULATION – BOX 2.
This segment is technically correct that at "designated congestion management program street segments or intersections" the impacts won't be significant. That's because they are all too far away from the site, and don't even receive 50 additional trips. But those are the ONLY intersections this segment addresses. **24**

Missing is any meaningful discussion of the Dayton/Fair Oaks and Dayton/Raymond intersections, as both intersections are not properly or adequately addressed or analyzed, nor are mitigation measures studied or analyzed. Both intersections must be studied, and mitigation measure must be investigated as part of this report. **25**

The only mitigation to increased traffic on Dayton Street that is 5-times the City's threshold of significant impacts is to add a queuing sign opposite the sole project driveway to keep the intersection unblocked. While beyond inadequate for the total of impacts (stated and unstudied), this is not going to prevent blockage of the driveway. **26**

TRANSPORTATION AND CIRCULATION – BOX 3.
Inadequate study and analysis of emergency egress and access on Dayton Street segment preclude the conclusion of "less than significant impact." The traffic study must include the existing 60 Apartment trip impacts and the existing Castle Green 12 spaces trip impacts on Dayton Street and beyond. **27**

This segment questionably states there will be no impact on pedestrian and bicycle facilities or decrease the safety or performance of such. What does that say for the significantly worse situation created at both Dayton intersections, likely making it more difficult to cross in an east or west direction for pedestrians and bicyclists. **28**

End.

Castle Green Homeowners Association
Green Hotel Apartments DEIR, Executive Summary Comments on
"Areas of Known Controversy" and Other Controversies known, not addressed or not adequately address.

March 9, 2014

Noted in these Comments are the 11 stated "Areas of Known Controversy" *included* in DEIR "Executive Summary," page ES-5. Comments are in 'bullet points' below each DEIR point. The Comments are followed by additional similar aspects or "Controversies" of the project mostly not addressed, or not adequately addressed and analyzed in the DEIR, even though many if not all were brought up in the earlier review phases. These notes may repeat some previously penned Specific Comments, but do include more of an overview of most issues missing or incomplete in the DEIR. **29**

DEIR POINT A - Aesthetic and landscaping changes through the removal of trees/canopy trees and survival of new and transplanted trees.

- This project represents the essential loss of what has always been filtered open space with open airflow, filtered light & noise, amazing views in and out due to the large tree canopy as the existing "built" environment.
- The natural tree canopy is described on page 3.1-3 as "visually prominent," "distinctive elements of the site and surroundings," contributors to "both the visual and aesthetic quality of the site," and are "some of the oldest, and of high visual significance." It is therefore logical that this loss would be *significant*, contrary to insignificant findings in the report. **30**
- Only 5 of the 15 "protected" trees are saved. *At very least,* the "protected" trees should be boxed and replanted, if not on-site, then at the adjacent Central Park.
- 75% of mature trees will be lost, replaced by small varieties *unable to replicating the large tree canopy height and breadth*. The requirement should be quality trees, not quantity of trees.
- And why no study of the "protected" trees to determine if they are "historic" as called for by the public in the 6-year life of this project?

DEIR POINT B - Ingress/Egress along Dayton Street.

- **639** new daily trips generated *just from this Project* will be added to an already strained Dayton Street roadway segment. Yet the Traffic Section doesn't properly study, or propose feasible mitigation of impacts with this lone-driveway location.
- The Dayton driveway width is inadequate and should be 24 feet wide.
- The DEIR stated a Fair Oaks driveway is "an alternative considered and dismissed." Which Fair Oaks driveway location is that? Studies are missing from the DEIR. **31**
- Why wasn't a **two-driveway alternative** studied to avoid or lessen significant impacts?
- No analysis of any driveway alternatives in 6 years of review? This driveway further deteriorates the two Dayton intersections, yet no mitigation studied?

DEIR POINT C - Fire Safety and emergency access along Dayton Street.

- The Fire Department letter addresses the code-required access road width. Are they addressing Dayton Street or the interior site access? Dayton Street doesn't meet this requirement today, but this is nowhere to be found in the DEIR.
- Let's remember that the **ONLY** fire access for the Castle Green is on this street. And Dayton Street is the ONLY existing peak-hour ***eastward*** emergency access route for the Fire Station. This Project (as well as Alternate 2) will likely impact emergency vehicle *flow and response time* as the total impact of all trips isn't adequately studied. (AS HAS ALREADY BEEN **32**

WITNESSED UNDER CURRENT TRAFFIC LOADS).

- Will this Project require the removal of all on-street parking & loading spaces on north side of Dayton as the illustration suggests, contrary to the City Memo dated June 12, 2013, or is this just another inconsistency uncovered?

32

DEIR POINT D - Increased traffic from project implementation.

- 639 *additional daily trips* will be generated from this Project. This Project increases average daily trips 5-times above the City's threshold for significant impacts!
- Yet the trip calculation may be faulty by not including all 60 existing and reassignment trip demands on Dayton Street while the Project trips alone raise the average daily trips to 5-times beyond the City's threshold for significant impact!
- Data for existing Castle Green generated trips on Dayton may be missing as well.
- There is no analysis of project Alternatives that avoids or lessens the significant traffic impacts.
- From existing conditions to Project & Alternative 2 impacts, the DEIR fails to provide analysis or adequately address the Dayton roadway, and the two Dayton intersections, and omits study Fair Oaks south from Dayton to Del Mar.
- These are issues previously mentioned that are not adequately or at all addressed in this report.

33

DEIR POINT E - Density and height of project relative to surrounding land uses and buildings.

- The project is just too dense, and the impacts go unmitigated.
- The Sec. of Interior Standards requires a 'compatible and subservient' building, yet the Project is a 6-story building next to two 6-story historic structures. Since the Project's inception, the height has remained within 10% of existing historic buildings, even after 6 years of dispute.
- This Project is taller than most existing historic buildings in the District, and taller than most every new building built in the District.
- Density is driving the height. Why is there no credible alternative presented with both *less height* and *less density* – the only solution to avoid or significantly lessen impacts as required by CEQA?
- The height negatively impacts long-establish views, air access, and light access, all unmitigated, and will result in higher energy use for the existing historic residences. Most of these impacts are not studied or adequately addressed.
- "Surrounding" land uses are the 6-story historic Hotel Green structures, the 'zero-density' Central Park and parking lot diagonally opposite the site, an adjacent historic one-story structure and a historic 3-story building opposite on Fair Oaks. The newest adjacent buildings are 4 & 3 stories for good reason.
- Looking at the building footprint is also ignored. Relying on a contrived "replication" concept has lead to inflexibility of the footprint, and an artificial constraint on alternatives.

34

DEIR POINT F - Historical significance of entire block on which the project site is located.

- It is still not clearly stated that the **parcel** is on the National Register. Nor is it clearly stated it is *part of the **listing*** on the National Register. Language says it is part of the "nomination." It's a fine point, but one that's been brought up and ignored for years.
- In fact, on most maps, not only is the *entire block outline* failed to be noted as on the National Register, the Old Pasadena District is generally not outlined either.

35

- Where is it noted the required application of the Secretary of Interior Standards, as they must trump prescriptive zoning regulations on arguably the MOST significantly historic block in the City. However, the Alternative 2 begins to respect the historical significance of this site.
- The report does not objectively address the historical significance of surrounding parcels.

35

DEIR POINT G - Impact on views from surrounding buildings.

- "Would the project have an impact on a scenic vista?" is the basis of Section 3.1.6. However, only **4 relatively close vantage points** (Page 3.1-13) are acknowledged and studied.
- The report says it provides "a more complete understanding" of views lost, yet studied less than half of the impacted views. It's no wonder view impacts were deemed *less than significant*.
- No views *from* the existing historic buildings were considered. No views *from a distance* to the site were considered – historic view corridors that are impacted.
- If all lost views are studied then Project impacts could be at significant levels, with Alternative 2 only slightly increases mitigation since it only addresses height and the 4 inadequate views.

36

DEIR POINT H - Alternatives to the proposed design.

- Alternative 2 only deals with height, and most impacts remain the same.
- Why isn't there a studied Alternative with way less residential units, a Dayton setback, a different footprint, less or no surface parking, a different driveway location or two driveways? These are all Alternatives asked for over the last 6 years.
- Retaining the building footprint and relying on a 101 year old *concept* has lead to artificial constraints and ineffectual alternatives.
- Why is there no "transfer of development rights" alternative proposed or considered, transferred to the Parson's lot or other areas that can take higher densities, unlike the Project site?
- This report states that Alternative 2 only reduces "the *severity* of the significant impacts of the Project," yet alternatives have to *avoid or significantly lessen impacts* as called for by CEQA.

37

DEIR POINT I - Air quality impacts to sensitive receptors, and specifically the neighboring Castle Green, the existing Green Hotel Apartments, and Central Park.

- The similar height of new Project to existing structures on the block will surely cut-off or significantly reduce air circulation to the *breeze-dependent,* un-air-conditioned Castle Green and to the south side of the existing Apartments.
- The Castle Green was designed for cross breezes, and still functions that way today, yet no consideration of this exists in the report. This could result in more air conditioning units and higher energy use in the Castle Green.
- Air quality also needs to be considered for the long 28-month construction period, and the need for not just proper measures but for monitoring.

38

DEIR POINT J - Unreinforced masonry walls of Castle Green Apartments could be impacted by excavation, vibration, and other construction activities.

- Almost all of the site will be excavated for the first time ever. Yet all many vibration mitigation measures omit the Castle Green in Table ES-1. Why aren't these concerns & measures properly and adequately addressed and analyzed in the report?

39

DEIR POINT K - Loss of soil during construction could cause displacement of Castle Green.

- 30,000 cubic yards of original earth will be displaced for the excavation of the parking structure, almost to the very borders adjacent to the existing historic structures. Vibration of earth-moving vehicles, as well as vibration from 1,500 trucks, about 25 per day or so carting away the earth are of significant concern, and mitigation measures need to be studied. Yet some mitigation measures exclude protecting the Castle Green in Table ES-1. **40**

Comments on important or *controversial areas* for study in the DEIR:

POINT 1 – No Dayton/ Fair Oaks & Dayton Raymond Intersection studies.

The DEIR says both intersections will be problematic with the Project, yet no alternatives for them were proposed or studied. While POINT B above touches this controversy, specific comments have asked for study of these intersections. Both intersections exist with no signal controls and no marked crosswalks There is no controlled way for vehicles, pedestrians and bicycles to safely make left turns to Fair Oaks and to cross *east-west* unless the traffic volume allows this. **41**

The Dayton/Fair Oaks intersection is particularly problematic, if not outright dangerous for all users. TO a lesser by significant extend, so is the Dayton Raymond intersection. This means that with the huge Project increases in trips, AM & PM peak hour times will be dangerous. Isn't this akin to not studying the "crosswalk" in the IDS project, and we all know how that came out.

POINT 2 - Fire Station signalized control light and south Fair Oaks.

When activated this fire signal *stops cars into the Dayton/Fair Oaks intersection*. This is a problem that is ignored. Not only was the fire station signalized stoplight not studied and not shown on any diagrams, this entire southern Fair Oaks roadway segment from Dayton south to Del Mar Blvd. wasn't studied, yet the traffic study reports it handles 20-25% of Project traffic. **42**

The DEIR only studied 4 of the 5 *roadway segments* affected by the Project. This 5th roadway segment has more complications than most that *were* studied. With added residential traffic from new and future developments to the west of this roadway segment, omitting this roadway study should require a revision to the EIR.

POINT 3 - Fire Department is not being made aware of existing conditions and future impacts.

The FD letter exhibit implies that Dayton Street meets the current safety access width of 20 feet, when in fact it does not. This letter no more conveys an understanding of existing conditions than it conveys an understanding and approval of this Project. This is a concern brought up since 2008. Given the facts, this letter is not applicable to the proposed Project or Alternative 2. **43**

With the Project traffic generating unmitigated traffic impacts, there is no concern mentioned of the deterioration on Dayton and at both Dayton intersections, nor of added traffic on Fair Oaks.

Castle Green folks have long heard concerns from the Fire Department about the existing condition of Dayton Street and the two intersections. With these difficult *existing conditions*, and the HUGE Project traffic impacts to them, the Fire Department needs involvement as part of a revised EIR.

POINT 4 - Buildings should be Setback on Dayton Street.

The Project (and Alternatives) rely on zoning's one-size-fits-all solutions, and fail to use the Secretary of Interior's (and possible CHBC's) interpretive guidelines to resolve impacts. The Castle Green is entirely setback from Dayton Street, its ground floor setback about 12-feet and all upper floors set back 30 feet, **44**

in what results today in a necessary and respectful nod to the significance of the zero-density Central Park. Yet setbacks were ruled out due to "zoning" language. An alternative approach with setbacks should be considered as mitigation to density, massing and resultant traffic impacts, and to meet the required "compatibility and subservience" to the existing historic buildings and to Central Park. **44**
Setting back the Project could also restore portions of lost scenic vistas (Vantage Point No. 1, page 3.1-13), and could benefit other omitted scenic views and airflow issues not studied but impacted. Setting back the project could also allow for likely *necessary structural roadway improvements* to Dayton Street and the Dayton/Fair Oaks intersection, all but ignored in this report.

POINT 5 - Most of the impacted scenic vistas are not analyzed.
While the DEIR investigates only 4 scenic views, most of the scenic views lost are not studied. These views have been mentioned since the first review in 2008.
There is no study and analysis of impacts of loss views *within the block* of the **predominant lush green canopy**. Or of the lost distant views *from the site* of the sunset, of the San Rafael Hills, of the Vista del Arroyo. Or of distant views *to the site* from historical view corridors (from farther south on Fair Oaks and farther west from former Ambassador parcels), and additional scenic views lost or reduced from Central Park not only of the site but of Old Pasadena and mountains to the north & west. **45**
Setbacks (especially when combined with lower heights & densities) would go far to reduce or eliminate impacts that should be studied in additional Alternatives in a revised EIR.
Also of note is that *new* views for many *existing* residents will be mostly that of the new Project.

POINT 6 - Noise generated from only ONE driveway/ramp to the parking below ground.
Ambient noise from Fair Oaks is not so much an existing problem, as the on-site large tree canopy acts as a positive filter. In fairness, the new large project could serve a similar function, but it is more likely that it will create a negative effect of an echo chamber for not only the existing fire response, but for the huge increased traffic loads all concentrated between the existing 6-story buildings and the proposed 6 story building – now three similar hard surfaces to trap and bounce sound.
A major new noise source is the unfortunate placement of the sole driveway and parking ramp within this newly created echo canyon, too close to the Castle Green and affecting the existing Apartments. This will surely generate noise (and some light spillover) for the Castle Green and the existing Apartments. No noise generation or abatement is studied in the DEIR. **46**
A meaningful height reduction and a setback on Dayton would go a long way to alleviate this impact, yet this is not studied in the proposed Alternatives.
An alternate *dual-driveway scenario* would all lessen these impacts, as would an alternate or dual ramp location.

POINT 7 - Parking for the Project site.
This new total of 24 surface spaces (Fig. 2-5) conflicts with the Project Description (Section 2.7.1 and Table 2-3) of 20 spaces. The Initial Study total is also is 20 surface spaces. Why are there now *4 additional surface spaces* to the Project? Who these 24 spaces are *dedicated to* is not adequately addressed. While 12 spaces have *overhead* covering, there are still visual with noise impacts, almost as much as the *additional* open-air 12 surface spaces. 11 spaces are assumed to be surface retail parking, the most active and impactful use. What are the 13 other surface parking spaces dedicated to? **47**
Why is there such a large volume of surface parking on this new Project, and not all below ground or hidden, as it is in other new projects in Old Pasadena?

While there *were* 48-60 surface parking spaces on site, this is no validation for new surface parking.
The new Subterranean Parking spaces (Fig. 2-6 & 7), seems to be 148 underground spaces, conflicting with the Project Description (2.7.1, Tables 2-2 & 3) which says 147 underground spaces.
Therefore, the *increased* parking totals are 172 for the Project, conflicting with the 167 in the report description and Traffic Study. **47**

POINT 8 - Light and glare impacts will increase due to project.
Little if any lighting or glare impacts come *from* the site today, due to the large tree canopy that partially hides Dayton Street and mostly hides Fair Oaks Avenue from resident's views. However, with the loss of this canopy, the glare is unstated from the increased 639 additional daily Project traffic trips within view of the existing residents. The new 6-story Project shields the existing buildings from some light and glare, but no more than Alternate 2 and arguably *less* than the existing tree canopy.
The light from added headlights of the AM & PM peak traffic hours in and out of the paved concrete parking/drive area (like noise) could have some impacts that should be addressed and analyzed. **48**

POINT 9 – Energy Use will increase in existing historic structures on the block.
Sunlight and general *daylighting* will be reduced for existing historic structures surrounding the Project. According to Appendix B, beginning at 2:00 PM on the Winter Solstice, shadows begin to be cast onto the existing Apartments, and by 3:00 PM onto the Castle Green, a good 2-3 hours before sunset.
Beginning around 5:00 PM on the Summer Solstice, shadows begin to be cast onto the existing Castle Green, a good 2 hours before sunset (not to mention eliminating sunset views). **49**
Also unstudied is the loss of airflow if a 6-story project is built. This could require the installation of mechanical air conditioning in many residents of the Castle Green, as this building relies on natural breezes for most of its cooling.
These new encroachment of *shadows* and *loss of air flow* with the Project will require more energy usage for large portions of the existing historic structures. This should be addressed and analyzed.

The Castle Green Homeowners Association believes it is clear from these Comments, as well as all other Comments submitted for this review along with oral testimony to be presented that the DEIR does not properly or adequately addressed and analyzed many relevant environmental aspects of the Project and Alternatives. The DEIR as submitted represents a failure to fully consider a range of impacts, a failure to study all relevant impacts, and a failure to propose and study appropriate and necessary mitigation. There are also errors, inconsistencies and omissions that compromise this DEIR. **50**

Perhaps the biggest point of frustration, second only to the disappointing actual Project, are that too many of these "controversies" noted in the Executive Summary and in the notes above have been presented before with seemingly indifference or simple rejection without proper study. We hope that this practice will not be repeated in the DEIR review.

Only a revised report and Project would be able to address the many concerns expressed in this review and over the 6-plus years of the life of this Project.

Castle Green Homeowners Association

Castle Green Homeowners Association
Green Hotel Apartments DEIR, Section 2.0 Project Description Comments
March 8, 2014

Section 2.0 Project Description.

This report fails to note in 2.5, "Land-Uuse and Zoning," that the development site is subject to the Secretary of Interior Standards being applied to all improvements on this parcel, as it is actually *listed* on the National Register of Historic Places, not just on the "nomination." The standards are clear about the subservient and compatible nature of any project on such a historic parcel, yet there is scant mention of these Standards and their applicability to this project. This goes to the heart of the concern over the objectivity in this report. **51**

2.6, "Project Objectives," discuss the objectives per the applicant for the proposed project. However there is one flawed objective, as well as one questionable objective.

Four of the project objectives deal appropriately with housing and the desire to provide new apartments to satisfy the increasing demand for residential units in the city. Yet if we look at the percentage of housing provided in this project, compared to the cumulative total of all housing projects, the Project only provides 3% of the cumulative housing total yet it creates significant, unmitigated traffic impacts on *at least* three reviewed major street conditions: the Dayton Street roadway segment, the Raymond/Dayton intersection and worse impacts on the Dayton/Fair Oaks intersection, all without any proposed or studied mitigation alternatives for these three impacted areas.

Three of the project objectives deal with the desire for new restaurant retail and commercial space in old Pasadena. This is perhaps the most appropriate and supported objective of this project, as it is critical to continue the Old Pasadena character further south along Fair Oaks Avenue. **52**
This component is probably the most important objective, and alone could be the least impactful alternative that should be considered for this project site.

The major flaw in one of the objectives (no. 6) claims the need to build out this parcel "In a manner that is based on the original turn of the 20th century vision." While many in the community have pointed to this historic proposal as a *starting point*, it has proven that a project of this type creates too many negative impacts, and oddly fails to meet the some key Secretary of Interior Standards for new structures applicable to the site, but not stated in the report.

The questionable project objective, (no. 5), says to provide residents of the adjacent existing Apartments appropriate parking with direct the ingress and egress." This condition already exists, as there is direct driveway access today for the existing surface parking spaces. Yet the report fails to note that this is already a traffic problem. The report also fails to acknowledge is the fact that *providing a singular driveway* from the new project on Dayton Street creates problems beyond mitigation. So this truly is a questionable objective, one that was desired in response to rejected early schemes.

The same project objectives are listed in Section 4, Alternatives. The same flaws apply to that section, and unfortunately has resulted in an inappropriate Alternative 2, and provided flawed grounds to dismiss some alternatives from ever being studied. **53**

The project site is described as 32,362 ft.². and is generally perceived now as open space from the existing residents on the block. It will be reduced approximately by half with the new projectThe proposed project identifies 9,600 ft.² of private open space on page 2–14, yet the open space square footage is actually 8,450 ft.², when you remove the 1,050 square-foot gym that is inside the building's ground floor. Why is this given credit for open-space? The actual 8450 ft.² of Private open-space is comparable to the existing landscaped open space. **54**

Therefore, this project, with its supposed benefits, provides similar benefit of the existing space. **54**

In addition to less open space, it eliminates the existing 45 to 75 foot mature tree canopy. This is a loss as it cannot be mitigated, yet its loss is reduced to insignificance in the report. An alternative that provides less-or-no surface parking and a large landscaped area would actually be appropriate to reduce impacts, but other than “no Project” alternative, this concept is not examined. **55**

While the report also notes on page 2–14, that parking for the project is provided *in compliance with City code*, nowhere else in old Pasadena is there surface parking provided at this scale for new projects. Is the only justification for new surface parking because *surface parking already exists* on the site? Is it because 55% of the proposed surface parking is "tucked under," yet still exposed to existing residents on the block? How can such a large quantity of new paved-over parking spaces be acceptable for new construction at this sensitive location? **56**

Page 2–15 describes the proposed building height at 75 feet. It is noted that the "height, floor area ratio, and setbacks meet the development standards for the CD – 1 zoning district." However what is missing from this description is that the applicable Secretary of Interior Standards that requires compatibility between new projects and existing historic buildings on the block, nor is it taken into account. Clearly because of this requirement, the 6-story height of 75 feet for the project is not appropriate when the height of the adjacent Castle Green is 78 feet, and approximately 84 feet to the top of the existing Green Hotel Apartments. The new project provides less than a 10% reduction in height when compared to the existing buildings. This clearly does not meet the Secretary of Interior Standards when considering subservient and compatible new construction on the same historic block. **57**

Curiously, the height of the project is a major reasons that this project has many impacts that cannot be mitigated. The inappropriate 75 foot height of this project contributes to the excessive density of the project, which creates huge traffic impacts *not addressed* on Dayton Street, on the two Dayton intersections, and likely on the *unstudied* Fair Oaks roadway from Dayton Street to Del Mar Blvd.

The single driveway to the project on Dayton Street is a major problem of this project, as it dumps all of the project traffic on to already-impacted Dayton Street, worsening the two adjacent intersections. Unfortunately, existing traffic conditions are not correct in the report, and there is insufficient study in the report of these impacted conditions, with no alternatives are provided. **58**

It should be noted that while the removal of 10 of the 15 protected trees allows five protected trees to remain, these five are not trees that create the existing lush canopy that is the predominant view of the existing apartments and of the Castle Green to the south and west.

While it is far superior to be able to maintain or to relocate existing protected trees onto the project site, it appears that this is not a project goal. The replacement trees won't ever come close to the existing mature tree canopy. Questions also remain whether or not the 36 inch box size of the new trees on this property will have the space to grow to their potential or the width to spread out their root canopy. **59**

The report already anticipates construction to last approximately 28 months, beginning in August 2014 and completing in December 2016. A significant amount of time to find artifacts and to investigate historic surface treatments over the long history of this site should be provided by additional time for this phase. What could be uncovered are remnants of historic walkways, historic planting, indicators of layouts of the original park over time, as well as the remnants of the foundation of the original house on the site. Also, there could be remnants of the original sports court parallel to Fair Oaks Avenue. This **60**

investigation of historic artifacts should be a condition of any approval prior to any activity on the site. 60

Of course, the concern remains of air-quality and airborne particulates during the construction phase and a possible heightened effect on some existing residents. Also concern would be noise and especially vibration, as it relates to the integrity of the existing historic buildings on the block. 61

Comments on plans and elevations submitted.

Figure 2-5, Site plan and first floor layout. There is no text identifying uses on this plan, only the floor plan itself. It is unclear where the common area that is referred to as the *open space "gym"* is located. It is also unclear what the parking spaces are dedicated to on the surface. Also missing are clear directional arrows on ramps and driveways. The trees that are indicated on this plan show the original canopy as well as the *projected* mature canopy, blurring the limited coverage of the new trees. In fact, the paved areas seem to cover over 90+% of the open area. Without the surface parking on the ground floor, this actually could have been *landscaped* open space. Instead it's dominated by auto uses, and pavement. This paved over approach should be completely reconsidered in the alternative section. 62

Figure 2–6 & 2-7, subterranean parking levels. An amenity that seems to be missing is storage for the private units. Typically there's some amount of storage in the garage area. Because the ground floor plan was not labeled, this unclear if any building storage is provided there or on the ground floor level. It is unfortunate that the subterranean level parking layouts are so tight - another problem with the density of this project. And there are inconsistencies between this plan and Appendix diagrams. 63

Figures 2-8, 9, & 10, floor layouts. It would be helpful if the actual s.f. area of the apartments were identified to help in reviewing the parking requirements, trips generated and alternatives. It would be helpful to identify accessible exterior spaces as well. These comments have been made before about the presentation, and sadly add to the list of those not addressed. 64

Figures 2-11 & 2-12, Conceptual elevations. Unfortunately, it appears that some of the same elevation errors noted in the Initial Study and previous scoping sessions remain on these elevations. It is also unfortunate that the predominant height of the existing Castle Green, at 911.4 feet (approx. 78' high), is not clearly delineated. This was raised during the Initial Study, and the scoping sessions.

By not clearly identifying the legally recognized height of the Castle Green (approx. 78 feet), a false impression is created that the Project building has less impact. Nothing could be further from the truth, as the height directly contributes to many impacts. What these elevations do show is that the height of the proposed building is generally problematic. 65

This building clearly dominates the west elevation. Because of the length of this elevation and the attempt to relate to the bay window pattern of the existing adjacent facade, this elevation tends to dominate the West side of Fair Oaks, partly due to length, but also to the oversized attempt to 'compliment' the historic bay windows. In relationship to the existing historic buildings, this is contrary to the Secretary of the Interior Standards. Yet in other elevations, the proposed six-story height may not always appear to be as dominating as it does in the illustrations provided in other sections of this study.

End.

Castle Green Homeowners Association
Green Hotel Apartments DEIR, Section 3.1 Aesthetics Specific Comments
March 9, 2014

DEIR Comments on Section 3.1 Aesthetics selected topics

3.1.2.2: In this section the Central District area that is discusses says "most of the buildings are two stories in height, although there are a few taller buildings of either three or four stories…" This should be the basis for reviewing the appropriateness of the Project. Height is a major compatibility factor for new buildings to respect existing historic buildings. Compatibility does not mean *equal stature* when it comes to new buildings on or adjacent to historic sites, and especially when on the same block.

In fact, there is reason that few *existing* historic buildings in this District rise above four stories. While mostly historic and significant buildings, they ultimately respect larger historic structures (such as the Castle Green/Green Hotel Apartments) and the scale of the district.

This is evident in most all new construction, that with one exception all new and proposed buildings within the Old Pasadena District are 4, 3 and 2 stories. **66**

3.1.2.3 Surrounding land uses. In the second paragraph Central Park is mentioned only as a *contributor* to the Old Pasadena District, yet it is *individually* listed on the National Register. **67**

Also note in the third paragraph, this Section discusses the Castle Green and the "The garden courtyard, located on the eastern side of Castle Green building at Raymond Avenue." This fails to note is that this was the original 1895 park land of the early Hotel Green, and further fails to discuss the fact that the project site became the "West Park," shown in Fig. 3.3-6, 7 & 8, Central Park's predecessor. **68**

It is with amazement that after six years of reviews and comments, this Section fails (in the 4th paragraph) to mention the predominant views from the existing historic residences of the large tree canopy that exists on the project site. This omission continues throughout this report. **69**

Continuing on page 3.1–3, *"Viewsheds*" on Fair Oaks are mentioned, an is somehow made that existing nighttime lighting levels are considered high to medium. This *may* only true for existing westernmost edge of the project site, and certainly not for existing block residents. The existing large tree canopy realistically shields most of this nighttime lighting from existing residents, and their impact should be noted as medium to low nighttime lighting levels. **70**

In addition there's discussion of daytime glare from windshields of moving parts vehicles. Do to the fact that Fair Oaks is a heavily traveled street this is *somewhat* true but only to the westernmost edge of the existing site. Again, as with lighting levels, the large tree canopy dissipates most glare to existing residents. Furthermore the discussion of glass windows and doors producing periodic glare is questionable boilerplate language for this site. To the west and east are the existing historic buildings, and the large tree canopy filters this light in all directions. **71**

3.1.2.4 Project Site
There actually are limited views to the north of San Gabriel Mountains along the western perimeter, and some limited views to the north of the west side of Fair Oaks and north-western Old Pasadena. **72**

The site description of the "significant" existing canopy, "These trees are visually prominent and distinctive elements of the site and surrounding area due to their size and scale, and the trees contribute to both the visual and aesthetic quality of the project site." Also noted, *"These trees are some of the oldest trees in the city… and are of high visual significance."* **73**

- Why are views of the trees not studied?
- Why haven't in the 6-year-life of this project these trees been studied for likely *historic* significance?
- Why isn't the loss of this canopy given then acknowledged as a significance unmitigated loss?
- Why are other descriptions of this canopy less significantly and incomplete in this report?

73

In table 3–1 on page 3.1–4, summary of on-site trees, they are only 15 "on-site trees" listed in this table, yet Fig. 3.1-2 shows 21 "on-site trees." In the previous project site description on page 3.1–3, it says there are 20 existing trees on the site, 15 of which are protected. This discrepancy continues and has been noted in previous reviews yet seems to have once again been ignored.

74

It is unfortunate on page 3.1–5, figure 3.1–2, location of "on-site trees," that the tree canopy sizes are inaccurately depicted. Every tree appears to be identical in canopy size. This of course greatly diminishes the importance of the trees there and the significance of the trees, and the full impact of the loss of the canopy.

75

Also in the same figure, there seems to be a discrepancy between protected tree counts and non-protected tree counts in reference to 3.1.2.4 project site. This figure only indicates that eight trees are protected. This is a discrepancy that is been brought up during the initial study and during two previous reviews yet it has not been corrected.

76

3.1.5, Thresholds of Significance. There is a discussion of the CEQA guidelines and reference to the Appendix G and four bullet points (top of page 3.1-13). Number one bullet point is "have a substantial adverse effect on a scenic vista." This should apply to not only views into the site but views from in across the site especially from the existing historic green hotel buildings. But the DEIR fails to only study 4 tight viewpoints in concluding a less than significant impact.

77

Another bullet point, number four, says a significant impact is true if it "Create[s] a new source of substantial light or glare which would adversely affect day or nighttime views in the area." Where is the consideration here of the removal of source of daylight – late-afternoon sun and the sunsets – views from and effect on the existing structures that are now going to be pretty much entirely lost? Shadows beginning in early evening during summer and late afternoon in winter will require more lighting and energy use for existing structures on the block. How much is not analyzed, even though this use is concluded to be insignificant.

78

3.1.6 Project Impacts

"Substantial adverse effect on scenic vistas." This section states *photosimulations* were used, "to provide a more complete understanding of the proposed projects effect on scenic vistas." However, this analysis fails to provide a true complete representation of the Project's effects on relevant scenic vistas. Only the 4 vantage points described on pages 3.1–13 through 3.1–24 are proposed and analyzed.

Yet the DEIR fails to take into account views impacted from the existing historic structures, and historic vistas to and from the site. This incomplete analysis must be updated to include all relevant view impacts. The historic vistas have long existed from the far west all the way to the sloped land east of Orange Grove Blvd, and from the far south all the way down to the former Raymond Hotel site and more significantly along Fair Oaks north toward the site, considered a gateway into Old Pasadena.

79

Castle Green Homeowners Association
Green Hotel Apartments DEIR, Section 4.0 Alternatives Comments
March 8, 2014

Review of Section 4.0 – Alternatives

Alternatives are to attempt to obtain most of the Project Objectives, yet *avoid or substantially lessen significant impacts* of the project, even if those alternatives impede to some degree the attainment of the Project Objectives, or would be more costly.

While the selection of alternatives is to foster public participation and informed decision making, it seems that the exclusion of many alternative ideas mentioned by the public fails to meet this standard. Many alternatives, mentioned over and over, have been ignored, or waved away by a *mere statement* that they "were considered but dismissed as infeasible." **80**

Case law clearly comes down on the side of measurably different alternatives that significantly lessen project impacts. Because a selected alternative reduces one or two impacts, or merely reduces the severity of an impact, doesn't make it appropriate, especially if "dismissed" alternatives do more.

Two questionable Project Objectives are driving not only the project but the dearth of credible alternatives:

> 1. "Direct ingress/egress for parking" is a questionable goal if it is reason for the Project's sole access on Dayton Street. Alternative 2 only reduces the severity of traffic impacts, yet other alternatives NOT considered would substantially lessen traffic impacts.
>
> 2. Building out the parcel "based on the original turn of the century vision to create a new "gateway" framing Old Pasadena" has proven to be problematic at best when narrowly interpreted as the proposed Project does. Attempting to meet this "objective" has lead to unmitigated traffic problems, to excessive height bringing excessive impacts (studied or not), and to excessive density for this site. Almost all of the negative impacts are due to trying to copy or stick to this "objective." This Project, while novel and better than previous proposals, has proven to not be appropriate for this project, nor for Alternative 2. **81**

In the discussion of Alternatives, page 4-2 mentions the ill-conceived original 2007 proposal, driven by the same project objectives, and completely rejected by all. While thankfully the current project has less in common visually with the 2007 concept, it is clear that the Project and Alternative 2 have too many unmitigated impacts. **82**

Page 4-3 discusses (in the second paragraph) "statements" of mitigation in the DEIR that purportedly are adequate to reduce significant impacts, yet few if any *actual mitigation measures* are mentioned, let alone studied and analyzed in the DEIR. The report goes on to say "a number of additional alternatives were considered but dismissed as infeasible." However, none of these "*dismissed*" alternatives show evidence of being studied. **To merely state that they are infeasible is inadequate and contrary to CEQA requirements.** **83**

Alternative 1 is the required "No Project" approach, one that would most please the community. What is omitted from this DEIR, is that Dayton Street as it exists, *does not meet the minimum access width* required by the fire code. So starting with the existing conditions are problematic, especially if they are omitted. **84**

Alternative 2 in concept actually is just slightly *better* than the project. It does not change key impacts, and only *reduces the severity* of unmitigated traffic impacts on Dayton, surrounding intersections and roadway segments. **85**

DISMISSED ALTERNATIVES

First of all, the Alternatives are supposed to be project-based. Statements such as "Much in the same manner" or "the same project" sadly characterize Alternative 2. A major failure here is that real alternative projects are not considered, just alternative portions of projects are considered. No wonder the stated alternatives are rejected, as they consist of "concepts" the City had no intention of supporting from the start. This is a major flaw. **86**

4.4.1 Alternate ACCESS Alternative describes a single driveway on Fair Oaks, yet *no location* is given. In fact, the existing parcel *has* a driveway on Fair Oaks. This dismissal goes on to opine that no *left turn lane*s into the project on Fair Oaks could ever exist, yet no study validates this "statement." Couldn't a portion of on-street Fair Oaks parking be removed to allow a left turn lane? Or a lot line adjustment in the parcel in conjunction with on-street parking changes be studied? Could a reduced size alternative with some or all of the above make a Fair Oaks driveway worth studying? Could a dual-driveway approach combine with the above options for consideration? Yes to all of these possiblities. **87**

Logic says they are worth evaluating, but without study, the DEIR says no way to any other driveway configuration than a single traffic-busting driveway onto Dayton Street. In rejecting any possibilities here, the report creates then ignores the worst series of unmitigated impacts possible.

4.4.2 Off-Site Parking Alternative. While this exploration could have promise, the City takes an "only per Code" approach. Nothing outside the zoning box was looked at, even on this most-significant block that should warrant a "creative" approach. Yet just next door, the Castle Green provides only 10 on-site resident parking places, with the majority of occupants parking across the street. A reduced size project with creative parking solutions could have made this worth of study. **88**

4.4.3 Alternate Site Alternative was dismissed solely because the current owner fails to own or control any other property in the vicinity. Is the grounds for dismissal? Instead of studying a possible alternate site, and following up with the other owners on possibilities that would provide such an alternate to be considered (such as land swap, or transfer of development rights, etc.), the City again dismisses this from further consideration. **89**

4.4.4 Smaller Scale Alternative. Everyone agress that the ground floor commercial is important for continuity with Old Pasadena, yet this "smaller scale" alternative removes this use, instead opting for only 13 residential units with no commercial space. We know the parking needs for the retail space, and this could be accessed from a single Fair Oaks driveway to below ground. 8-14 residential units, per the proposed floor plans could be added and accessed from this same driveway to underground. Less than 69 spaces would be required, limiting underground parking to one floor. Perhaps if less parking, a Dayton ramp could be part of this to allow a second and impact-reducing driveway. The existing Fair Oaks driveway could be the parking entrance. Two driveways could reduce left turn impacts, queuing impacts and overall added traffic impacts. Dismissed. **90**

4.5 Analysis Methodology. The flaw in this section is that only the "alternatives selected for analysis" are sufficiently evaluated, leaving questions about how the "dismissed" alternatives were objectively studied. **91**

Sadly, superior low build options exist, but weren't considered. Alternatives such as *ONLY building the Fair Oaks ground floor retail component* with covered parking in a wider footprint, or this and perhaps adding a full or partial second or even a limited third floor of housing above, with smaller underground parking footprint allowing some preservation of historic tree canopies and two driveways is a simple and likely less impactful alternative. **92**

For some reason, alternatives seemed to only follow existing project footprint. In fact, a 2-3 story build, as discussed above with wider lot coverage could have a planted roof, or solar roof, or larger undisturbed ground floor landscaped area with a smaller excavation area.

Section 4.6, Comparative Impact Analysis, Alternative 1 – No Project Alternative **93**

Refer to Tom Brohard traffic notes on existing traffic conditions omitted in the DEIR. **94**

4.6.2 Alternative 2 – Reduced Height

The only difference in Alternative 2 and the project is the lopping off of the top two floors. However, what results from this reduction in height and density only slightly (in words direct from this section) begin to reduce the severity of the impacts or having similar reductions as the Project.

Artificially lopping off the top two floors may be an obvious *start* in considering alternatives, this is where it ended. Why do all other attributes remain the same: views are only 'slightly improved,' air access slightly better, fewer daily trips but with traffic still unsupported by roads and intersections. By reducing only ONE attribute, the "Reduced height" Alternative fails when a *"Reduced Scope*" Alternative should have been studied. Is Alternative 2 more appropriate and desirable than the Project – sort of. But to say this Alternative is ***good*** is relative – sorta like the loud relative that lives far away, so he visits less often, which is *good*, but he'll always be a *relative*. This is reason alone to require a revised report. **95**

Aesthetically, to quote the report, "the height would merely be reduced by two stories." **That's it.** And the report says Alt. 2 has similar effects on impacts. Wow, so there's little difference because it is not a reduction in SCOPE. And Alternative 2 still isn't set back on Dayton Street, and still has 20 new surface parking spaces on a large paved "open area" stymieing a more appropriate and less impactful *greener landscaped ground floor*. Why weren't the "Known Areas of Controversy" considered when picking alternatives? **96**

And there is a false statement *by omission* on Page 4-8 stating that the Alternative wouldn't restore turret views from the west. Based on only the 4 close-up Vantage Points, in this case just 200-300 feet west of the site, this is true. Even a 3 or 2 story building from this point could obscure the turret views. Yet the fact is that most of the impacted views *aren't even considered* by the Project. Alternative 2 in fact would begin to restore many of the turret views beyond these short-sited Vantage Points, including the *historical view corridors* of the last 112+ years. It could also restore many historic western, afternoon and sunset views from the site (also not studied). **97**

Under air quality, while referring to construction, it is deemed for Alternative 2 to be less than significant. What the lower height does is to reduce lost air circulation for the breeze-dependent Castle Green (also not studied) **98**

As for Cultural Resources, if the DEIR fails to address *all the cultural resources impacts* for the Project, then the Alternative is essentially similar in studied impacts. Without an objective Project analysis, of course Alternative 2 looks better. **And the report concludes "similar impacts to historic resources would result with implementation of"** Alternative 2. Then in other words, lopping off 2 floors in **Alt. 2 is really not less impactful, and not really an alternative,** and should be deemed inappropriately. **99**

Traffic generation from Alternative 2 is deemed to be on par with the Project, somewhat less but still overwhelming Dayton Street. Alternative 2 continues to create unmitigated circumstances at Dayton & Raymond, at Dayton & Fair Oaks, and at the unstudied *Fair Oaks roadway segment* from Dayton to Del Mar. **So Alt. 2 is essentially similar in traffic impacts as well.** **100**

Only a significant reduction of scope for an alternative would meet the CEQA threshold for Alternatives. **101**

The "Conclusion" on page 4-14 pretty much sums up Alternative 2: **"The same significant and unavoidable impacts would either be similar to or reduced in comparison to the Project."** It goes on to say Alt. 2 "would not avoid but would *reduce the severity* of the significant traffic impact of the Project." Reduce the "severity" is not the standard of which Alternatives are measured, but this fact seems ignored. The standard is to avoid or substantially lessen significant impacts, not to just reduce their severity. **102**

…so this really isn't an appropriate Alternative after all. The above comments are reason enough to require a revised report before any project approvals are granted. **103**

End.

Letter No. 3 Castle Green Homeowners Association

Castle Green Homeowners Association
March 8 and 9, 2014

Responses

Response 3-1

Detailed responses to the allegations in this comment letter are provided. All impact areas have been appropriately investigated according to CEQA requirements and no mitigation measures are omitted or incomplete.

Response 3-2

The general statement provides no basis or discussion regarding why the "less than significant impact" conclusions need to be revisited. Subsequent comments and conclusions are discussed further below.

Response 3-3

The subject description is a summary of the more detailed discussion of aesthetics provided in Section 3.1 of the Draft EIR. Whether the existing Castle Green is characterized as a six-story building or a seven-story building does not exaggerate nor underestimate the height of the subject structure, nor is that characterization the basis on which the conclusions of the aesthetics impacts analysis were reached. The Draft EIR analysis is based on the actual heights of existing structures in relation to the height of the proposed project building. That is clearly evidenced in the elevations provided in Section 3.1 (i.e., Figure 2-11 and 2-12), which are drawn to scale and have the actual heights, as measured in feet above mean sea level, of numerous existing structural features near the project site. Castle Green has a height of between 906.1 and 938.2 feet above mean sea level, depending on particular roof features, and the proposed project building has a height of 908.26, which is, for the most part, lower than Castle Green.

Response 3-4

Section 3.1.2.4 of the Draft EIR acknowledges that surface parking and mature trees also currently occupy the project site and are therefore included in the impacts analysis. For the reasons described in Section 3.1 of the Draft EIR, specifically pages 3.1-24 through 3.1-27, implementation of the proposed project will not substantially degrade the existing visual character or quality of the site and its surrounding. The conclusion that there will be no significant impacts pertaining to aesthetics remains valid.

Response 3-5

The issue described in the comment (i.e., headlight illumination impacts) is addressed on page 3.1-27 of the Draft EIR. Furthermore, the project is located in one of the most heavily urbanized and active areas of Pasadena, where lighting from cars in the late evening or early morning hours or glare during daytime hours would not be a material change to the existing condition, and therefore is a less than significant impact.

Response 3-6

The figures presented in Appendix B of the Draft EIR indicate that shading impacts associated with the project would generally be limited to only portions of the adjacent building during certain times of the year and certain hours of the day. The figures in Appendix B also show the substantial separation

between the project building and existing structures, including a building separation distance of approximately 40 feet to the existing Green Hotel Apartments to the north and approximately 158 to the Castle Green to the east. Figure 2-8 through 2-12 of the Draft EIR also delineate, to scale, the substantial amount of separation between the project building and the aforementioned existing structures. While development of the proposed building may cause existing breezes from the west and south to flow around the new building, there is no indication that there would be a significant loss or reduction of existing airflow to Castle Green. Based on the above, there is no factual basis to conclude that implementation of the project would cause a loss of daylight and breeze resulting in higher energy use.

Response 3-7

Please see Response to Comment 3-6 above. Additionally, relative to the commenter's statement that the Castle Green units were designed for cross-building ventilation, it should be noted that the currently proposed building is in the same basic location and orientation as originally envisioned in 1903 for the overall Green Hotel complex (see Figures 3.3-4 and 3.3-5 on page 3.3-11 of the Draft EIR), with the notable exception that the current proposal has a 40-foot wide separation between the north end of the proposed building and the south side of the existing Green Hotel Apartments, whereas the original development had continuous building area with no such gap. If anything, the currently proposed project better supports cross-building ventilation at Castle Green than the development concept in mind when Castle Green was designed, by providing a sizeable opening for westerly breezes to flow through.

Response 3-8

The general statement provides no basis or discussion regarding why the "less than significant impact" conclusions need to be revisited. Subsequent comments and conclusions are discussed further below.

Response 3-9

In contrast to the commenter's allegation, the historic value of the trees and landscaping on site has been evaluated in the EIR. Page 3.3-6 of the Draft EIR includes a discussion of trees at and near the project site. Appendix E of the Draft EIR provides a detailed evaluation of the ages of trees at and adjacent to the project site. As concluded therein, removal of trees onsite would not affect the existing National Register listing and there would be no significant impact related to historic resources. Further, as discussed under CEQA Guidelines Section 15125(a) the environmental setting [i.e. the basis for determining whether an impact is significant] are the "physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published…" (See also CEQA Guidelines Section 15126.2(a).) (See also *Citizens Committee to Save Our Village v. City of Claremont* (1995) 37 Cal.App.4th 1157, 1170 [no historic impacts based upon alleged inconsistency with historic landscape plan when there was no evidence as to the extent, detail, or nature of the plan, no evidence that plan was maintained or continued over time, and no credible evidence that landscaping in accordance with alleged plan was in existence at the present time.]

Secretary of the Interior's Standard 4 states: *Changes to a property that have acquired historic significance in their own right will be retained and preserved.*

The growth and maturity of the trees on the property is a change; however, this is a change that has not acquired historic significance because historic association has been lost and there is no new context or association. Two trees remain on the parcel from the hotel's period of significance. The

historic landscape associated with the hotel is no longer discernible, and the parcel no longer conveys its past use as a designed landscape for the hotel or has a visual association with Central Park. The landscape features currently on the parcel have not acquired historic significance, on the contrary, they have lost historic significance. The project conforms to Standard 4 because there is no change that has acquired significance over time.

Response 3-10

Please see Response to Comment 3-9 above. Relocation of trees will comply with the Tree Protection Ordinance. Trees by themselves could be considered significant, but would have to be designated as such pursuant to the City's Zoning Code. None of the trees on this site have been, or could be, so designated.

Response 3-11

The height compatibility of the proposed project is addressed on page 3.3-29 of the Draft EIR. Additionally, please see Topical Response TR-CR-1 regarding the Draft EIR analysis of impacts to historic resources.

Response 3-12

The comment claims that the project is not consistent with Standard 10; however, Standard 10 specifies that if new construction is removed in the future, the integrity of the existing historic resources would be unaffected. The proposed project is a separate building that would not touch the existing historic resources; hence, if it were removed at a future date, the "form and integrity of the historic property and its environment would be unimpaired." The project is, therefore, consistent with Standard 10. Standard 9 is more related to the commenter's concern regarding height. Please see Topical Response TR-CR-1 for additional discussion regarding the Draft EIR analysis of impacts to historic resources, including a discussion of height in relation to the adjacent historic buildings.

Response 3-13

The Draft EIR addresses the impacts associated with proposed Project in accordance with CEQA requirements.

Response 3-14

South Coast Air Quality Management District thresholds pertaining to greenhouse gases (GHGs) are based on land use sources of GHGs, not land use receptors. GHG impacts are global in nature, and not specific to local settings. Section 3.2 of the Draft EIR addresses potential air quality impacts associated with construction and operation of the proposed project, including potential impacts to sensitive receptors as discussed on pages 3.2-14 through 3.2-17. That analysis considers potential "hot spots" (i.e., the potential for high concentrations of air pollutants to accumulate in particular areas) and toxic air contaminants. As indicated in Section 3.2, no significant impacts related to air quality are anticipated to occur following implementation of recommended mitigation measures.

Response 3-15

The general statement provides no basis or discussion regarding why the "less than significant impact" conclusions need to be revisited. The analysis of potential noise and vibration impacts to nearby buildings, as presented in Section 3.5 of the Draft EIR and supported by Appendix G, is specific to each building. The nature and applicability of mitigation measures presented in that section, as well as in other sections of the Draft EIR, are specific to the significant impacts identified in the impacts analysis. It is not necessary or appropriate to extend mitigation measures to situations where no

significant impacts occur. Additionally, it should be noted that the vast majority of mitigation measures presented in Section 3.5 are not limited to specific building, but rather apply in general. The only mitigation measures that are buildings-specific are MM-NOISE-4 and MM-NOISE-5 relative to potential construction-related structure vibration impacts to the existing Green Hotel Apartments and the single-story structure at 84 Fair Oaks Avenue (see Response to Comment 2-5 regarding clarification that the subject mitigation measures apply to 84 Fair Oaks Avenue). Those two building-specific measures do not apply to Castle Green because, as indicated on page 3.5-21 of the Draft EIR, project-related construction activities would be 75 feet or more from Castle Green, which, at that distance, the potential for structural vibration impacts would be less than significant.

Response 3-16

MM-NOISE-1 is consistent with the City's Noise Ordinance, which is described in Section 3.5.3.3, and provides appropriate time limitations on construction activities, thereby reducing potential noise impacts to a level that is less than significant. The Mitigation Measure extends noise restrictions applicable to residential zones to this site, which is not in a residential zone and would therefore not normally be required to comply with residential noise restrictions. The comment provides no basis for, or analysis in support of, expanding those time limitations beyond those required for residential zones in the City's Noise Ordinance.

Response 3-17

Noise impacts associated with vehicle traffic on Dayton Street are addressed on page 3.5-14 of the Draft EIR, which states that the project-induced increase in traffic volumes on Dayton Street would increase ambient noise levels by 2 dBA. For comparison, it is widely accepted that the average healthy ear can barely perceive changes of a 3 dBA increase or decrease in noise. The noise generated by 639 new daily project trips is much less significant than the noise generated by 20,690 existing daily vehicle trips on Fair Oaks.

Response 3-18

Condition of Approval COA-NOISE-4 and Mitigation Measure MM- NOISE-3 sufficiently reduce noise impact to a level that is less than significant. No expansion or modifications of those measures are warranted. Moreover, COA-NOISE-4 does not contain any noise notification requirements but rather pertains to providing data to the Director of Planning and Community Development documenting that noise levels from heating, ventilation, and air conditioning (HVAC) and other mechanical equipment will meet specified noise levels. Additionally, MM-Noise-3 in its current form calls for a prohibition on use of the pool area between 10:00 p.m. and 5:00 a.m. To add noise restrictions on continued pool use after 8:00 p.m. and before 7:00 a.m. is unwarranted given that noise intensive use of the pool area during such times seems unlikely and the commenter provides no basis or rationale for why such restrictions during those hours are needed. In the event there is a notable noise disturbance occurring during those hours of interest, enforcement of the city's noise ordinance, as described in Section 3.5.3.3 of the Draft EIR is available to address the issue.

Response 3-19

Mitigation Measure MM-NOISE-4 on page 3.5-21 of the Draft EIR provides sufficient detail regarding how the measure will work. As described therein, the tasks required in MM-NOISE-4 are to be implemented by a Professional Structural Engineer with experience in structural vibration analysis and monitoring and a Project Historic Architect as a team. As qualified professionals, they will take the steps necessary and appropriate to address potential vibration impacts specific to the site characteristics and specific to the demolition/construction approach proposed. As indicated by the

examples provided in the latter portion of MM-NOISE-4, the types of measures to be employed are aimed primarily at avoiding or minimizing activities that may result in significant vibration levels. It is not necessary to test such mitigation measures prior to demolition, as suggested by the commenter.

Response 3-20

Please see Response to Comment 2-5, which adds the 84 Fair Oaks Avenue structure to the proposed monitoring program and reiterates the Draft EIR finding that the Castle Green building is approximately 75 feet from the project site, and, at this distance, the potential for structural vibration impacts would be less than significant (i.e., vibration monitoring is not warranted).

Response 3-21

Please see Response to Comment 2-5.

Response 3-22

The general statement provides no basis or discussion regarding why the "less than significant impact" conclusions need to be revisited. The alleged deficiencies in the traffic study are addressed below.

Response 3-23

An Alternative Access Alternative and an Off-Site Parking Alternative have been studied to address the significant impact to Dayton Street. These alternatives are discussed on page 4-4 of the Draft EIR. Traffic impacts on Dayton Street are identified and discussed on page 3.6-43 of the Draft EIR, as indicated; no feasible mitigation measures are available to reduce significant traffic impacts on Dayton Street because the only way to reduce the impact below a level of significance is to reduce the number of trips along this segment. In order to study the potential to reduce the number of trips along this segment, the Alternate Access Alternative would relocate the project driveway along Fair Oaks Avenue creating right-turn in and right-turn out access for the project site. As discussed in Response 2-6 above, this alternative would not mitigate the significant impact on Dayton Street. The Off-Site Parking Alternative would relocate 32 parking spaces to an off-site parking structure. As described in Section 4.4.2 of the Draft EIR, the capacity of the two nearby parking structures has been reached and they are therefore not available, thereby making it infeasible to provide off-site parking within the required 1,000 feet of the project site. For this reasons, the Off-Site Parking Alternative was eliminated from further consideration and evaluation in the Draft EIR.

Typical local street capacity is between 3,000 to 5,000 Average Daily Traffic (ADT); the current ADT on Dayton Street is 883, and the project would increase the ADT on Dayton Street to approximately 1,509. This increase is substantially below the available capacity on Dayton Street.

The traffic study includes the existing (baseline) trips affecting Dayton Street, which are part of the existing AM and PM vehicle count data, and included in the traffic impact analysis on page 12 and 13 in Appendix H of the Draft EIR, and in the Draft EIR itself on page 3.6-11 and 3.6-13. This includes all trips associated with the existing parking lot, which currently only uses Dayton Street for access (per the applicant, the gated Fair Oaks Avenue driveway is locked and only used for trash pickup).

Response 3-24

The discussion within the Executive Summary box addresses whether project implementation would conflict with the County Congestion Management Program (CMP), and the conclusion therein that it would not conflict with the CMP is correct, which the commenter acknowledges. As described in

Section 3.6 of the Draft EIR, the traffic study completed for the project addresses six intersections located near the project site, as shown in Figure 3.6-2 of the Draft EIR, and concludes, based on substantial evidence that no significant impacts to any of those intersections would occur.

Response 3-25

Both of the subject intersections (Dayton Street/Fair Oaks Avenue and Dayton Street/Raymond Avenue) are addressed in Section 3.6 of the Draft EIR. As discussed therein, no significant impacts would occur at any of the intersections evaluated; hence, no mitigation measures for intersection impacts are warranted.

Response 3-26

Significant traffic impacts on Dayton Street are identified in Section 3.6 of the Draft EIR and, as indicated on page 3.6-45, no feasible mitigation measures are available to reduce those impacts. The issue of potential blockage of the site driveway on Dayton Street is addressed on page 3.6-49 of the Draft EIR and Condition of Approval COA-TRAN-1 is identified to avoid driveway blockage.

Response 3-27

The emergency access on the Dayton Street segment is discussed on page 3.6-49 of the Draft EIR, with the City's Fire Department stating that Fair Oaks Avenue has been identified as the preferred and primary emergency access for this project, and that Dayton Street would only be used as a secondary emergency access for this project if circumstances warrant due to the fact that the project is at the corner of Fair Oaks Avenue and Dayton Street. The Fire Department has also recommended that the project driveway to the parking garage be located on Dayton Street to avoid potential conflicts between the project driveway and the primary emergency access location that would be on Fair Oaks Avenue.

The traffic study includes the existing apartment trips and the existing Castle Green trips on Dayton Street, which are part of the existing AM and PM vehicle count data, and included in the traffic analysis on page 12 and 13 in Appendix H of the Draft EIR, and in the Draft EIR itself on page 3.6-11 and 3.6-13.

Response 3-28

The discussion on page 3.6-50 of the Draft EIR indicates that the existing Pedestrian Environmental Quality Index and the Bicycle Environmental Quality Index scores will not be significantly impacted with implementation of the proposed project and in certain cases would be improved.

Response 3-29

As described on page ES-5 of the Draft EIR, the 11 areas of known controversy that are listed were taken into consideration in determining the scope of the EIR analysis, which, in turn, were all addressed in the six topical areas presented as Sections 3.1 through 3.6 of the Draft EIR, along with Section 4 (Alternatives) of the Draft EIR. Many of the specific notes provided by the commenter relative to each area of controversy are repeated elsewhere in the commenter's submittal. Provided below are responses to new/additional comments, as well as cross-references to responses to other comments addressed elsewhere in the submittal.

Response 3-30

The specific points bulleted in this comment are raised elsewhere in the comment letter, and thus addressed in the following Responses to Comments.

- For Bullet 1, refer to Responses to Comments 3-4, 3-46, 3-48, 3-55, 3-70, and 3-71.
- For Bullet 2, refer to Responses to Comments 3-9, 3-55, and 3-75.
- For Bullet 3, refer to Responses to Comments 3-10, 3-59, and 3-74.
- For Bullet 4, refer to Responses to Comments 3-9, 3-48, 3-59, 3-70, and 3-71.
- For Bullet 5, refer to Response to Comment 3-9.

Response 3-31

The specific points bulleted in this comment are raised elsewhere in the comment letter, and thus addressed in the following Responses to Comments.

- For Bullet 1, refer to Responses to Comments 3-23, 3-26, and 3-43.
- For Bullet 2, refer to Response to Comment 3-84.
- For Bullet 3, refer to Responses to Comments 3-84 and 3-87.
- For Bullet 4, refer to Responses to Comments 3-84 and 3-87.
- For Bullet 5, refer to Responses to Comments 3-23, 3-26, and 3-43.

Response 3-32

The specific points bulleted in this comment are raised elsewhere in the comment letter, and thus addressed in the following Responses to Comments.

- For Bullet 1, refer to Responses to Comments 3-43, 3-52, and 3-84.
- For Bullet 2, refer to Responses to Comments 3-43 and 3-52.
- For Bullet 3, refer to Response to Comment 3-47.

Response 3-33

The specific points bulleted in this comment are raised elsewhere in the comment letter, and thus addressed in the following Responses to Comments.

- For Bullet 1, refer to Responses to Comments 3-41, 3-42, and 3-58.
- For Bullet 2, refer to Responses to Comments 3-41, 3-42, and 3-58.
- For Bullet 3, refer to Responses to Comments 3-27 and 3-58.
- For Bullet 4, refer to Responses to Comments 3-41, 3-58, and Topical Response TR-ALT-1.
- For Bullet 5, refer to Responses to Comments 3-25, 3-27, and 3-28.
- For Bullet 6, refer to Responses to Comments 3-25, 3-27, 3-28, 3-41, 3-42, 3-58, and 3-85.

Response 3-34

The specific points bulleted in this comment are raised elsewhere in the comment letter, and thus addressed in the following Responses to Comments.

- For Bullet 1, refer to Responses to Comments 3-44 and 3-57.
- For Bullet 2, refer to Responses to Comments 3-3, 3-11, 3-12, 3-44, 3-51, 3-57, and Topical Response TR-CR-1.
- For Bullet 3, refer to Responses to Comments 3-3, 3-11, 3-66, and 3-95.
- For Bullet 4, refer to Responses to Comments 3-44, 3-57, 3-95 and Topical Response TR-ALT-1.
- For Bullet 5, refer to Responses to Comments 3-3, 3-6, 3-11, 3-49, 3-57, and 3-95.
- For Bullet 6, refer to Responses to Comments 3-44 and 3-51.
- For Bullet 7, refer to Responses to Comments 3-44, 3-65, and 3-66.

Response 3-35

With one exception, the specific points bulleted in this comment are raised elsewhere in the comment letter. The only item in this comment that is not raised elsewhere in the letter is the second bullet point alleging that the entire block where the project site is located should be shown on maps as being on the National Register, as well as the entirety of the Old Pasadena District. In that regard, the discussion on pages 3.3-16 through 3.3-17 of the Draft EIR, and accompanying Figure 3.3-9, correctly describe how the structures within the subject block contribute to the Old Pasadena District, while, as noted on page 3.3-19, vacant lots, such as the project site, are considered to be non-contributing resources. Regarding the suggestion to outline all of the Old Pasadena District, the discussion on page 3.3-15 describes the boundaries of the District, and the map on page 32 of Draft EIR Appendix E shows the boundaries of the entire District. Please see Responses to Comments 3-51 and 3-67 regarding the other bulleted items in this comment.

Response 3-36

With one exception, the specific points bulleted in this comment are raised elsewhere in the comment letter. The only item in this comment that is not raised elsewhere in the letter is the third bullet point that the Draft EIR does not address impacts to views from existing historic buildings. In that regard, CEQA emphasizes evaluation of visual resources that are visible from public places, like streets, sidewalks, and parks, and is not intended to protect private views, such as those that may be available from existing private property/buildings. For the other bulleted items in this comment, please refer to the following Responses to Comments.

- For Bullet 1, refer to Responses to Comments 3-79 and Topical Response TR-AES-1.
- For Bullet 2, refer to Response to Comment 3-79.
- For Bullet 3, refer to Responses to Comments 3-95, 3-96, 3-97, and Topical Response TR-AES-1.
- For Bullet 4, refer to Responses to Comments 3-95, 3-96, 3-97, and Topical Response TR-AES-1.

Response 3-37

The specific points bulleted in this comment are raised elsewhere in the comment letter, and thus addressed in the following Responses to Comments.

- For Bullet 1, refer to Responses to Comments 3-90 and 3-95.
- For Bullet 2, refer to Responses to Comments 3-90, 3-91, 3-92, and Topical Response TR-ALT-1.
- For Bullet 3, refer to Responses to Comments 3-90 and 3-92.
- For Bullet 4, refer to Response to Comment 3-89, and also note that transfer of development rights are not allowed within the Central District Specific Plan area where the project site is located.
- For Bullet 5, refer to Responses to Comments 3-80 and 3-102.

Response 3-38

The specific points bulleted in this comment are raised elsewhere in the comment letter, and thus addressed in the following Responses to Comments.

- For Bullet 1, refer to Responses to Comments 3-7 and 3-98.
- For Bullet 2, refer to Responses to Comments 3-7 and 3-49.
- For Bullet 3, refer to Response to Comment 3-61.

Response 3-39

The specific points bulleted in this comment are raised elsewhere in the comment letter. Please see Responses to Comments 3-15 and 3-19 which address the bulleted items in this comment.

Response 3-40

Please see Response to Comment 3-15. Also note that, as indicated on page 3.5-11, vibration levels associated with loaded trucks, along with large bulldozers and other such equipment, were accounted for in the impacts analysis. Regarding the excavation of earth near existing structures, it is anticipated that shoring will be used, where appropriate as will be determined by a structural engineer and the Building Official prior to issuance of a building permit for the project.

Response 3-41

The Draft EIR does not say both, or either, of the subject intersections will be problematic. As documented in Section 3.6 of the Draft EIR, no significant impacts would occur at those intersections and the existing Pedestrian Environmental Quality Index and the Bicycle Environmental Quality Index scores in areas around the project site will not be significantly impacted with implementation of the proposed project and in certain cases would be improved.

Response 3-42

The fire station signal on Fair Oaks Avenue is intended to facilitate emergency vehicles exiting the fire station. The flashing beacon near the fire house is not a signalized or an unsignalized intersection. The flashing beacon is used to warm motorists that a fire engine is responding to an emergency and will exit the fire house. During operation, the signal stops traffic for just enough time for the emergency vehicles and equipment to exit the structure. Accordingly, this is not a typical traffic signal since it

does not operate on a regular basis. Further, the configuration of the intersection of Dayton Street and Fair Oaks Avenue and the emergency signal would not change with implementation of the project, nor would the functionality of the emergency signal and the response pattern of traffic change. Accordingly, the project would not change the existing scenario. Nor would the introduction of project traffic into the emergency signal area impact the ability of the emergency signal to function appropriately. Finally, it is assumed that traffic from the project would respond as required when the emergency signal is in operation, and there is no evidence to rebut that assumption, nor is there evidence that additional traffic on Fair Oaks Avenue, or Dayton Street, or at their intersection, would impede the operation of the emergency signal.

The street segment of Fair Oaks Avenue between Dayton Street and Del Mar Boulevard is a four-lane roadway with higher capacity than any of the other street segments that have been analyzed. The net increase in traffic on that segment is expected to be less than one percent because the segment of Fair Oaks Avenue north of the segment in question is less than one percent, well under the 4.9 percent threshold that triggers consideration of project alternatives. An additional 1,000 trips would be needed to generate a significant impact on Fair Oaks Avenue. The project generates well below 1,000 average daily trips on Fair Oaks Avenue. Therefore, the street segment of Fair Oaks Avenue between Dayton Street and Del Mar Boulevard was not included as part of the traffic study.

Response 3-43

The Fire Department is aware of the existing and future impacts of the proposed project as well as the Alternative 2 scenario, and the Fire Department has no issues or concerns regarding the safety access on Dayton Street, Fair Oaks Avenue, or the project site itself. The City has numerous locations where streets are not in compliance with the current Fire Code. The City has past practice allowing nonconforming streets to continue to exist and does not burden new projects with requirements to provide fire access when there is alternative fire access provided. In this case, Fair Oaks Avenue has been identified by the Fire Department as the preferred and primary emergency access for this project because it is a larger street and has a larger water main than Dayton Street. Dayton Street would only be used as secondary emergency access for this project if circumstances warrant due to the fact that the project is at the corner of Fair Oaks Avenue and Dayton Street. Because Fair Oaks Avenue would be the primary emergency access for the project, the Fire Department has recommended that access to the project's parking garage be from Dayton Street to avoid potential conflicts between the project driveway and the primary emergency access location on Fair Oaks Avenue. Any future construction on Dayton Street shall comply with the requirements of California Fire Code (CFC) (Pasadena Fire Chief, August 2014).

Traffic concerns and impacts at both Dayton Street intersections were adequately studied, and the analysis indicated the two intersections (Dayton Street at Fair Oaks Avenue and Dayton Street at Raymond Avenue) would operate at an acceptable level of service (LOS A) with and without the project, as discussed on pages 11 and 34 of the traffic study included in Appendix H of the Draft EIR.

Response 3-44

As indicated on page 2-15 of the Draft EIR, the height, floor area ratio, and setbacks of the proposed project meet the development standards for the CD-1 zoning district. As such, the development plan for the project site complies with the existing zoning requirements, and there are no significant impacts that warrant consideration of building setbacks different than those currently proposed. Additionally, the project applicant cannot be forced into a Variance situation, notwithstanding that it would be unlikely that the findings necessary to grant such a Variance could be met.

Response 3-45

As stated on page 3.1-17 of the Draft EIR..." while the proposed project would affect private views from certain residences in the Castle Green and Green Hotel Apartment building, CEQA emphasizes evaluation of visual resources that are visible from public places, like streets, sidewalks, and parks." Impacts to such public views are addressed in the Draft EIR and supplemented with additional discussion and visual simulations provided in this Responses to Comment document. Notwithstanding, it should be noted that the mature tree canopy visible from Castle Green, the existing Green Hotel Apartments, and offsite areas to the south and southwest is concentrated in the area immediately west of, and on the same property as, Castle Green, which will not be affected by the proposed project, The attached figure, which supplements Figure 2-3 in the Draft EIR provides an oblique aerial view looking northward, which shows the existing vegetation at and near the project site. As shown, the predominant lush green canopy, which the commenter may be referring to, is immediate to Castle Green and outside of the project boundary. The existing vegetative canopy within the project site is characterized by several pockets of trees dispersed within the existing surface parking lot that covers the vast majority of the site. As described in Section 3.1 of the Draft EIR, the loss of onsite trees, being those that cannot be saved in-place or transplanted elsewhere within the site, would be mitigated through replacement trees planted onsite. It should also be noted that the visual impacts discussion on page 3.1-17 of the Draft EIR indicated that, from the perspective of Castle Green residents, the proposed project would obstruct views to the west, which currently include views of the Doty Block building, the former Ambassador College campus, Vista del Arroyo Hotel and Bungalows, Verdugo Mountains, and the San Rafael Hills. See also Topical Response TR-AES-1 Potential View Impacts.

Response 3-46

Notwithstanding that tree foliage such as that currently at the Project site provides minimal sound attenuation, implementation of the project includes replacement and relocation of existing trees. Based on the low speeds at which vehicles would be operating at the Project driveway, minimal vehicle noise levels would be generated. Moreover, the noise exposure at Castle Green and the Green Hotel Apartments associated with the Project-related 626 trips per day would be more than offset by the shielding of traffic noise from the existing 20,690 average daily trips on Fair Oaks Avenue that would occur with development of the Project building, which would be an intervening noise barrier. A building height reduction, setback on Dayton Street, and/or dual-driveway scenario would not lessen noise impacts. No operations-related noise mitigation is warranted given that there are no significant noise impacts.

Regarding the creation of an “echo chamber” as suggested in the comment, it should be noted that there would be over 150 feet of separation between Castle Green and the proposed building. As shown in the visual simulations presented in Figures 3.1-4 through 3.1-6 and 3.1-11, the exterior of the proposed building has numerous protrusions and other architectural features that “break up” the exterior finish, which will serve to diffract any sound waves extending to the building. Additionally, substantial landscaping, including numerous existing and proposed trees, will occupy the area between the proposed building and Castle Green, especially around the proposed driveway and parking ramp as shown in Figure 2-5b, which has been added in the Final EIR. To the extent that landscaping, such as the tree canopy serves as a “positive filter,” as suggested by the commenter, such would still be the case with project implementation. Based on the above, no significant impacts related to a potential “echo chamber” are anticipated to occur.

Response 3-47

Figure 2-5 in the Draft EIR was a preliminary site plan that was subsequently updated to include minor refinements to the surface parking layout, landscaping, and other ground level features. The updated site plan, presented herein as Figure 2-5a, delineates the location and intended use of the 20 parking spaces proposed at surface level. The comment provides no indication as to how or why the provision of covered parking, versus uncovered parking, would create visual and/or noise impacts that are not already addressed in Sections 3.1 and 3.5, respectively, of the Draft EIR. The commenter's question of why isn't all of the parking underground, instead of having any surface parking, is a design issue and not an environmental issue requiring analysis in the EIR. Regarding underground parking, a total of 147 parking spaces are shown on Figures 2-6 and 2-7 of the Draft EIR, with 78 spaces on Level 1 and 69 spaces on Level 2.

Response 3-48

Light and glare impacts, including impacts associated with vehicle headlights, are addressed in Section 3.1 of the Draft EIR.

Response 3-49

As indicated by the figures contained in Appendix B, shade impacts on adjacent buildings would generally be limited to mid- to late-afternoon, depending on time of year, and, as also reflected in those figures, there is a substantial amount of open area between the proposed Project building and adjacent structures, which would continue to allow for air flow between buildings. The commenter provides no substantial evidence in support of the claim that implementation of the proposed Project would result in increased energy usage at existing buildings in the vicinity of the Project.

Response 3-50

All comments have been carefully reviewed and considered, and written responses have been prepared for all comments. The Draft EIR and the written responses to comments on the Draft EIR, along with other information contained in this Final EIR, meet the requirements of CEQA for the City to consider action on the Project.

Response 3-51

Section 2.5 of the Draft EIR describes the existing General Plan land use and zoning designations applicable to the Project site. Section 3.3 of the Draft EIR addresses historic resource considerations, including issues pertaining to the National Register of Historic Places.

Response 3-52

The comment offers an opinion regarding the appropriateness of the project objectives and does not raise any new environmental issues. That opinion is included as part of the Final EIR, which will be considered by decision makers in taking action on the Project.

Response 3-53

Similar to above, the commenter's opinion regarding the relationship between the project objectives and the alternatives is so noted and is included in the Final EIR.

Response 3-54

The existing composition of the 32,362 square-foot project site is described in Section 2.2 of the Draft EIR, which includes a surface parking lot with 60 parking spaces, a billboard, concrete pathways, benches, an outdoor eating area, and 20 trees. The first sentence of the second full paragraph on page 2-14 is hereby revised to read:

> The proposed project would provide 9,600 square feet of private open space and recreational uses, which would consist of 2,880 square feet of open space (including a pool), a 1,050 square-foot gym, and 5,670 square feet of open space provided in the courtyard on the ground floor.

Response 3-55

Section 3.1 of the Draft EIR provides the analysis and substantial evidence for concluding that the impact associated with the loss, replacement, or relocation of existing trees onsite in compliance with the Tree Protection Ordinance would be less than significant impact. There is no basis for further evaluating alternatives to reduce that impact. Additionally, it should be noted that the comment is incorrect in stating that the proposed project would eliminate the existing 45-75 foot mature tree canopy. As indicated in Table 3-2, as revised in Response to Comment 3-74 below, eight of the 23 existing trees located within or directly adjacent to the project site would remain in place or would be relocated within the project site. Also, the existing trees located directly adjacent to the west side of Castle Green, east of the project site, that are in addition to the 23 trees noted above would be unaffected by the project and would remain in place.

Response 3-56

The questions regarding the amount of surface parking proposed, as opposed to putting all parking underground, is a design issue and not an environmental issue requiring analysis in the EIR. Surface parking is not prohibited in the Zoning Code and the design ensures that surface parking will not be seen from Fair Oaks Avenue, in compliance with design guidelines in the Central District Specific Plan.

Response 3-57

Page 2-15 of the Draft EIR provides a factual description of the characteristics of the project that comply with applicable zoning requirements. Historic resource considerations are addressed in Section 3.3 of the Draft EIR and Topical Response TR-CR-1 of this Final EIR, and traffic considerations are addressed in Section 3.6 of the Draft EIR.

Response 3-58

Traffic considerations are addressed in Section 3.6 of the Draft EIR. The comment provides no explanation, facts, or analysis regarding how or why the traffic analysis is not adequate. No significant impact was identified in the traffic study at the intersections of Dayton Street and Fair Oaks Avenue or Dayton Street and Raymond Avenue.

Response 3-59

As indicated in Response to Comment 3-74, five of the 18 protected trees would be saved in-place, three of the protected trees would be boxed and transplanted within the project site, and the remaining ten protected trees would be removed and replaced onsite. As discussed in Response to Comment 3-45, the predominant lush canopy visible from the existing Green Hotel Apartments and Castle Green towards the project site is at the western end of the Castle Green site, which would not be affected by the proposed project. Additionally, as noted above, eight of the existing mature trees

located within or directly adjacent to the project site would remain in place or be relocated within the project site. The existing vegetative canopy within the project site is characterized by several pockets of trees dispersed within the existing surface parking lot that covers the vast majority of the site (see Figure 2-3a included with Response to Comment 3-45). Between the preservation/on-site transplantation of eight existing protected trees and the mitigation of the removal of ten remaining protected trees with 32 replacement trees that will be planted onsite, it is anticipated that the amount of existing canopy area associated with the existing protected trees will be maintained if not expanded with implementation of the proposed project.

Response 3-60

The potential to encounter significant subsurface historic archaeological resources during excavation activities was addressed in Section II.7 of the Initial Study contained in Appendix A of the Draft EIR and concludes that there would be no potential adverse effect on archaeological resources as a result of the project. However, to address this comment, the following condition of approval will be added to the project to clarify the "standard feature within the construction contract" referenced in the Initial Study:

A targeted monitoring program by a qualified professional archaeologist versed in historic archaeology shall be implemented during construction. While the archaeological monitor need not be present throughout construction, the targeted archaeological monitoring program shall minimally include the following:

- *Prior to grading, the archeological consultant shall acquire and review a records search from the South Central Coastal Information Center (SCCIC) and review the cultural/historic resource reports prepared for the project to identify any areas of archaeological sensitivity onsite.*
- *On the first day of the grading phase and/or prior grading activities, the archaeological consultant shall conduct a meeting with the construction crew to assist the crew in identifying potentially significant cultural resources and to identify any potential related concerns. If any potential resources are identified when the monitor is not on site, the monitor shall be called immediately and permitted to examine the area prior to additional disturbances.*
- *The archaeological consultant shall monitor the first two days of grading activities and initial activities associated with the removal of basements, foundations, and/or concrete slabs.*
- *The archaeological consultant shall monitor the disturbance (e.g., grading, trenching, etc.) of any archaeologically sensitive areas identified through records review and/or preliminary investigation. To minimize costs, efforts will be made to schedule such disturbance while the archaeological consultant is otherwise present onsite.*
- *The archaeological consultant shall prepare a summary report at the completion of monitoring for submittal to the SCCIC.*

The archaeological monitor shall have the authority to halt any activities impacting archaeological resources and the monitor/archaeological consultant must be permitted to adequately evaluate the find. If materials are found to be important, measures must be taken to preserve such materials in place or relocate the materials off site for further study.

Response 3-61

Construction-related air quality impacts and noise/vibration impacts are addressed in Sections 3.2 and 3.5, respectively, of the Draft EIR.

Response 3-62

The updated site plan referenced in Response to Comment 3-47 as a replacement for Figure 2-5 of the Draft EIR identifies the locations of various uses, including the gym and retail uses, proposed on the ground floor and also shows the location of the underground parking access ramp (southeast portion of site) and the nearby driveway connecting with Dayton Street. No significant impacts were identified relative to the proposed surface parking and other associated paved areas; consequently, there is no need to address alternatives for that area.

Response 3-63

The need for, and nature and location of, building storage are not environmental issues; no response is required. The Zoning Code does not require provision of dedicated storage areas.

Response 3-64

In general, the sizes of the proposed apartments are expected to range from approximately 640 sf to approximately 960 sf on most floors, and between approximately 940 sf and approximately 1,645 on the top floor. While the floor area of the individual apartments shown in Figures 2-8 through 2-10 vary by unit type and location, the specific size of each apartment does not pertain to environmental issues. Table 2-2 in the Draft EIR indicates the parking requirements for the proposed apartments, including a breakdown of apartments less than 650 sf and greater than 650 sf. Vehicle trip generation for apartments is by unit count (i.e., 64 units), not unit size, as shown in Table 8 of the traffic study contained in Appendix H of the Draft EIR.

Response 3-65

The elevations presented in Figures 2-11 and 2-12 of the Draft EIR are drawn to scale and include specific call-outs of building heights. The reader is provided clear and accurate information to draw conclusions regarding the relationships between existing and proposed buildings. In regards to the comment regarding the Secretary of the Interior's Standards, see Topical Response TR-CR-1.

Response 3-66

The comment offers an opinion regarding the height of new and proposed buildings within the Old Pasadena sub-district and does not raise any new environmental issues. That opinion is included as part of the Final EIR, which will be considered by decisionmakers in taking action on the Project. See also Topical Responses TR-CR-1 and TR-AES-1 regarding historic resources and aesthetics, respectively.

Response 3-67

The commenter's statement is incorrect. Central Park is not currently listed in the National Register as an individual resource, but rather is a contributor to the Old Pasadena National Register Historic District. This was verified by searching for the property in the National Register's online database and contacting the South Coast Information Center.

Response 3-68

Section 3.1 of the Draft EIR pertains to aesthetics considerations while Section 3.3 addresses cultural/historic resources. The information contained in the comment is already reflected in Section 3.3 and is not required to be in Section 3.1.

Response 3-69

As is evident in many of the site photographs presented in Section 3.1 of the Draft EIR, especially the aerial photo in Figure 3.1-3, as well as in Figure 2-3a added as part of the Final EIR, the large tree canopy immediately adjacent to Castle Green and the tree canopy within the project site are clearly within the viewshed looking west from Castle Green. As indicated above in Response to Comment 3-45, however, CEQA emphasizes evaluation of visual resources that are visible from public places, like streets, sidewalks, and parks. The views noted in the comment are private views.

Response 3-70

The subject statement on page 3.1-3 of the Draft EIR is a fair and accurate characterization of the nighttime lighting levels in the areas surrounding the project site as visible to the public, which is the topic at hand in Section 3.1.2.3, whereas the commenter is describing an isolated interior portion of the project site available to private views of existing residents. As indicated above in Response to Comment 3-45, CEQA emphasizes evaluation of visual resources that are visible from public places, like streets, sidewalks, and parks.

Response 3-71

For the same reason described above in Response to Comment 3-70, the description of daytime glare provided on page 3.1-3 of the Draft EIR is considered a fair and accurate characterization of existing conditions in areas surround the project site as visible to the public, as opposed to limited private views of existing residents. As indicated above in Response to Comment 3-45, CEQA emphasizes evaluation of visual resources that are visible from public places, like streets, sidewalks, and parks.

Response 3-72

Comment noted. The last sentence in the second paragraph on page 3.1-3 of the Draft EIR is hereby revised as follows:

> There are no distant views of the San Gabriel Mountains available within the <u>vast majority</u> project site, as views to the north are blocked by the existing Green Hotel Apartments building<u>; however, a narrow view window of the mountains is available at the western edge of the site when looking north along Fair Oaks Avenue, with the breadth of that view being constrained by existing multi-story buildings that line both sides of the street</u>.

Response 3-73

The nature, location, and visibility of existing trees located on and near the project site are described in Section 3.1.2 of the Draft EIR and project-related impacts to views of those trees are addressed in Section 3.1.6. In addition to the discussion on pages 3.1-26 and 3.1-27, under the heading Trees and Landscaping, view impacts specific to project-related removal or relocation of trees are discussed on page 3.1-15 relative to Vantage Point 1 and page 3.1-17 relative to Vantage Point 3. Other related discussions also appear on pages 3.1-24 and 3.1-25. Evaluation of the existing trees relative to their age and potential historic significance is provided in Section 3.3 of the Draft EIR and, as indicated on page 3.3-25, and substantiated by Appendix E (Tree Aging Report), the trees that would be impacted by the proposed project are not considered historic resources. Based on the analysis and substantial

evidence provided in the Draft EIR, the project-related impacts to the onsite trees were determined to be less than significant.

Response 3-74

As indicated in the last paragraph on page 3.1-3 of the Draft EIR, which introduces and references Figure 3.1-1 and Table 3-1, there are 20 trees that occupy the project site (Note: Only the 20 trees shaded in brown and tan on Figure 3.1-2 in the Draft EIR occur within the site boundary of proposed development - the three trees shaded in green occur outside that boundary) and, of those 20 trees 15, of them are protected under the City Trees and Tree Protection Ordinance, which are listed in Table 3-1 of the Draft EIR. Figure 3.1-1 and Table 3-1 have been revised in conjunction with preparation of the Final EIR to further clarify this information, as well provide some corrections to the labeling or protected versus non-protected trees. The revised figure follows on the next page and the revised table is presented below.

Table 3-1 Summary of On-Site Trees

Tree #	Genus & Species	Common Name	Diameter (Inches)	Height (Feet)	Protected Status
1	Cinnamomum camphora	Camphor	36	45	Protected Specimen Tree
2	Cinnamomum camphora	Camphor	23	45	Protected Specimen Tree
3	Pinus Canariensis	Canary Island Pine	19	65	Non-Protected Tree
4	Pinus Canariensis	Canary Island Pine	18	60	Non-Protected Tree
5	Cinnamomum Camphora	Camphor	50	45	Protected Specimen Tree
6	Washingtonia Filifera	California Fan Palm	36	65	Protected Specimen Tree
7	Cinnamomum camphora[1]	Camphor	23	60	Protected Specimen Tree
9	Magnolia Grandiglora	Southern Magnolia	15	35	Non-Protected Tree
10	Ulmus Parvifolia	Chinese Elm	14.5	30	Non-Protected Tree
11	Washingtonia Filfera	California Fan Palm	32.5	60	Protected Specimen Tree
12	Ficus Microcarpa	Indian Laurel Fig	40	40	Protected Specimen Tree
13	Phoenix Canariensis	Canary Island Date Palm	30	65	Protected Specimen Tree
14	Phoenix Canariensis	Canary Island Date Palm	~36	8	Non-Protected Tree
22	Syagrus Romanzoffiana[1]	Queen Palm	~11	~12	Protected Street Tree
23	Syagrus Romanzoffiana[1]	Queen Palm	~11	~15	Protected Street Tree
28	Washingtonia Robusta	Mexican Fan Palm	17	~50	Protected Mature Tree
29	Washingtonia Robusta	Mexican Fan Palm	16	~45	Protected Mature Tree
30	Washingtonia Robusta	Mexican Fan Palm	16	~50	Protected Mature Tree
31	Washingtonia Robusta	Mexican Fan Palm	17	~50	Protected Mature Tree
35	Washingtonia Robusta X	Mexican Fan Palm	21	75	Protected Mature Tree
36	Washingtonia Robusta X	Mexican Fan Palm	18	~30	Protected Mature Tree
37	Washingtonia Robusta	Mexican Fan Palm	16	~65	Protected Mature Tree
38	Washingtonia Robusta	Mexican Fan Palm	16	~75	Protected Mature Tree

Note: 1. Although the canopy of this tree extends to or into the project site, the trunk of the tree is located outside the site boundary (i.e., off-site).

Table 3-2 on page 3.1-26 of the Draft EIR has also been revised in order to match the tree numbering and other data in the revised Table 3-1, as well clarify the disposition of protected trees with

implementation of the proposed project (i.e., identify which protected trees will be saved in-place, which protected trees will be boxed and transplanted elsewhere within the project site, and which protected trees will be removed and mitigated through replacement in accordance with the City Trees and Tree Protection Ordinance). Revised Table 3-2 is as follows:

Table 3-2 Summary Disposition of Protected Trees with Project Implementation

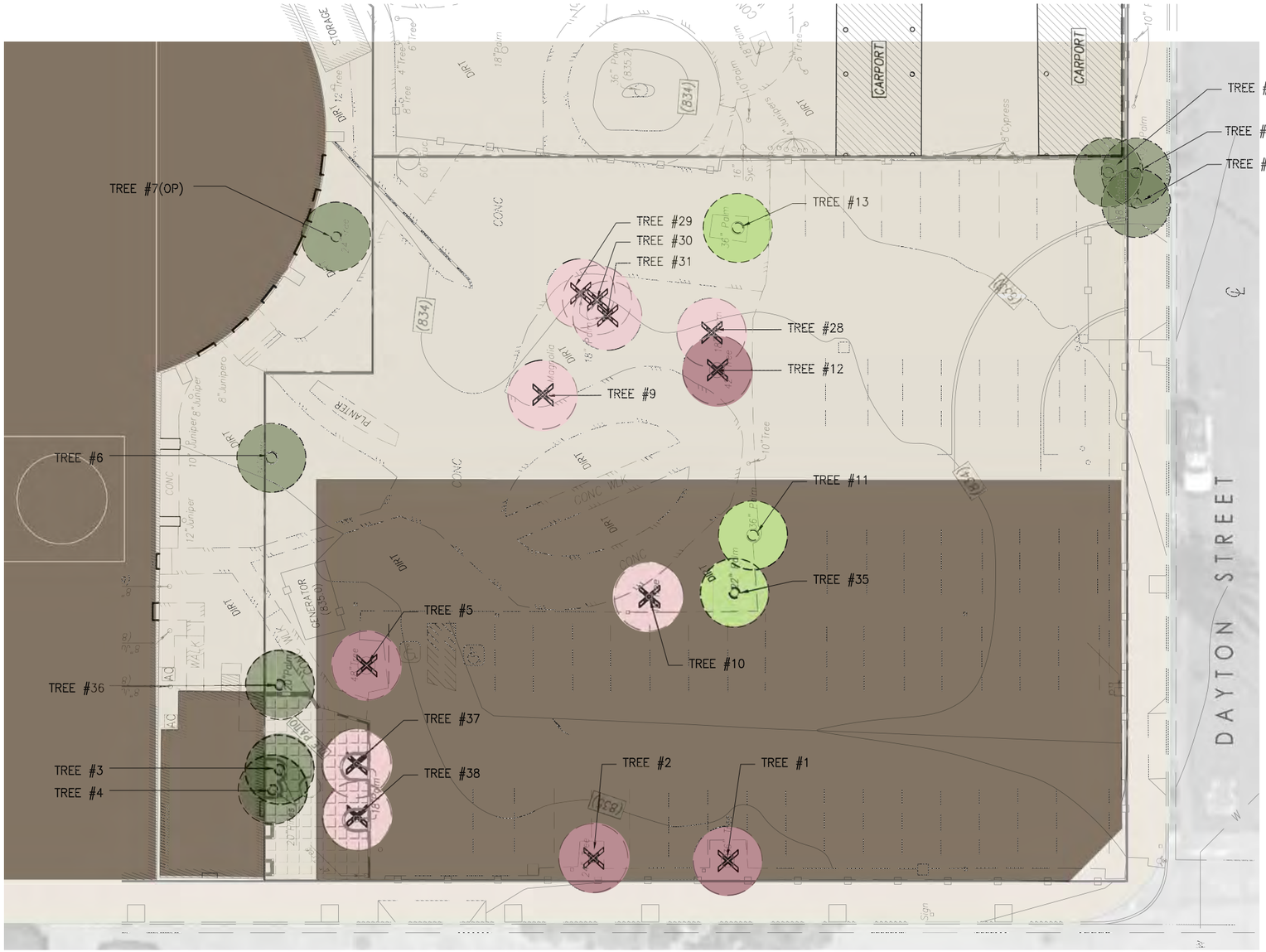
Tree #	Genus & Species	Common Name	Diameter (Inches)	Height (Feet)	Remain in Place	Relocate within Project Site	Remove/ Mitigate Through Replacement
1	Cinnamomum camphora	Camphor	36	45			X
2	Cinnamomum camphora	Camphor	23	45			X
5	Cinnamomum Camphora	Camphor	50	45			X
6	Washingtonia Filifera	California Fan Palm	36	65	X		
7	Cinnamomum camphora	Camphor	23	60	X		
11	Washingtonia Filfera	California Fan Palm	32.5	60		X	
12	Ficus Microcarpa	Indian Laurel Fig	40	40			X
13	Phoenix Canariensis	Canary Island Date Palm	30	65		X	
22	Syagrus Romanzoffiana	Queen Palm	~11	~12	X		
23	Syagrus Romanzoffiana	Queen Palm	~11	~15	X		
28	Washingtonia Robusta	Mexican Fan Palm	17	~50			X
29	Washingtonia Robusta	Mexican Fan Palm	16	~45			X
30	Washingtonia Robusta	Mexican Fan Palm	16	~50			X
31	Washingtonia Robusta	Mexican Fan Palm	17	~50			X
35	Washingtonia Robusta X	Mexican Fan Palm	21	75		X	
36	Washingtonia Robusta X	Mexican Fan Palm	18	~30	X		
37	Washingtonia Robusta	Mexican Fan Palm	16	~65			X
38	Washingtonia Robusta	Mexican Fan Palm	16	~75			X

As related to the above revisions to Table 3-2 of the Draft EIR, Table 2-1 on page 2-2 of the Draft EIR, which provides essentially the same information as Table 3-2, is hereby revised as follows:

Table 2-1 Summary Disposition of Protected Trees with Project Implementation

Genus & Species	Common Name	Diameter (Inches)	Height (Feet)	Remain in Place	Relocate within Project Site	Remove/ Mitigate Through Replacement
Cinnamomum camphora	Camphor	36	45			X
Cinnamomum camphora	Camphor	23	45			X
Cinnamomum Camphora	Camphor	50	45			X
Washingtonia Filifera	California Fan Palm	36	65	X		
Cinnamomum camphora	Camphor	23	60	X		
Washingtonia Filfera	California Fan Palm	32.5	60		X	
Ficus Microcarpa	Indian Laurel Fig	40	40			X
Phoenix Canariensis	Canary Island Date Palm	30	65		X	
Syagrus Romanzoffiana	Queen Palm	~11	~12	X		
Syagrus Romanzoffiana	Queen Palm	~11	~15	X		
Washingtonia Robusta	Mexican Fan Palm	17	~50			X
Washingtonia Robusta	Mexican Fan Palm	16	~45			X
Washingtonia Robusta	Mexican Fan Palm	16	~50			X
Washingtonia Robusta	Mexican Fan Palm	17	~50			X
Washingtonia Robusta X	Mexican Fan Palm	21	75		X	
Washingtonia Robusta X	Mexican Fan Palm	18	~30	X		
Washingtonia Robusta	Mexican Fan Palm	16	~65			X
Washingtonia Robusta	Mexican Fan Palm	16	~75			X

This page is intentionally left blank.



PROTECTED TREES TO BE REMOVED

NON-PROTECTED TREE TO BE REMOVED
(SEE A1.15 FOR NON- PROTECTED TREE LEGEND)

PROTECTED TREE TO BE BOXED AND TRANSPLANTED ON THE SITE

EXISTING NPMRCARCB TREE TO BE SAVED.

SCALE: 1/16"=1'–0"

Figure 3.1-2
Location of On-Site Trees

This page intentionally left blank.

Response 3-75

Figure 3.1-2 in the Draft EIR is intended and designed to depict, using a common symbol, the locations of the existing trees onsite. The analysis of tree impacts took into account the type and size of each tree, as did also the basis of mitigation for loss of trees. The aerial photographs of the project site shown in Figure 3.1-3 of the Draft EIR and Figure 2-3a, added as part of the Final EIR, illustrate the existing tree canopy.

Response 3-76

Please see Response to Comment 3-74 above, which includes a revised Figure 3.1-2 that shows there are 13 protected trees that will be removed or boxed and transplanted on the site, and five protected trees that will be saved in-place.

Response 3-77

As indicated above in Response to Comment 3-45, CEQA emphasizes evaluation of visual resources that are visible from public places, like streets, sidewalks, and parks. The views noted in the comment are private views, wherein CEQA emphasizes public views. Nonetheless, impacts on private views from the existing Green Hotel Apartments and Castle Green buildings are considered on page 3.1-17 of the Draft EIR. In conjunction with preparation of this Final EIR, additional viewpoints were modeled and evaluated - please see Topical Response TR-AES-1. The Draft EIR analysis concluded that aesthetics impacts, including view impacts, associated with project implementation would be less than significant.

Response 3-78

The shade and shadow impacts of the project are discussed on pages 3.1-28 and 3.1-29 of the DraftEIR. This analysis concludes that, "While implementation of the proposed project would result in new shadows being cast on light-sensitive uses, the project is being constructed in an urban environment, immediately adjacent to existing buildings of comparable massing and height, and would be constructed consistently with the zoning and site development standards applicable to the parcel, including those that regulate height and mass. As such, while new shading and shadow patterns would occur, impacts would be less than significant." Please also see Responses to Comments3-6 and 3-49 regarding shade and shadow impacts and Responses to Comments 3-45 and 3-77 regarding impacts on private views.

Response 3-79

The four vantage points selected for the preparation of visual simulations represent locations where the visibility of project development would be most prominent and the attendant impacts would be greatest, which provided a conservative (i.e., worst-case) disclosure of project impacts. The Draft EIR analysis, specifically Section 3.1, includes consideration of visual/aesthetic impacts from other locations in the general vicinity of the project site, such as those shown in Figures 3.1-7 through 3.1-10 and 3.1-13, to also represent the fact that project implementation would not obstruct views from several other nearby locations. Beyond the many view locations addressed in the Draft EIR, additional vantage points were evaluated in conjunction with preparation of the Final EIR- please see Topical Response TR-AES-1. That additional evaluation of view impacts further support the Draft EIR conclusion that view impacts would be less than significant with project implementation. It should also be noted that many of the potential impact concerns expressed in the comment pertain to private views, such as from Castle Green. CEQA emphasizes evaluation of visual resources that are visible from public places, like streets, sidewalks, and parks, and is not intended to protect private views, such as those that may be available from existing private property/buildings. However, despite

CEQA's emphasis on public views, impacts on private views from the existing Green Hotel Apartments and Castle Green buildings are considered on page 3.1-17 of the Draft EIR.

Response 3-80

A reasonable range of alternatives was identified and addressed in the Draft EIR - please see Topical Response TR-ALT-1. In all cases, however, none of the feasible alternatives were found to avoid or substantially lessen the one significant impact associated with project implementation - that unavoidable significant impact being the project-related traffic volumes on Dayton Street. All other impacts associated with the proposed project were either less than significant or were reduced to less than significant through specific conditions of approval and mitigation measures identified in the Draft EIR.

Response 3-81

The comment offers an opinion regarding the appropriateness of the project objectives and does not raise any new environmental issues. That opinion is included as part of the Final EIR, which will be considered by decisionmakers in taking action on the Project.

Response 3-82

The commenter's opinions that the current project proposal is an improvement over the 2007 proposal and that the proposed project and Alternative 2 have too many unmitigated impacts are so noted and are included in the Final EIR for consideration by decisionmakers. It should also be noted, however, there is only one unavoidable significant impact of the proposed project and Alternative 2, which is the traffic segment impact on Dayton Street.

Response 3-83

The mitigation referenced on page 4-3 of the Draft EIR pertains to the mitigation measures and conditions of approval described in detail within Section 3 of the Draft EIR; specifically, Sections 3.2, 3.4, and 3.6. The alternatives considered but dismissed as infeasible are specifically described and addressed in Section 4.4 of the Draft EIR.

Response 3-84

As indicated in the memorandum from the Pasadena Office of the Fire Marshall, provided in Appendix I of the Draft EIR, "Fire apparatus access roads shall have an unobstructed width of not less than 20 feet exclusive of shoulders as defined in the California Fire Code (CFC) Section 503.2.1. Dayton Street is an established public street and complies with the requirements of CFC." The fact that the existing dimensions of Dayton Street meets the requirements of the CFC applies to both the proposed project and the No Project Alternative.

Response 3-85

The comment generally, but not fully, reflects the conclusions of the Draft EIR analysis of Alternative 2. As described in Section 4.6.2.7 of the Draft EIR, Alternative 2 has the potential to result in fewer environmental impacts when compared to the proposed project due to the fact that the building would be reduced in size and scale and be occupied by fewer residents. Specifically, this alternative would result in fewer operational air quality, GHG, noise and vibration, and transportation and traffic impacts; however, the reduction of the number of vehicle trips generated by the Reduced Height Alternative is not enough to avoid the significant impact to the Dayton Street segment between Fair Oaks Avenue and Raymond Avenue. In summary, the only unmitigated significant impact

associated with the proposed project would be traffic on Dayton Street, a significant impact that would be lessened, but not avoided, under Alternative 2.

Response 3-86

The comment offers an opinion regarding the formulation of alternatives and does not raise any new environmental issues. That opinion is included as part of the Final EIR, which will be considered by decisionmakers in taking action on the project.

Response 3-87

The right-of-way along Fair Oaks Avenue and the available on-street parking only allows for two travel lanes in each direction. The on-street metered parking on Fair Oaks Avenue is essential for the nearby businesses, and removal of this parking supply could have secondary impacts, both environmental and economic. Nonetheless, removal is discussed herein in response to this comment. Removing a portion of on-street parking in this segment would not be sufficient to allow the proper alignment distances to add a southbound left-turn lane. Therefore, all on-street parking along Fair Oaks Avenue between Green Street and Dayton Street would need to be removed to allow the reconfiguration and alignment of the southbound left-turn lane and all through lanes. This would also affect the alignment of lanes at the intersection of Fair Oaks Avenue and Green Street, creating a short distance from the left-turn lane and Green Street, with potential backup of vehicles into the intersection. This would create vehicle congestion and the slowing of traffic by creating a "chokepoint" along Fair Oaks Avenue.

A Fair Oaks Avenue access would not mitigate the significant impact on Dayton Street because at least 44 cars per day would be expected to use Dayton Street to reach the Fair Oaks Avenue access, as discussed in detail in Response to Comment 2-6. Given that significant impacts could not be avoided with the Alternate Access Alternative, a Dayton Street access is preferred over a Fair Oaks Avenue access.

In addition, access from Fair Oaks Avenue, which is a designated multi-modal corridor, would conflict with the City of Pasadena DOT's adopted Driveway Design Guidelines (March 2011) and the Central District Specific Plan, as follows:

- Driveway Design Guidelines (March 2011), Section IV- DOT may require the relocation of proposed driveways in order to minimize conflicts between pedestrians, and vehicular traffic from the parking facility and the abutting street system. The public interest requires optimum capacity of streets to carry all modes of travel including pedestrians, bicycles and transit with minimum potential for traffic accidents. Driveways may not be permitted along multi-modal corridor streets (unless deemed necessary by DOT) where; access is possible using an alley or non-multi-modal corridor street, or the proposed development is industrial or commercial, and at the intersection of the multi-modal corridor streets with a non-multi-modal corridor streets, or access is possible along the non-multi-modal corridor streets frontage.

- The Central District Specific Plan discusses in Section 5 how multi-modal corridors are meant not just for vehicles but pedestrian, cycling, etc. Multimodal Corridors: A number of Downtown streets are classified by the City-wide Mobility Element as "Multimodal Corridors" with the intent that these routes will support higher traffic volumes while their use will minimize impacts on Pasadena's residential neighborhoods. In accordance with their multimodal character, these routes need to accommodate other modes of travel, especially transit and pedestrian movement. The Land Use Concept recognizes multimodal corridors as principal

movers of people and traffic, and therefore, the highest permissible development intensities are generally assigned along these streets. The Specific Plan states that multimodal corridors should accommodate other modes of travel. Adding a driveway introduces an additional conflict point to pedestrians, thereby, going against the CDSP. Reference District-wide Map 20: Multimodal Corridor Concept.

In addition, the Fire Department has recommended that the project take access from Dayton Street to avoid potential conflicts between the project driveway and the primary emergency vehicle access to the project site along Fair Oaks Avenue.

Response 3-88

As a new development, the proposed project is required to meet applicable code requirements including the provision of on-site parking. The fact that existing uses nearby, such as Castle Green, were developed prior to adoption of current zoning requirements and are "grandfathered" to not meet current requirements, does not relieve the proposed project from meeting current requirements. In addition to not meeting current zoning requirements, this alternative was considered infeasible given the fact that capacity at the two parking structures near the project site has been reached and forcing residents to park over 1,000 feet (several blocks) away does not make sense. The Draft EIR addresses an off-site parking alternative and two reduced size alternatives, as well as several other alternatives, none of which were found to be feasible and avoided or substantially reduced the one unavoidable significant impact of the project.

Response 3-89

Please see Topical Response TR-ALT-1 for a discussion regarding the decision not to analyze an off-site alternative. A reasonable and appropriate level of inquiry was completed relative to identification of a potential alternative site for the proposed project. It is not necessary for the applicant to investigate a myriad of possibilities such as follow-up with other property owners in the local area regarding potential land purchases or land swaps. The transfer of development rights for the project site is not allowed under the City's Zoning Code.

Response 3-90

Please see Topical Response TR-ALT-1 for a discussion regarding the problems associated with a smaller scale alternative, an alternative access alternative, and various mixes and proportions of residential uses and commercial uses that would still trigger a significant traffic impact on Dayton Street.

Response 3-91

Section 15126.6 of the CEQA Guidelines requires an EIR to identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. That is what was done in Section 4.4 of the Draft EIR relative to consideration of alternatives that were considered but rejected as infeasible.

Response 3-92

In accordance with CEQA requirements, a reasonable range of alternatives were considered in the Draft EIR for the proposed project - please see Topical Response TR-ALT-1 which demonstrates that only a very small commercial or mixed-use project would alleviate the traffic impact on Dayton Street.

Response 3-93

It is unclear as to what the nature is of the comment; no response is possible.

Response 3-94

Please see Responses to Comments 4-7 through 4-18 regarding comments prepared by Tom Brohard.

Response 3-95

As described in Section 4.6.2.7 of the Draft EIR, implementation of the Reduced Height Alternative would result in reduced impacts to air quality, GHG, noise and vibration, and transportation and traffic impacts compared to the proposed project, but would not avoid or substantially lessen the one unavoidable significant impact associated with the project (i.e., traffic on Dayton Street). Evaluation of this alternative, along with the No Project Alternative, responds to the CEQA requirement to consider alternatives to the proposed project. Please see Topical Response TR-ALT-1 for additional discussion regarding the Draft EIR analysis of project alternatives.

Response 3-96

The Draft EIR text quoted by the commenter is specific to the analysis of aesthetics impacts associated with this alternative and is not indicative of the overall characteristics of the alternative. Contrary to the commenter's assertion, the Reduced Height Alternative is a reduction in the scope of development compared to the proposed project in that, in conjunction with the reduction of two stories in building height, the number of proposed apartment units would be reduced from 64 to 42 and the number of underground parking spaces would be reduced from 147 to 131. Please see Topical Response TR-ALT-1 for additional discussion regarding the Draft EIR analysis of project alternatives.

Response 3-97

The subject text on page 4-8 of the Draft EIR is true and accurate as stated, based on substantial evidence provided therein. Although it is possible that partial views of the turrets may be possible as one moves farther and farther to the west, the visual context in which the turrets may appear would be substantially different, and largely diminished, compared to the more representative views described in the Draft EIR (i.e., the visibility and prominence of the turrets viewed against other objects within the viewshed would become smaller and smaller as one moves farther to the west). Please also see Topical Response TR-CR-1 for additional discussion regarding the Draft EIR analysis of impacts to historic resources, Topical Response TR-AES-1 for additional discussion regarding the Draft EIR analysis of visual impacts, and Topical Response TR-ALT-1 for additional discussion regarding the Draft EIR analysis of project alternatives. See also Responses to Comments 3-45 and 3-77 regarding impacts on private views.

Response 3-98

As discussed in Response to Comment 3-49, implementation of the proposed project is not expected to substantially reduce air flows around the existing Green Hotel Apartments or the Castle Green. Such would also be the case for the Reduced Height Alternative.

Response 3-99

Section 3.3, along with Appendix A (EIR Initial Study) and Appendix D (Historic Resources Technical Report), of the Draft EIR provide a comprehensive evaluation of potential impacts to cultural resources, and conclude that implementation of the proposed project will not result in significant impacts to cultural resources. The discussion in Section 4.6.2 of the Draft EIR correctly notes and discloses that cultural resource impacts associated with the Reduced Height Alternative would be similar to those of the proposed project, which are less than significant in both cases. That comparative analysis meets the requirements of CEQA.

Response 3-100

The comment generally, but not fully, reflects conclusions of the Draft EIR. The discussion in Section 4.6.2.6 of the Draft EIR indicates that the traffic generation associated with the Reduced Height Alternative and the resultant impacts on Dayton Street would be less than those of the proposed project, but would not reduce the impact to a level that is less than significant. Contrary to the commenter's statement, the traffic analysis for the project did not identify "unmitigated circumstances at Dayton & Raymond or Dayton & Fair Oaks." The segment of Fair Oaks Avenue between Dayton Street and Del Mar Boulevard was not studied because Fair Oaks Avenue already has a high volume of traffic. If one already knows that the project's incremental contribution to traffic on Fair Oaks Avenue is relatively low near the project site, it is not necessary to evaluate segments of Fair Oaks Avenue located farther from the project site.

Response 3-101

The Draft EIR includes consideration of the Smaller Scale Alternative that would avoid the one unavoidable significant impact of the proposed project, that being the traffic impact on Dayton Street; however, as indicated in Section 4.4.4 of the Draft EIR, that alternative is infeasible. The Draft EIR alternatives analysis satisfies the requirements of CEQA. Please see Topical Response TR-ALT-1 for additional discussion regarding the Draft EIR analysis of project alternatives.

Response 3-102

As indicated above in Response to Comment 3-101, the City considered an alternative that would avoid the unavoidable significant impact associated with the proposed project (i.e., traffic impact on Dayton Street); however, that alternative was determined to be infeasible. Please see Topical Response TR-ALT-1 for additional discussion regarding the Draft EIR analysis of project alternatives.

Response 3-103

The City has carefully considered the information contained in the Draft EIR, along with the comments received during the Draft EIR review period and the written responses to those comments, and has determined that preparation and circulation of a revised Draft EIR is not warranted.

Letter No. 4

CHATTEN-BROWN & CARSTENS LLP
2200 PACIFIC COAST HIGHWAY
SUITE 318
HERMOSA BEACH, CALIFORNIA 90254
www.cbcearthlaw.com

Telephone: (310) 798-2400
Facsimile: (310) 798-2402

E-mail:
DPC@CBCEARTHLAW.COM

March 10, 2014

Via Email and Overnight Mail
Kevin Johnson
Design & Historic Preservation Section,
175 N. Garfield Avenue,
Pasadena, CA 91101
kevinjohnson@cityofpasadena.net

Re: Comments on Draft Environmental Impact Report for Green Hotel Apartments

Dear Mr. Johnson:

Thank you for the opportunity to comment upon the Draft Environmental Impact Report (EIR) on the Green Hotel Apartments. On behalf of the Castle Green Homeowners Association, we note that an inappropriate or incompatible project could have the effect of detracting from not just on views to and from the National Register designated Hotel Green Apartments and Castle Green, but could change the entire ambience of the historic district that surrounds it. Any consideration of a project in this area must be undertaken with the utmost sensitivity to the context of the area and this historic property. 1

We previously commented on the notice of preparation of the EIR that it must include a reasonable range of alternatives "that could feasibly attain most of the basic objectives of the project while avoiding or substantially lessening any of the significant effects of the project." (*In re Bay Delta, supra*, 43 Cal. 4th at 1162; Guidelines §15126.6(f), emphasis added.) In addition to off-site alternatives, alternative onsite designs must be further considered. A reduced density alternative would be appropriate to consider, given the negative impacts associated with the size and massing of the proposed project. While the EIR provides analysis of a single reduced size alternative, it does not provide the factual financial analysis that would support its rejection of the "Smaller Scale Alternative" as infeasible. (DEIR, p. 4-5.) In order to reject an alternative from analysis, bare conclusions are not sufficient; instead, there must be a meaningful, factually based analysis of why a smaller scale alternative that avoids significant traffic impacts to Dayton Street would not be feasible. For purposes of a statement of overriding 2

considerations, a public agency and project proponent may not reject the feasibility of an environmentally superior alternative without substantial evidence to show that alternative would make it impractical to proceed with the project. "'The fact that an alternative may be more expensive or less profitable is not sufficient to show that the alternative is financially infeasible. What is required is evidence that the *additional* costs or lost profitability are sufficiently severe as to render it impractical to proceed with the project.'" (*Uphold Our Heritage v. Town of Woodside* (2007) 147 Cal.App.4th 587, 599.) 2

In addition to the aesthetic and historic impacts that can be avoided by the choice of an appropriate alternative, the project's impacts to biological resources, air quality and human health, traffic and access, and land use plans must also be reduced. 3 The Project as proposed will severely impact Dayton Avenue, which is a small street that is already burdened with traffic. We are herewith transmitting the analysis of professional traffic consultant Tom Brohard. Among other deficiencies, errors, omissions, and inconsistencies, Mr. Brohard identified the following:

- -Dayton Street Project access driveway
- -Fair Oaks Avenue street segment from Dayton Street to Del Mar Boulevard
- -Dayton Street intersections at Fair Oaks Avenue and at Raymond Avenue
- -Trips to and from the existing 60 parking spaces
- -Pedestrian and bicycle facilities
- -Access driveway alternatives
- -Inconsistent site plans for the ground level
- -Construction traffic and worker parking

4

Mr. Brohard identifies significant issues. Among other problems, a statement of overriding considerations cannot be used override the potential violation of the Fire Code that would be caused by this Project. We are also aware of, and support the comments of, Mike Salazar on behalf of the Castle Green Homeowners Association that were submitted by separate letter. 5

Conclusion.

We look forward to your response to these comments. Please add us to any list for notification of public hearings or notices related to this project pursuant to Public Resources Code section 21092.2. 6

Sincerely

Douglas P. Carstens

Enclosure: March 10, 2014 Review of Draft EIR by Tom Brohard, P.E.

Tom Brohard and Associates

March 10, 2014

Mr. Douglas P. Carstens
Chatten-Brown & Carstens
2200 Pacific Coast Highway, Suite 318
Hermosa Beach, CA 90254

SUBJECT: Review of the Draft EIR for the Green Hotel Apartments in the City of Pasadena – Traffic and Parking Issues

Dear Mr. Carstens:

As requested, I, Tom Brohard, P.E., have reviewed the traffic portions of the January 2014 Draft Environmental Impact Report (DEIR) for the Green Hotel Apartments in the City of Pasadena. The Project proposes to construct a six-story mixed-use building with 64 residential units and 5,000 square feet of commercial space and will also provide 60 replacement spaces for the existing surface parking lot at the northeast corner of Fair Oaks Avenue and Dayton Street. In preparing these comments, I have reviewed various portions of the DEIR including:

- Executive Summary
- Section 2 Project Description
- Section 3.6 Transportation and Circulation
- Appendix H – June 12, 2013 City Memorandum to Planning and Development Department (Memo) and June 2013 Traffic Impact Study (TIS)
- Appendix I – Correspondence, City of Pasadena Fire Department

Most significantly, the DEIR and TIS do not properly or adequately address, analyze, or propose feasible mitigation of the significant traffic impact that will be created by the Proposed Project on Dayton Street from Fair Oaks Avenue to Raymond Avenue. As discussed throughout this letter, other deficiencies, errors, omissions and inconsistencies include failures to properly analyze:

- Dayton Street Project access driveway
- Fair Oaks Avenue street segment from Dayton Street to Del Mar Boulevard
- Dayton Street intersections at Fair Oaks Avenue and at Raymond Avenue
- Trips to and from the existing 60 parking spaces and 12 space loading area
- Pedestrian and bicycle facilities
- Access driveway alternatives
- Inconsistent site plans for the ground level
- Construction traffic and worker parking

7

Education and Experience

Since receiving a Bachelor of Science in Engineering from Duke University in Durham, North Carolina in 1969, I have gained over 40 years of professional

8

81905 Mountain View Lane, La Quinta, California 92253-7611
Phone (760) 398-8885 Fax (760) 398-8897
Email tbrohard@earthlink.net

engineering experience. I am licensed as a Professional Civil Engineer both in California and Hawaii and as a Professional Traffic Engineer in California. I formed Tom Brohard and Associates in 2000 and now serve as the City Traffic Engineer for the City of Indio and as Consulting Transportation Engineer for the Cities of Big Bear Lake, San Fernando, and Tustin. I have extensive experience in traffic engineering and transportation planning. During my career in both the public and private sectors, I have reviewed numerous environmental documents and traffic studies for various projects as indicated on the enclosed resume. 8

Traffic and Parking Issues

The following deficiencies were identified in my review of the documents associated with the DEIR for the Green Hotel Apartments:

1) Significant Traffic Segment Impact on Dayton Street Not Properly Addressed, Analyzed, or Mitigated – Two of the four roadway segments studied are significantly impacted (Raymond Avenue from Green Street to Dayton Street with 2.7% ADT increase as well as Dayton Street from Fair Oaks Avenue to Raymond Avenue with 35.4% ADT increase). In both cases, Table 3.6-5 on Page 3.6-18 indicates "soft measures required", and the DEIR explains that that is typically addressed by the payment of Traffic Reduction and Transportation Fees (Ordinance No. 7076). With the forecast ADT increase on Dayton Street greatly exceeding the threshold increase of 7.5% (actually by nearly five times), Table 3.6-5 indicates that "Extensive physical improvements may be required" and "Project alternatives may be considered." Rather than addressing and analyzing these significant ADT traffic impacts, the DEIR and the City Memo at the beginning of the TIS in Appendix H simply dismiss this by stating "there are no feasible mitigation measures to reduce segment impacts to below levels of significance." 9

   The DEIR and the TIS also point out that westbound queuing on Dayton Street from Fair Oaks Avenue will likely block access to and from the Proposed Project driveway. To purportedly address that issue, the installation of a "Do Not Block Driveway" sign is recommended. However, without continuing enforcement, that sign will not be effective since the Police Department would not be likely to closely monitor traffic conditions at the Dayton Street/Proposed Project access driveway.

   From Google Earth (see enclosed aerial photograph), Dayton Street from Fair Oaks Avenue to Raymond Avenue is only 30' between curbs and parking stalls are marked on both sides of the street (11 spaces on the north side and 14 spaces on the south side). These 8' wide parking spaces effectively limit moving traffic in both directions to one inadequate 14' wide lane for two-way traffic flow. At least 36' between curbs is needed to provide for parking on both sides and for one separate moving traffic lane in each direction. In

addition, Condition #10 of Project Approval on Page 4 of the June 12, 2013 City Memo states "Existing on-street parking conditions fronting this project should be maintained."

With only 30' between curbs, Dayton Street is not adequate to provide two travel lanes with on-street parking on both sides. Acceptable minimum 10' wide travel lanes and 8' wide parking stalls within a 36' wide street can be achieved by widening the north side of Dayton Street by 6' across the frontage of the Proposed Project. To maintain the existing 10' sidewalk along the north side of Dayton Street, the developer would need to dedicate 6' of right of way to the City and also reconstruct the sidewalk. The three existing parking spaces on the north side of Dayton Street between Fair Oaks Avenue and the single access driveway for the Proposed Project should be eliminated to reduce the westbound queue on Dayton Street (an 18' wide westbound lane on Dayton Street approaching Fair Oaks Avenue would provide space that could be used as a defacto right turn lane). The ineffective "Do Not Block Driveway" sign which would rarely be enforced should also be eliminated.

While widening of Dayton Street would impact the site, this potential is foreseen in the "Required Multi-Modal Measures" which indicate "Project alternatives may be considered" together with "Extensive physical improvements may be required" for roadways having more than a 7.5% increase in ADT caused by the Proposed Project. With a 35.4% increase in the Dayton Street ADT (five times higher than the City's threshold of a significant traffic impact), widening of the roadway to 36' and prohibition of on-street parking west of the Proposed Project driveway must be considered as a viable, feasible mitigation measure. 9

As indicated on the enclosure, the City of Pasadena has adopted the California Fire Code including Section 503 which identifies the minimum fire lane width of 20 feet and Appendix D which identifies road widths with corresponding vehicle parking allowances. Appendix I to the DEIR, Correspondence from the City of Pasadena Fire Department dated June 27, 2013, correctly states "Fire apparatus access roads shall have an unobstructed width of not less than 20 feet exclusive of shoulders as defined in the California Fire Code (CFC) Section 503.2.1." While Dayton Street is 30 feet between the outside curbs, the City allows parking on both sides of the street with parking stall markings. As indicated above, this limits the single traffic lane for moving vehicles to only 14' in width. As a result, Dayton Street does not comply with CFC 503.2.1 as the 14' lane for two-way traffic is 6' less than the minimum unobstructed width of 20' that is required.

The correspondence from the City of Pasadena Fire Department dated June 27, 2013 concludes that "Dayton Street is an established public street and complies with the requirements of CFC." While Dayton Street does appear to

be "...an established public street...", the existing 30' roadway width with on-street parking on both sides only provides a 14' wide unobstructed roadway. Without prohibiting parking on one side of Dayton Street or without widening Dayton Street by 6' to retain on-street parking, the existing roadway does not comply with the required provisions of the California Fire Code which the City of Pasadena has adopted. **9**

2) Analysis of Dayton Street Access Is Flawed - The DEIR and the TIS do not include the exact location of the March 2013 traffic counts on the streets and do not contain any counts of the existing three driveways for the 60 parking spaces. The Proposed Project includes changing the access for the existing 60 spaces in the surface parking lot but that has not been properly analyzed.

   From Google Earth, one existing gated driveway on the north side of Dayton Street provides two-way access to the separate existing 12 space loading area for Castle Green. The 60 space gated surface parking lot that will be removed with the Proposed Project has two, one-way gated driveways on Dayton Street and a third gated driveway on the east side of Fair Oaks Avenue. With the Proposed Project, all vehicle access for the 60 replacement spaces will be from Dayton Street about 150' east of Fair Oaks Avenue. **10**

   Trips for the Proposed Project have been calculated based on only the 64 new units plus the new 5,000 square feet of commercial space, and do not include reassignment of trips to and from the 60 spaces in the existing parking lot to the combined access driveway on Dayton Street (see Proposed Project Trip Generation in Table 8 on Page 26 of the TIS and Project PM Peak Hour Volumes in Figure 22 on Page 54 of the TIS).

   By failing to reassign all trips to and from the existing 60 space parking lot to the new Dayton Street driveway, the DEIR and TIS fail to properly account for, analyze, or mitigate the impacts on Dayton Street as well as on the other street segments on Fair Oaks Avenue and on Raymond Avenue. Analyses of the Fair Oaks Avenue/Dayton Street and the Raymond Avenue/Dayton Street intersections also fail to account for the single combined access driveway on Dayton Street that will include both trips to and from the Proposed Project as well as all trips to and from the 60 replacement parking spaces.

3) Fair Oaks Avenue Street Segment from Dayton Street to Del Mar Boulevard – While four street segments are analyzed and evaluated in DEIR and TIS, Fair Oaks Avenue from Dayton Street to Del Mar Boulevard immediately south of the Proposed Project was not studied. From the Project Trip Distribution, 25% of the inbound trips and 20% of the outbound trips generated by the Proposed Project are forecast to use Fair Oaks Avenue south of Dayton Street. Additionally, the traffic signal at the fire station on Fair Oaks Avenue immediately south of Dayton Street is not discussed or evaluated as part of **11**

the DEIR or the TIS. When emergency vehicles exit the fire station, traffic on Fair Oaks Avenue is required to stop within the Dayton Street intersection, blocking access from Dayton Street. These issues must be analyzed and evaluated, and enforceable mitigation measures must be developed. **11**

4) Fair Oaks Avenue/Dayton Street Intersection Considerations – The existing Fair Oaks Avenue intersection at Dayton Street includes offset eastbound and westbound legs. With the west leg offset to the north of the east leg, simultaneous left turns from Fair Oaks Avenue to Dayton Street are forced to compete for the same space in the middle of Fair Oaks Avenue while making left turns from the inside through lanes on Fair Oaks Avenue. With the Proposed Project, there is an opportunity to realign the east leg of Dayton Street to the north so it is in direct alignment with the west leg, thereby creating a conventional four-legged intersection. The DEIR and TIS must evaluate this measure with consideration of the recent collision history at the existing offset intersection on Fair Oaks Avenue at Dayton Street. **12**

5) Pedestrian and Bicycle Facilities – Pedestrian facilities including ramps, push buttons, and crosswalks are generally provided at signalized intersections on Fair Oaks Avenue and on Raymond Avenue but not at all intersections such as the fire station signal and non-signalized intersections. The DEIR and TIS evaluate the PEQI (Pedestrian Environmental Quality Index) along midblock portions of Fair Oaks Avenue and Dayton Street and also evaluate the BEQI (Bicycle Environmental Quality Index) along Dayton Street. Pedestrian traffic that will be generated by the Proposed Project must be analyzed and evaluated to determine if additional pedestrian facilities should be provided to facilitate safe pedestrian crossings in all directions at Fair Oaks Avenue/Dayton Street and at Raymond Avenue/Dayton Street. With 15 bicycle parking spaces being provided within the Proposed Project, bicycle traffic must also be analyzed and evaluated. **13**

6) Access Driveway Alternatives – The TIS did not review the internal layout of the Proposed Project or the single access driveway geometry at Dayton Street. From the site plans, the single access driveway for the Proposed Project appears to be only 16' wide. This is too narrow to safely accommodate two-way traffic and must be widened to at least 24'. Furthermore, alternatives for vehicle access to and from the Proposed Project have not been considered. With a single access to Dayton Street, the DEIR and TIS disclose a significant segment impact on Dayton Street but no "feasible" mitigation measures are suggested. Direct vehicle access to and from Fair Oaks Avenue would eliminate the significant ADT segment impact on Dayton Street and must be considered. **14**

7) Inconsistent Site Plans for Ground Level - The site plans in the DEIR and in the TIS are different regarding available parking on the ground level. In the **15**

TIS, four additional head-in parking spaces are provided on the easterly side of the internal ramp to the subterranean parking but these four spaces are not shown on the site plan in the DEIR. These site plan inconsistencies must be resolved. **15**

8) Construction Traffic – The DEIR and TIS indicate there will be 30,000 cubic yards of export from the site over three months. Assuming each truck has a capacity of 20 cubic yards, 1,500 trucks will be required to haul away the excess dirt from the site (about 25 round trip truck trips per working day). Each dirt-hauling truck equates to three passenger cars in terms of traffic flow. The potentially significant traffic impacts associated with the dirt-hauling trucks have not been addressed or evaluated, and enforceable mitigation measures must be developed. **16**

9) Worker Parking – The DEIR and TIS indicate there will be a maximum of 40 construction workers on site during the 28 month construction period. No conditions of approval or enforceable mitigation measures have been developed to control or contain construction worker parking to the construction site itself, or to develop ways to reduce construction worker trips to the site. **17**

In summary, the DEIR and the TIS for the Green Hotel Apartments do not properly or adequately address, analyze, or propose feasible mitigation of the significant traffic impact that will be created by the Proposed Project on Dayton Street from Fair Oaks Avenue to Raymond Avenue. As discussed throughout this letter, other deficiencies, errors, omissions and inconsistencies must also be addressed before the City of Pasadena considers the Proposed Project. **18**

If you have questions regarding these comments, please call me at your convenience.

Respectfully submitted,

Tom Brohard and Associates

Tom Brohard

Tom Brohard, PE
Principal





Enclosures
- Resume
- Google Earth Aerial of Proposed Project Site
- California Fire Code Provisions

Tom Brohard, PE

Licenses:	1975 / Professional Engineer / California – Civil, No. 24577 1977 / Professional Engineer / California – Traffic, No. 724 2006 / Professional Engineer / Hawaii – Civil, No. 12321
Education:	1969 / BSE / Civil Engineering / Duke University
Experience:	40+ Years
Memberships:	1977 / Institute of Transportation Engineers – Fellow, Life 1978 / Orange County Traffic Engineers Council - Chair 1982-1983 1981 / American Public Works Association – Life Member

Tom is a recognized expert in the field of traffic engineering and transportation planning. His background also includes responsibility for leading and managing the delivery of various contract services to numerous cities in Southern California.

Tom has extensive experience in providing transportation planning and traffic engineering services to public agencies. Since May 2005, he has served as Consulting City Traffic Engineer for the City of Indio. He also currently provides "on call" Traffic and Transportation Engineer services to the Cities of Big Bear Lake, Mission Viejo, and San Fernando. In addition to conducting traffic engineering investigations for Los Angeles County from 1972 to 1978, he has previously served as City Traffic Engineer in the following communities:

- Bellflower ..... 1997 - 1998
- Bell Gardens ..... 1982 - 1995
- Huntington Beach ..... 1998 - 2004
- Lawndale ..... 1973 - 1978
- Los Alamitos ..... 1981 - 1982
- Oceanside ..... 1981 - 1982
- Paramount ..... 1982 - 1988
- Rancho Palos Verdes ..... 1973 - 1978
- Rolling Hills ..... 1973 - 1978, 1985 - 1993
- Rolling Hills Estates ..... 1973 - 1978, 1984 - 1991
- San Marcos 1981
- Santa Ana ..... 1978 - 1981
- Westlake Village ..... 1983 - 1994

During these assignments, Tom has supervised City staff and directed other consultants including traffic engineers and transportation planners, traffic signal and street lighting personnel, and signing, striping, and marking crews. He has secured over $5 million in grant funding for various improvements. He has managed and directed many traffic and transportation studies and projects. While serving these communities, he has personally conducted investigations of hundreds of citizen requests for various traffic control devices. Tom has also successfully presented numerous engineering reports at City Council, Planning Commission, and Traffic Commission meetings in these and other municipalities.

In his service to the City of Indio since May 2005, Tom has accomplished the following:

- Oversaw preparation and adoption of the Circulation Element Update of the General Plan including development of Year 2035 buildout traffic volumes, revised and simplified arterial roadway cross sections, and reduction in acceptable Level of Service criteria under certain constraints. Reviewed Riverside County's updated traffic model for consistency with the adopted City of Indio Circulation Plan.

- Oversaw preparation of fact sheets/design exceptions to reduce shoulder widths on Jackson Street over I-10 as well as justifications for protected-permissive left tum phasing at I-10 on-ramps, the first such installation in Caltrans District 8 in Riverside County; reviewed plans and provided assistance during construction of a $1.5 million project to install traffic signals and widen three of four ramps at the I-10/Jackson Street Interchange under a Caltrans encroachment permit.

- Oversaw preparation of fact sheets/design exceptions to reduce shoulder widths on Monroe Street over I-10 as well as striping plans to install left tum lanes on Monroe Street at the I-10 Interchange under a Caltrans encroachment permit; reviewed plans to install traffic signals and widen three of four ramps at the I-10/Monroe Street Interchange.

- Reviewed traffic impact analyses for Project Study Reports evaluating different alternatives for buildout improvement of the I-10 Interchanges at Jefferson Street, Monroe Street, Jackson Street and Golf Center Parkway.

- Oversaw preparation of plans, specifications, and contract documents and provided construction assistance for over 40 traffic signal installations and modifications.

- Reviewed and approved over 600 work area traffic control plans as well as signing and striping plans for all City and developer funded roadway improvement projects.

- Oversaw preparation of a City wide traffic safety study of conditions at all schools.

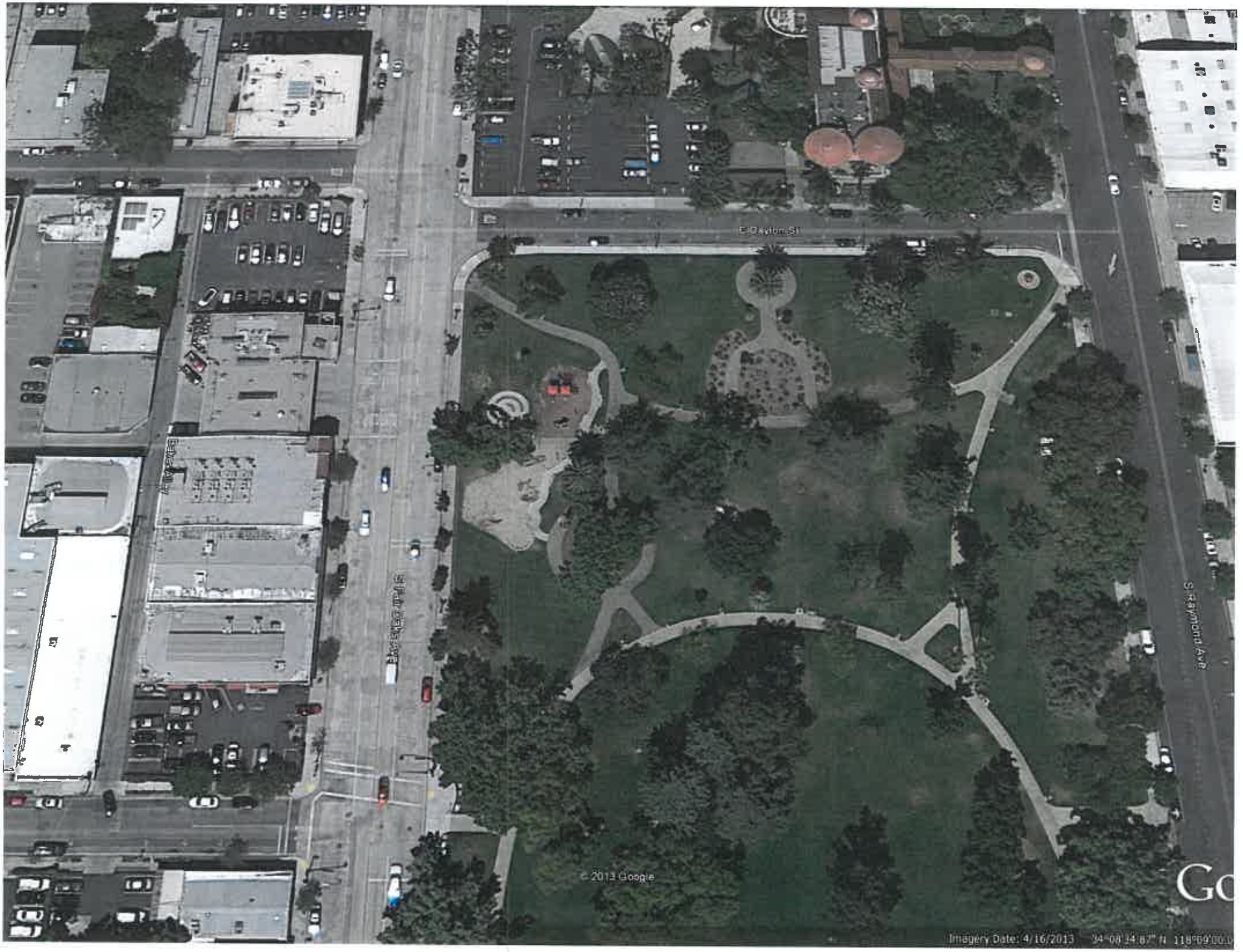
- Prepared over 500 work orders directing City forces to install, modify, and/or remove traffic signs, pavement and curb markings, and roadway striping.

- Oversaw preparation of engineering and traffic surveys to establish enforceable speed limits on over 200 street segments.

- Reviewed and approved traffic impact studies for more than 25 major developments.

- Developed the Golf Cart Transportation Program and administrative procedures; implemented routes forming the initial baseline system.

Since forming Tom Brohard and Associates in 2000, Tom has reviewed many traffic impact reports and environmental documents for various development projects. He has provided expert witness services and also prepared traffic studies for public agencies and private sector clients.


E Dayton St
S Raymond Ave
© 2013 Google
Imagery Date: 4/16/2013

City of Pasadena Fire Code

14.28.010 California Fire Code adopted.

Except as is otherwise provided for in this chapter by specific provision, the minimum standards, provisions and requirements for the safe construction and maintenance of property, facilities, conditions, materials, equipment, fire prevention and alarm systems, and the general supervision thereof for the purpose of combating and control of fire and fire hazards and abatement of same, within the corporate limits of the city, shall be in accordance with the provisions and in the manner prescribed by the California Fire Code, 2013 Edition ("California Fire Code") in its entirety, as published by the International Code Council and including Appendix Chapter 4 and Appendices B through D, and I, all as compiled, adopted, and subsequently amended by the International Code Council, California State Fire Marshal's Office, California Building Standards Commission, or City of Pasadena. One copy of the above publications is on file for public inspection and they are adopted and incorporated herein as if fully set forth in this chapter.

(Ord. 7127 § 9 (part), 2007)

(Ord. No. 7201, § 6(A), 12-6-2010; Ord. No. 7234, § 4(A), 12-9-2013)

Section D103.6 of Appendix D of the California Fire Code is amended to read as follows:

Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING-FIRE LANE signs complying with the current specifications maintained by the Pasadena Department of Public Works.

FIRE COMMAND CENTER.

FIRE DEPARTMENT MASTER KEY.

FIRE LANE.

KEY BOX.

TRAFFIC CALMING DEVICES.

SECTION 503
FIRE APPARATUS ACCESS ROADS

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3.

503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

Exception: The fire code official is authorized to increase the dimension of 150 feet (45 720 mm) where:

1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1. 903.3.1.2 or 903.3.1.3.
2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved altemative means of fire protection is provided.
3. There are not more than two Group R-3 or Group U occupancies.

503.1.2 Additional access. The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

503.1.3 High-piled storage. Fire department vehicle access to buildings used for high-piled combustible storage shall comply with the applicable provisions of Chapter 32.

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8.

[California Code of Regulations, Title 19, Division 1, §3.05(a)] Fire Department Access and Egress. (Raads)

(a) Roads. Required access roads from every building to a public street shall be all-weather hard-surfaced (suitable for use by fire apparatus) right-of-way not less than 20 feet in width. Such right-of-way shall be unobstructed and maintained only as access to the public street.

***Exception:** The enforcing agency may waive or modify this requirement if in his opinion such all-weather hard-surfaced condition is not necessary in the interest of public safety and welfare.*

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

503.2.2 Authority. The fire code official shall have the authority to require an increase in the minimum access widths where they are inadequate for fire or rescue operations.

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be determined by the fire code official.

503.2.5 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an approved area for turning around fire apparatus.

503.2.6 Bridges and elevated surfaces. Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO HB-17. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained when required by the fire code official.

503.2.7 Grade. The grade of the fire apparatus access road shall be within the limits established by the fire code official based on the fire department's apparatus.

503.2.8 Angles of approach and departure. The angles of approach and departure for fire apparatus access roads shall be within the limits established by the fire code official based on the fire department's apparatus.

503.3 Marking. Where required by the fire code official, approved signs or other approved notices or markings that include the words NO PARKING—FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times.

CALIFORNIA FIRE CODE – MATRIX ADOPTION TABLE
APPENDIX D – FIRE APPARATUS ACCESS ROADS

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user.
See Chapter 1 for state agency authority and building applications.)

(Not adopted by the State Fire Marshal)

Adopting Agency	BSC	SFM		HCD			DSA		OSHPD				BSCC	DHS	AGR	DWR	CEC	CA	SL	SLC
		T-24	T-19*	1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt Entire Chapter as amended (amended sections listed below)																				
Adopt only those sections that are listed below																				
[California Code of Regulations, Title 19, Division 1]																				
Chapter / Section																				

* The *California Code of Regulations* (CCR), Title 19, Division 1 provisions that are found in the *California Fire Code* are a reprint from the current CCR, Title 19, Division 1 text for the code user's convenience only. The scope, applicability and appeals procedures of CCR, Title 19, Division I remain the same.

APPENDIX D

FIRE APPARATUS ACCESS ROADS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION D101
GENERAL

D101.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the *California Fire Code*.

SECTION D102
REQUIRED ACCESS

D102.1 Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds (34 050 kg).

SECTION D103
MINIMUM SPECIFICATIONS

D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm), exclusive of shoulders (see Figure D103.1).

D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade.

Exception: Grades steeper than 10 percent as approved by the fire chief.

D103.3 Turning radius. The minimum turning radius shall be determined by the fire code official.

D103.4 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.4.

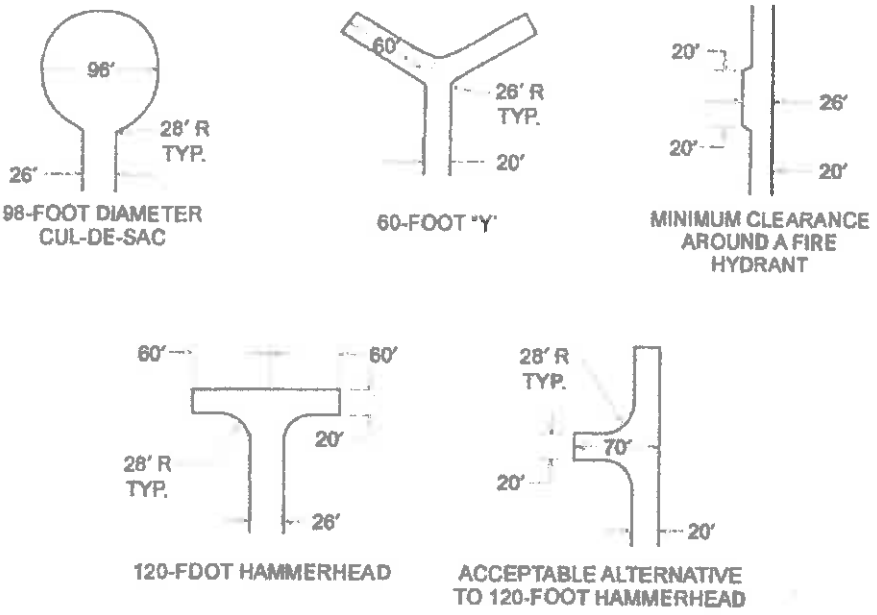
TABLE D103.4
REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0-150	20	None required
151-500	20	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
501-750	26	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
Over 750	Special approval required	

For SI: 1 foot = 304.8 mm.

D103.5 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. The minimum gate width shall be 20 feet (6096 mm).
2. Gates shall be of the swinging or sliding type.
3. Construction of gates shall be of materials that allow manual operation by one person.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the fire code official.



For SI: 1 foot = 304.8 mm.

FIGURE D103.1
DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUND

6. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or when a key box containing the key(s) to the lock is installed at the gate location.
7. Locking device specifications shall be submitted for approval by the fire code official.
8. Electric gate operators, where provided, shall be listed in accordance with UL 325.
9. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

D103.6 Signs. Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING—FIRE LANE signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.

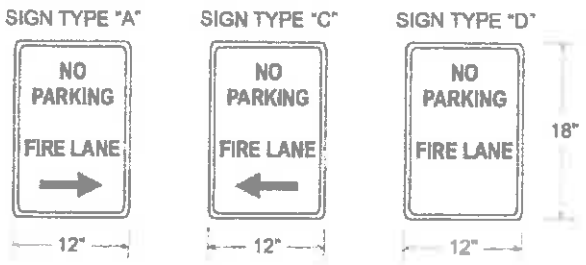


FIGURE D103.6
FIRE LANE SIGNS

D103.6.1 Roads 20 to 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide (6096 to 7925 mm).

D103.6.2 Roads more than 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on one side of fire apparatus access roads more than 26 feet wide (7925 mm) and less than 32 feet wide (9754 mm).

SECTION D104
COMMERCIAL AND INDUSTRIAL OEVELOPMENTS

D104.1 Buildings exceeding three stories or 30 feet in height. Buildings or facilities exceeding 30 feet (9144 mm) or three stories in height shall have at least two means of fire apparatus access for each structure.

D104.2 Buildings exceeding 62,000 square feet in area. Buildings or facilities having a gross building area of more than 62,000 square feet (5760 m^2) shall be provided with two separate and approved fire apparatus access roads.

Exception: Projects having a gross building area of up to 124,000 square feet (11 520 m^2) that have a single approved fire apparatus access road when all buildings are equipped throughout with approved automatic sprinkler systems.

D104.3 Remoteness. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.

SECTION D105
AERIAL FIRE APPARATUS ACCESS ROADS

D105.1 Where required. Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet (9144 mm), approved aerial fire apparatus access roads shall be provided. For purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greater.

D105.2 Width. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm), exclusive of shoulders, in the immediate vicinity of the building or portion thereof.

D105.3 Proximity to building. At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4572 mm) and a maximum of 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the fire code official.

D105.4 Obstructions. Overhead utility and power lines shall not be located over the aerial fire apparatus access road or between the aerial fire apparatus road and the building. Other obstructions shall be permitted to be placed with the approval of the fire code official.

SECTION D106
MULTIPLE-FAMILY RESIDENTIAL DEVELOPMENTS

D106.1 Projects having more than 100 dwelling units. Multiple-family residential projects having more than 100 dwelling units shall be equipped throughout with two separate and approved fire apparatus access roads.

Exception: Projects having up to 200 dwelling units may have a single approved fire apparatus access road when all buildings, including nonresidential occupancies, are equipped throughout with approved automntic sprinkler systems installed in accordance with Section 903.3.1.1 or 903.3.1.2.

D106.2 Projects having more than 200 dwelling units. Multiple-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system.

SECTION D107
ONE- OR TWO-FAMILY RESIDENTIAL DEVELOPMENTS

D107.1 One- or two-family dwelling residential developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3.

Exceptions:

1. Where there are more than 30 dwelling units on a single puhlic or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 of the *California Fire Code*, access from two directions shall not be required.
2. The number of *dwelling units* on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the fire code official.

D108
REFERENCED STANDARDS

ASTM	F 2200—05	Standard Specification for Automated Vehicular Gate Construction	D103.5
UL	325—02	Door, Drapery, Gate, Louver, and Window Operators and Systems, with Revisions through February 2006	D103.5

Letter No. 4 Chatten-Brown & Carstens LLP

Chatten-Brown & Carstens LLP
2200 Pacific Coast Highway, Suite 318
Hermosa Beach, California 90254
Douglas P. Carstens
March 10, 2014

Responses

Response 4-1

The Draft EIR impacts analysis takes into consideration the presence of the existing Green Hotel Apartments and Castle Green adjacent to the project site, including, but not limited to, potential view impacts, as addressed in Section 3.1 of the Draft EIR, and potential historic resources impacts, as addressed in Section 3.3 of the Draft EIR. Based on the substantial evidence provided therein, the Draft EIR analysis concluded that project implementation would not result in significant view or historic resource impacts.

Response 4-2

In compliance with CEQA requirements, the Draft EIR addressed a reasonable range of alternatives that could possibly avoid or substantially lessen the single unavoidable significant impact of the project, which was identified as the traffic impact on Dayton Street. Such alternatives are presented and evaluated in Section 4 of the Draft EIR. Alternatives considered but rejected as infeasible include Alternative Access Alternative, Off-Site Parking Alternative, Alternative Site Alternative, and Smaller Scale Alternative (see EIR, pp. 4-3 to 4.5). Alternatives analyzed in the EIR include the No Project Alternative, and Reduced Height Alternative, as these were the only two that could attain most of the basic project objectives at the same time as avoiding or reducing a potentially significant environmental effect. Alternative designs were not considered in the EIR because design in Pasadena is governed by the design review process set forth in PMC Section 17.61.030, and therefore design is not set through the EIR process. Please see Topical Response TR-ALT-1 for additional discussion regarding the Draft EIR analysis of project alternatives and TR-CR-1 for additional discussion regarding design review.

The EIR is intended to identify and disclose the environmental impacts of the project and of the alternatives. It is not intended to, nor does it recommend approval or rejection of the project or any of the alternatives evaluated. Thus, other than environmental impacts, the EIR does not consider the merits of the project or any alternatives, such as the economic, legal, social, technological, or other non-environmental factors that may be considered by decision makers when deciding whether to approve the project or a project alternative. While not included in the EIR itself, such information may be included in the administrative record.

Response 4-3

Implementation of the project, as currently proposed, would not result in significant impacts to biological resources, air quality and human health, and land use plans - see Draft EIR Appendix A-Initial Study Section II-6. Biological Resources; Draft EIR Section 3.2. Air Quality (including Human Health); and, Draft EIR Appendix A-Initial Study Section II-13. Land Use and Planning. As such, evaluation of alternatives to address those impacts is not warranted. The comment provides no critique nor does it pose any comment or question regarding this analysis. As described above in Response to Comment 4-2, the Draft EIR includes and addresses a reasonable range of alternatives to address the unavoidable significant traffic impact on Dayton Street.

Response 4-4

The existing AM and PM peak hour traffic volumes along Dayton Street are approximately 0.8 vehicles per minute during the AM peak hour and 1.4 vehicles per minute during the PM peak hour. Dayton Street would not be considered to be burdened with traffic as it currently serves parking for the existing Green Hotel Apartments, Castle Green trips, and on-street parking for Central Park. Not all traffic on Dayton Street is through traffic. Existing vehicle trips along Dayton Street and Fair Oaks Avenue have been accounted for in the existing traffic count data and included in all existing and future analysis scenarios.

Response 4-5

Implementation of the proposed project would not result in a violation of the Fire Code - please see Response to Comment 3-84 above.

Response 4-6

Comment noted. Chatten-Brown & Carstens, LLP will be included in notifications of public hearings or notices related to the proposed project.

Response 4-7

Comments noted. Please see Responses to Comments 4-9 through 4-17 below.

Response 4-8

Comments noted.

Response 4-9

The segment of Raymond Avenue between Green Street and Dayton Street would experience a 2.7 percent increase in ADT, which is not considered a significant impact per DOT guidelines (ADT over 4.9 percent is considered a significant impact). Regarding the possibility of mitigating the street segment impact on Dayton Street, no feasible mitigation measures are available to reduce those impacts; the only way to reduce the impact below a level of significance is to reduce the number of trips along this segment, which would require modification of the project scope as illustrated in topical response TR-ALT-1.

The condition of approval to install a regulatory sign at the project driveway along Dayton Street for the potential queuing along Dayton Street at Fair Oaks Avenue would be adequate to prevent motorists from blocking the driveway. The situation is no different from other apartment driveways on local Pasadena streets and does not require providing any special or preferred treatment from the Police Department. There is no evidence to support the contention that the Police Department would not enforce a regulatory sign at the subject driveway when the City has a history of responding to complaints about non-conformance with regulatory signs. The existing 14-foot-wide through-way traffic lane on a low-volume, low-speed street such as Dayton Street is adequate for two-way operations and the street currently operates adequately as a two-way street. Additionally, widening the roadway would lead to higher speeds on Dayton Street which is not desirable in an urban environment adjacent to a park.

Existing on-street parking conditions along Dayton Street should be maintained to support the Central Park as well as to calm traffic on the street, adjacent to the park. The widening of Dayton Street would be infeasible because it would take property from a historic park on the south or require dedication of six feet of right of way from the project site. This is infeasible because it would

only address the impact on a portion of the block; the remaining portion on the north side is occupied by the historic Castle Green and could not be widened without significantly impacting the historic building. The widening of Dayton Street would not mitigate the significant impact because the project would still increase the street volumes by 70.9 percent.

Implementation of the proposed project would not result in a violation of the Fire Code; please see Response to Comment 3-43 above.

Response 4-10

All existing vehicle trips along Dayton Street have been accounted for in the existing turning movement traffic count data at both the Fair Oaks Avenue and Dayton Street and Raymond Avenue and Dayton Street intersections and included in all existing and future analysis scenarios. Per the project applicant, the existing driveway on Fair Oaks Avenue is not used for access to the existing parking lot and is always locked except for trash pickup; therefore, all trips associated with the existing parking lot are accounted for in the existing traffic counts. These existing volumes are illustrated on page 12 and 13 of the traffic impact study included in Appendix H of the Draft EIR as well as on pages 3.6-11 and 3.6-13 in the Draft EIR itself.

Response 4-11

Please see Response to Comment 3-42 above.

Response 4-12

Realigning the east leg of Dayton Street at Fair Oaks Avenue with the west leg of Dayton Street would significantly change the project site and significantly limit what can be developed in the remaining portions of the project site. Based on conversations with staff of the Department of Public Works, a minimum of 20 percent of the project site frontage along Dayton Street would be required to provide the curvature required for a safe transition from the east leg to the west leg of Dayton Street. The intersection would experience no significant impact as a result of the proposed project, so there is no nexus to require consideration of a realignment alternative. The comment alleges a past accident history at the intersection of Dayton Street and Fair Oaks Avenue without supporting factual evidence. The impacts of this project are measured against the baseline as set forth in Section 3.6.2 of the Draft EIR and need not remedy alleged but undescribed accidents or their alleged propensity to occur at the intersection of Dayton Street and Fair Oaks Avenue. Realignment of the street would also potentially add traffic volume on Dayton Street. Further, the remedy of widening Dayton Street to the north and thereby intruding into the project site (and, potentially, the Castle Green site) is not part of the project description, would significantly and adversely impact the historic Castle Green site, and would not mitigate the traffic impact on Dayton Street because the project would still increase the volumes by 70.9 percent.

Response 4-13

The traffic study included in Appendix H of the Draft EIR, on pages 45 through 52, indicates that the existing pedestrian and bicycle environment conditions are at average to high quality for pedestrian walk-ability and bicycle conditions along Fair Oaks Avenue and Dayton Street. The project would not diminish the existing bicycle/pedestrian environment, and therefore, there is no nexus to require any mitigation. The project may activate the bicycle/pedestrian environment by providing additional retail store frontages and additional landscaping.

Response 4-14

Please see Responses to Comments 3-87 and 4-9 above. The project shall be required to provide a driveway width in compliance with Zoning Code §17.46.150.B, which, for non-residential projects (including mixed-use projects) is 20 feet for a two-way driveway. The plans depict a 20-foot-wide driveway, as required by the Code.

Response 4-15

Comment noted. The four at-grade parking spaces shown on the site plan in Figure 2-5 of the Draft EIR have been relocated to the subterranean garage and a revised site plan, which is consistent with the site plan in the traffic impact study, has been incorporated into the Final EIR. This change has no effect on traffic impacts of the project.

Response 4-16

Project construction, pursuant to Section 9.36.070 of the Pasadena Municipal Code, must occur between the hours of 7:00 AM and 7:00 PM Monday through Friday; and between 8:00 AM and 5:00 PM on Saturday. However, hours for construction traffic (delivery trucks or haul trucks) shall be restricted to the hours between 9:00 AM to 3:00 PM to limit peak hour traffic conflict along the local street network. In addition, the number of construction-related trips would be less than the number of project-related trips analyzed in the traffic study, and, therefore, would be less than significant. Please also see Response to Comment 4-17 below.

Response 4-17

Issues related to project construction traffic access and circulation shall be reviewed and approved by the Department of Public Works and Department of Transportation upon the submittal of a Construction Staging and Traffic Management Plan, which includes the location of site access for construction vehicles; number of trucks and construction worker vehicles for each construction phase and duration of each construction phase; adjacent street and/or on-site staging of construction trucks; and truck routes. This analysis presents information related to all the above elements and provides construction mitigation requirements including development of a construction traffic management plan for the project and locations for construction worker parking in the vicinity of the project site.

Response 4-18

Please see Responses to Comments 4-9 through 4-17 above.

Comments on DEIR for Hotel Green Site

11 March 2014

Dear Members of the Design Commission:

Below are my comments on the DEIR. As the author of the original study of the Hotel Green complex and the area surrounding it (Pasadena's Architectural and Historical Inventory, Survey Area 7), I have followed the development of the preservation of the complex and the City's efforts with interest. I hope that the City's commitment to this very special site will continue.
Sincerely,
Ann Scheid

1

General Comments:

The Hotel Green complex is the most significant of all of Old Pasadena's historic buildings, second only to City Hall in its importance. As such, this building and its surroundings are part of the public trust implied by the historic designations (which also include City Landmark status, omitted in the report) accorded the property. This complex belongs not only to the owners, but in a greater sense to the citizens of Pasadena, of California and of the nation. There is no doubt that the proposed project will significantly diminish the historic character of the Hotel Green complex. Moreover the garden area, which existed until fairly recently in the building's history, is being destroyed to accommodate parking that could, with some creative action, be accommodated elsewhere.

2

If this project is approved in its present form, those in the community and owners of the condominiums in the Castle Green who have invested time and money in ownership, restoration, and maintenance of this iconic historic building, will be rewarded by an action that betrays this public trust, and Pasadena, California, and the nation will be the poorer for it. The Hotel Green complex is unique, exists nowhere else, and unlike the proposed project cannot be found on every street corner. It is a unique component of Pasadena's urban historic fabric, and a building of national significance.

3

Discussion of Alternatives

Both the proposed project and the only Alternative offered (aside from No Build) will overwhelm the existing historic complex. The new building, which is clearly incompatible with the old and with the historic buildings across Fair Oaks, will become the dominant building along Fair Oaks. Is this the building that we want to become the "gateway to Old Pasadena?"

4

Additional alternatives need to be studied:

1. **Literal Replication**: This alternative for additions has been used by architects for centuries and has been used at Dulles Airport (1997), Kennedy-Warren apartments (Washington, DC, 2004), and Chicago's Carson Pirie Scott store (1960). Since this project is an **addition** to the complex it should strive for compatibility, especially in proportion, scale and massing; differentiation will be an inevitable outcome. The Hotel Green complex is clearly as significant in its context as any of the above buildings. While this is an unusual solution, it can and is being done. Why hasn't this alternative been studied? 5

2. **Invention Within a Style**: This alternative has also been used by architects for centuries. Recent examples in this country include the repeated additions to the US Capitol building, a new wing on the Frick Collection in New York (1977) and Whitman College at Princeton (2004). Again such an alternative needs to be studied for this significant site. 6

3. **4.4.2 Off-site Parking Alternative:** The study of this alternative has been reduced to a numbers exercise, based on existing code requirements. This analysis ignores the special characteristics of the site, especially its historic development which involved the gradual take-over of the garden by parking and the accommodations made by the City by allowing off-site parking and other creative actions to encourage preservation of the entire complex. Once again, a more creative solution needs to be reached, or the project size needs to be reduced. Pasadena touts its "greenness" and yet it still requires on-site parking for every project? This is a no-win endgame that will result in ever-increasing traffic congestion. 7

4. **4.4.3. Alternate Site Alternative:** Again, this alternative has been dismissed with no real investigation of sites in the area. There is no demonstration of contact/discussions/negotiations with the owners of the Green Street/Arroyo Parkway project or of any investigation or contact with the owners of the Parsons property, both of which might afford opportunities for TDRs. By narrowing Fair Oaks at the Parsons site, significant land area could be recovered for development and the area more closely integrated into Old Pasadena, including facilitating pedestrian street crossing. 8

5. **4.4.4. Smaller Scale Alternative:** Dismissing this alternative as financially infeasible does not include another possible configuration: A two story project with retail below and residential above. This would be the most compatible with the existing site and would greatly lessen the impact on the historic buildings. Furthermore it would allow parking below grade that would not interfere with the development of the garden at grade, which should be the goal any project on the site. The number of stories in the dismissed alternative is not indicated in the report. In order to fully evaluate it, this needs to be stated somewhere in the report. 9

Aesthetics:

The proposed project does not meet the criteria of **Standard 9**:
"New additions, exterior alterations or **related new construction** will not destroy historic materials, features and **spatial relationships** that characterize the property."
Clearly the spatial relationship and setting of the existing historic complex are severely compromised by the new project, obstructing views for residents from the existing buildings and obstructing public views of the historic buildings. The open space is also severely compromised by the parking structure below, which inhibits garden planting and removes many trees. **10**

Standard 9 continues:
"The new work shall be differentiated from the old and **will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the historic property and its environment."**

Again, the proposed project does not demonstrate compatibility, especially in the following areas: scale, proportion and massing (see Figures 2-11 and 2-12). As for features and historic materials, these are not clearly defined, although the balconies shown are clearly incompatible with those in the existing buildings. **11**

More information is needed on the following:
The plan for the proposed project (Figure 2-5) does not show the spatial relationships to the existing historic property, which is not included on the plan. To be complete, the EIR should show those relationships clearly, not just in plan but also in elevation (relationships to window openings, balconies, etc.) This information needs to be included to demonstrate the full impact of the project on both the Castle Green and the Hotel Green Apartments. **12**

This page is intentionally left blank.

Letter No. 5 Ann Scheid

Ann Scheid
March 11, 2014

Responses

Response 5-1

The comment is noted and is included as part of the Final EIR, which will be considered by decisionmakers in taking action on the Project.

Response 5-2

The City of Pasadena's designation of the existing Green Hotel Apartments building and Castle Green as historic monuments is acknowledged on page 3.3-16, contrary to the comment's assertion that the information was omitted from the Draft EIR. Section 3.3, along with Appendix D, of the Draft EIR addresses potential impacts to historic resources and, based on substantial evidence presented therein, concludes that implementation of the proposed project will not result in significant impacts to historic resources. The majority of the parking associated with the proposed project will be underground (i.e., 147 of the 167 total spaces). The surface level parking proposed as part of the project will provide 20 spaces within the western portion of the existing 60-space surface parking lot. Section 4.4.2 of the Draft EIR evaluates an alternative that would provide project-related parking at an off-site location; however, for reasons described therein, that alternative would found to be infeasible. Additionally, it should be noted that the trees within the project site are not historic resources, as described in Section 3.3.2.2 of the Draft EIR. Please see also Topical Response TR-CR-1, above.

Response 5-3

The comment is noted and is included as part of the Final EIR, which will be considered by decisionmakers in taking action on the Project.

Response 5-4

Section 3.1 of the Draft EIR addresses potential aesthetics impacts, including view and aesthetic character impacts, and, based on substantial evidence presented therein, concludes that implementation of the proposed project will not result in significant impacts to existing views. As indicated in the elevation diagrams presented in Figures 2-11 and 2-12 of the Draft EIR, the mass and scale of the proposed building is generally consistent with those of Castle Green and the existing Green Hotel Apartments. That is also evident in the visual simulations presented in Section 3.1 of the Draft EIR.

Response 5-5

As indicated in Section 1.3 of the Draft EIR and expounded upon in Topical Response TR-ALT-1, several alternatives related to building size, massing, footprint, and design were evaluated in the course of defining the currently proposed building. The current proposal is considered to be generally compatible with the concept originally envisioned for the Green Hotel, with the project building representing the originally designed but unbuilt west wing of the complex. The Draft EIR analysis of the proposed project found no significant impacts related to aesthetics and cultural resources. As such, further evaluation of other design concepts for the project, such as suggested in the comment, is not warranted.

Response 5-6

Please see Response 5-5 above.

Response 5-7

Section 4.4.2 of the Draft EIR evaluates an alternative that would provide project-related parking at an off-site location; however, for reasons described therein, that alternative would found to be infeasible. The analysis therein is not a "numbers exercise" but is instead an analysis consistent with the requirements of the Pasadena Zoning Code from which no amount of creativity could deviate.

Response 5-8

Please see Topical Response TR-ALT-1 for a discussion regarding the decision not to analyze an off-site alternative. A reasonable and appropriate level of inquiry was completed relative to identification of a potential alternative site for the proposed project. It is not necessary for the applicant to investigate a myriad of possibilities such as follow-up with other property owners in the local area regarding potential land purchases or land swaps. The transfer of development rights for the project site is not allowed under the City's Zoning Code. It should also be noted that the comments regarding development at the Parson's site cannot be considered in relation to this project.

Response 5-9

The alternative suggested in this comment would be generally similar to the Smaller Scale Alternative described in Section 4.4.4 of the Draft EIR, with the notable difference being that the commenter's alternative includes ground level retail. The limitation of residential apartments to a single level, providing approximately 6 units, as in the case of the Smaller Scale Alternative, would still render this alternative to be financially infeasible.[3] Please see Topical Response TR-ALT-1 for additional discussion regarding the Draft EIR analysis of project alternatives including a table of residential/commercial mixes that would alleviate the traffic impact on Dayton Street and would also be financially infeasible.

Response 5-10

Please see Topical Response TR-CR-1 regarding the Draft EIR analysis of impacts to historic resources. The related new construction will alter spatial relationships that characterize the property. The most significant spatial relationships of the Hotel Green/Castle Green are the relationships between the primary facades and the public right-of-way (Raymond Avenue, Green Street and Fair Oaks Avenue), and the secondary facades that face south to Dayton Street and Central Park. Views of the secondary facades will be partially obscured from Dayton Street and Fair Oaks Avenue; however major portions of those façades will remain visible. The proposed project will alter but not destroy spatial relationships that characterize the Hotel Green/Castle Green.

Response 5-11

Please see Topical Response TR-CR-1 regarding the Draft EIR analysis of impacts to historic resources. The project is compatible with the adjacent historic resources and the historic character of the District in terms of scale, proportion and massing. The new building is rectangular in plan and has massing similar to the existing adjacent district contributor, Hotel Green/Castle Green. It also recalls traditional historic architectural design details found within the District including arched windows,

[3] Although the Draft EIR identified the Smaller Scale Alternative as having 13 residential dwelling units, that number was reduced to 6 residential dwelling units for reasons explained in the Recirculated Draft EIR.

similarly proportioned fenestration, punched windows, cement plaster finishes, and a low-pitched roof with supporting brackets. The new building will also maintain the prevailing setback of the adjacent and nearby District contributors, continuing the street wall that defines and contains the immediate blocks of Fair Oaks Avenue.

Response 5-12

Figures 2-11 and 2-12 in the Draft EIR provide elevation views that show the spatial relationships of the proposed project to adjacent buildings including the existing Green Hotel Apartments and the Castle Green. Additionally, each of the 16 figures contained in Appendix B of the Draft EIR show the spatial relationship between the proposed project building and the existing buildings nearby, including, but not limited to the existing Green Hotel Apartments and Castle Green.

This page is intentionally left blank.

Letter No. 6

March 11, 2014, via email

Ali Barar, Chair
Design Commission
Design & Historic Preservation Section
City of Pasadena
175 North Garfield Avenue
Pasadena, California 91109

RE: Draft Environmental Impact Review, 86 S. Fair Oaks, Green Hotel Apartments

Dear Chair Ali Barar and Design Commissioners:

Throughout the development of this project, I along with architectural historian Francesca Smith, have provided you with our concerns regarding the associated adverse impacts. I have attached those letters for your current review of the proposed project. **1**

In review of the DEIR, I would ask that the Commission require the project to specifically address the following items:

Compliance with the *Secretary of the Interior Standards for the Treatment of Historic Properties.*
The size of the proposed project competes with that of the historically significant buildings already on the site and earnestly cannot be considered "subordinate" to the historic resources as outlined in the standards. **2**

Misuse of the *Secretary of the Interior Standards for the Treatment of Historic Properties*:
The technical report and EIR asserts that the new project conforms to the *standards* and causes no impacts. This assertion is simply baseless as it provides no expository argument, valid figures or facts on contained with the standards on which that important premise is rooted. **3**

Acknowledgement of the proposed development's impacts to the setting:
The FEIR does not adequately analyze impacts to the immediate surroundings or within the context of the broader historic district. The report continues to disregard the impacts the development will have specifically within the subject property itself, as the entire parcel is designated and recognized as an historic resources. This is well illustrated in Fig. 3.3-1, as the report only labels historically significant buildings, and does not acknowledge that the entire block is currently designated as a historic resource. The report also does not adequately address any cumulative impacts to the adjacent and surrounding historic resources. **4**

Inadequate consideration towards impacts to the site during the construction process:
The report does not provide adequate analysis of construction-related vibration impacts to adjacent historically significant buildings. The report also lacks evaluation of impacts to potential archaeological features in relation to the construction process. **5**

Required evaluation of Project Alternatives:
With the expected impacts to historical resources in the vicinity, evaluation of alternatives that would avoid or reduce impacts must be analyzed and considered. 6

In closing, I would like to ask that the Commission require the project applicant to revise the report to address the items mentioned above. 7

Kelly Sutherlin McLeod, FAIA

Architect

November 8, 2010, via e-mail

Mr. Abe Chorbajian, Chair
Design Commission
Design & Historic Preservation Section
City of Pasadena
175 North Garfield Avenue
Pasadena, CA 91109

RE: COMMENTS ON PROPOSED PROJECT, 86 SOUTH FAIR OAKS AVENUE, PASADENA

Dear Chair Chorabian and Design Commissioners:

As a preservation architect and an architectural historian, we are extremely concerned with the expected impacts that would be caused by the mixed-use project proposed for 86 South Fair Oaks Avenue (proposed project) currently in Preliminary Consultation and subject to your commission review. The comments listed below are related to review for conformance with the California Environmental Quality Act (CEQA), as well as the integrally related issue of conformance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* (*Standards for Treatment*, Kay D. Weeks and Anne E. Grimmer for the National Park Service, 1995). **8**

National and State Significance

The Castle Green Apartments and Hotel Green buildings were listed together in the National Register of Historic Places (National Register) in 1982, and are therefore listed in the California Register of Historical Resources (California Register). The properties were listed separately (not as an historic district), and each was since listed as a contributor to the Old Pasadena Historic District (1983). CEQA uses California Register of Historical Resources criteria as the threshold for historical resources eligibility under statute 21084.1. The Castle Green and Hotel Green are therefore considered "historical resources" for the purposes of CEQA. **9**

National Register Boundaries

The boundaries of the Castle and Hotel Green are an important component of this discussion. As described in the National Park Service-prepared "Defining Boundaries for National Register Properties" **10**

> Carefully defined [for National Register-listed properties] boundaries are important for several reasons. The boundaries encompass the resources that contribute to the property's significance. Selection of boundaries is... based on the nature of the property's significance, integrity, and physical setting... [B]oundaries ... define the limits of the eligible resources. Such resources usually include the immediate surroundings and encompass the appropriate setting. [Areas are excluded] that do not directly contribute to the property's significance as buffer or as open space to separate the property from surrounding areas.... When such areas are small and surrounded by eligible resources, they may not be excluded, but are included as noncontributing resources of the property. That is, do not select boundaries which exclude a small noncontributing island surrounded by contributing resources; simply identify the noncontributing resources and include them within the boundaries of the property.

The boundaries of the Castle Green and Green Hotel historic resource are clearly defined in the original National Register registration form as "The square block bounded by Raymond Avenue on the east, Green Street on the north, Fair Oaks [A}venue on the west and Dayton Street on the west" Continuation Sheet 11, item 1 page 1. Figure 1 below is excerpted from Continuation Sheet 12 of the same document. It depicts the boundaries of the historic property, annotated in red, from curb to curb (as described), with the very approximate footprint of the proposed project expressed in blue, and clearly shown within the boundaries of the historic property.

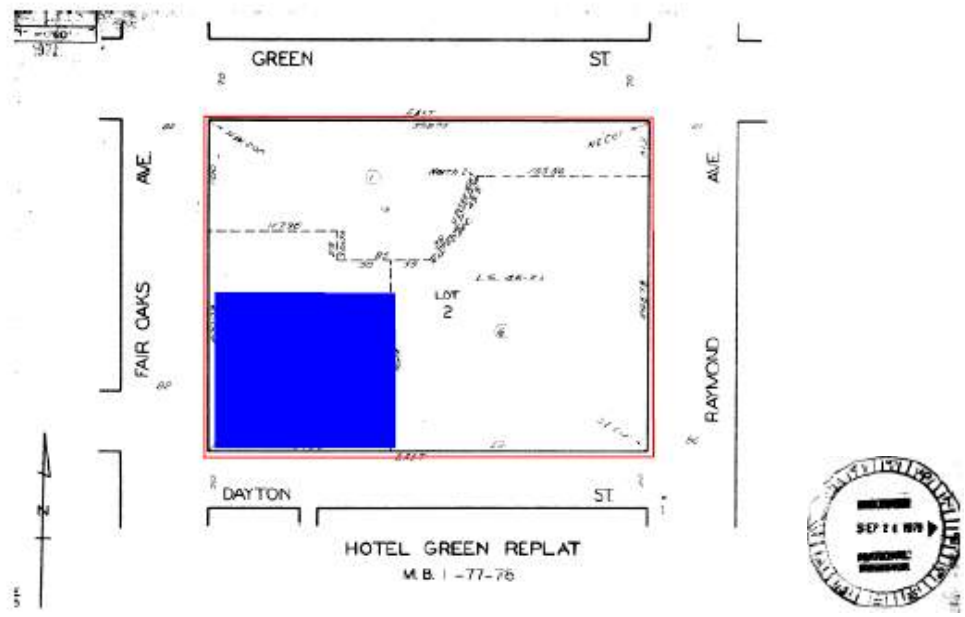


Figure 1: National Register property boundaries of Castle Green Apartments and Hotel Green. Source: National Register nomination form, dated October 29, 1979.

10

In that the project is proposed within the boundaries of a National Register-listed property, it is imperative that the Commission seriously consider the effects of its design. Problematic aspects of the current design include its very large size (in height and plan), the block-like massing, ineloquent scale, rough proportions and significant effects on important view sheds. We recommend that the project be redesigned to more convincingly conform to the *Standards for Rehabilitation* as they relate to new construction, settings, districts and neighborhoods in order to avoid a finding that the proposed project would result in a significant effect on the environment.

11

The definition of "Environmental Setting" is parallel to the above concepts and is clarified in the Pasadena Zoning Code as:

> The entire lot as of the date of landmark or historic monument designation, on which is located a landmark or historic monument, and to which it relates historically, physically, and/or visually. The environmental setting includes, but is not limited to, accessory structures, driveways, fences, gateways, open space, rocks, vegetation (including gardens, lawns, and trees), walkways, and walls (no emphasis needed).

12

Thus, the entire property is a component of the historical resource, not merely the land beneath the buildings. The proposed project would use a large amount of contributing property and is incompatible with the historically significant setting. We strongly urge that

an Environmental Impact Report (EIR) be prepared to objectively analyze the proposed project's effects of on the adjacent, historically significant buildings, their collective setting and on the historic district as a whole.

12

Section 106

The entire block where the project is proposed is listed in the National Register as described, and is an "historic property" for the purposes of Section 106 of the National Historic Preservation Act of 1966, as amended. Although there is some US Department of Housing and Urban Development (HUD) nexus in the Hotel Green building ownership by the proposed project owners, it is not known with certainty whether Section 106 is triggered by any components of this project. Of the various plans, some are entitled "Lot Line Adjustment Submission" (see Figure 2). As described in the Code of Federal Regulations (CFR), if such an "undertaking" (requirement of a federal permit, 36 CFR Section 800.16(y)) were proposed the project would be subject to federal Section 106 review and may result, as proposed, in a finding of adverse effect.

13

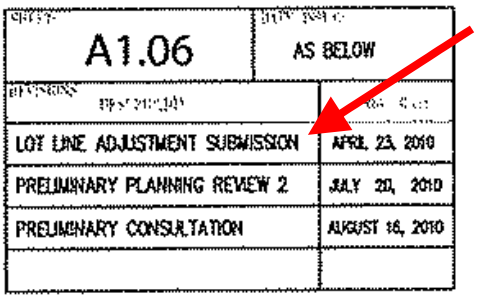


Figure 2: Excerpted, annotated, proposed project plan title block, GMPA, 8/26/2010.

CEQA

CEQA equates "substantial adverse change" in the significance of an historical resource with a significant effect on the environment (Section 21084.1). Substantial adverse change is defined as "demolition, destruction, relocation, or *alteration activities which would impair historical significance*" (emphasis added, Section 5020.1). The proposed project is expected to cause *substantial adverse change* in historical resources; therefore environmental clearance for the project must include a complete historical resources technical report, which would include specific mitigation measures to reduce impacts. "Substantial adverse change in the significance of an historical resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (PRC Section15064.5 (b)(1)).

14

For the past two years, as clearly communicated to the developer by community stakeholders in meetings and in the press, the existence of serious public controversy has been established concerning the environmental effects of the proposed project. Examples include recent local newspaper articles: "Proposed Mixed-Use Building in Old Pasadena Frays Nerves" Brenda Gazzar, *Pasadena Star-News*, 9/25/2010; "Past Present Imperfect" Jake Armstrong, *Pasadena Weekly*, 9/16/10, thus an additional threshold has been reached requiring preparation of an EIR to examine the effects on historical resources (CEQA Guidelines, Section 15064).

Other CEQA issue areas of concern include the related issue of aesthetics, as well as recreation, geology and soils (the opportunity for ground-borne vibration and differential settlement to affect the historic buildings), traffic and transportation and public services.

Secretary of the Interior's Standards for Rehabilitation

We have reviewed the memorandum prepared by our colleagues at ARG (8/20/10), and while it asserts that the proposed project would meet standards 9 and 10, the other eight

15

standards are not adequately satisfied in the current design. The proposed project plans (GMPA Architects, 8/26/2010) clearly demonstrate that the proposed project design does not conform to the *Secretary of the Interior's Standards for Rehabilitation*, particularly as they relate to settings, district and neighborhoods and building sites.

The proposed project does not meet the objectives described in the *Secretary of the Interior's Standards for Rehabilitation*, specifically ...Additions for the New Use, which include the following as specifically "not recommended:" **"**Introducing new construction into historic districts that is visually incompatible or that destroys historic relationships within the setting." The proposed project's location infilling the **L** between the Castle Green and Hotel Green buildings destroys the existing *parti* or geometry between the existing buildings. We note that the City of Pasadena previously approved a project singled-out by the National Park Service (NPS) as a bad example in "Interpreting the Standards Number 41: Incompatible Alterations to the Setting and Environment of a Historic Property" (Attachment 1: U.S. Department of the Interior, Technical Preservation Services, 2006).

"Incompatible Alterations to the Setting and Environment of a Historic Property" declared regarding the other Pasadena project:

> the formerly expansive, almost pastoral, landscape that surrounded the... [historic buildings] consisting largely of grass covered areas dotted with small shrubs, olive trees, and clusters of palm trees has been drastically reduced by the new construction. In addition, the height, massing, scale, and proximity of the new construction dwarf the historic... building. The cumulative effect of all these changes negatively impacts the historic character of the... [historic property]. *Accordingly, the project does not meet the Standards* (emphasis added, Antonio Aguilar, 2006).

15

The negative review prepared by Park Service staff foretells the expected effects of the proposed 86 South Fair Oaks Avenue project, the impacts of which are significant. The NPS considered the other project improper treatment to the setting of an historic building; the design was modified after construction was completed as a result of the review.

The proposed project would remove 19 trees, of which 6 are protected (ARG, 8/20/10). The ARG review asserts incorrectly "these [trees] have not been shown to be part of any historic designated landscape..." The National Register registration form clearly described the contributing historic gardens: "It is set back approximately... 30 feet from Dayton Street, affording ample space for a fine garden consisting of lawns, shrubs, pathways, a pool with a fountain, and mature plantings of magnolias, bananas, varieties of palms and other trees." The landscape open space is plainly a contributing feature to the National Register listing. The registration form concluded: "Thus while located in the urban context of downtown Pasadena, The Castle Green enjoys an oasis of surrounding greenery... Within the **L** created by this junction of two [Castle and Hotel Green] buildings are located parking lots, garages and other service facilities."

Recent problems with the panacea of design review in Pasadena have evidenced themselves, as described in the Interpreting the Standards bulletin. Based in part on that fact, we believe that City review and approval would not prove or assure conformance with the *Standards for Rehabilitation.* The assertion commonly used by the City of Pasadena that design review reduces future project impacts constitutes deferred

mitigation. If future design review would be adequate mitigation for historic resources impacts, that premise would not sufficiently commit projects to reduced impacts. The premise lacks CEQA-required specific performance standard details. We bring the *Secretary of the Interior's Rehabilitation Guidelines for Setting* to the attention of reviewers, as they apply to new construction in historic districts (underlining indicates emphasis that applies to the proposed project) in Attachment 2.

15

The proposed project does not meet the objectives described in the *Secretary of the Interior's Standards for Rehabilitation*, specifically "Additions for the New Use," which does recommends against: **"**Introducing new construction into historic districts that is visually incompatible or that destroys historic relationships within the setting." This project is both visually incompatible and destroys the relationship between the Hotel Green and Central Park to the south, and the connection between the Hotel Green and Castle Green on its shared corner.

Conclusion

For the past two years several presentations were made by the development team for the 86 South Fair Oaks Avenue project. Community concerns have been clearly and consistently expressed in those meetings, but no benefit has evidenced itself in the overall design approach and treatment. Response has been negligible: weak attempts were made to back-pedal the proposed project into conformance. The development team clearly has no understanding of the unique visual, physical and historic significance of this National Register-listed property in the context of Pasadena and the region. Project proponents would be well-served to engage an experienced historic preservation architect who meets the Secretary of the Interior's Professional Qualification Standards in historic architecture to collaborate on the project design and to advise on whether project objectives are achievable while meeting CEQA requirements.

16

In closing, we believe that the proposed project design is not contextual to its setting and that it should be redesigned. An EIR must be prepared to properly analyze environmental impacts under CEQA. The EIR would analyze alternatives to the proposed project. We trust the Design Commission will seriously consider the effects of the proposed project on the historic property, its setting and the surrounding historic district and will take necessary steps to provide the constructive scrutiny deserved for this gateway site. We appreciate the opportunity to comment on the proposed project.

17

Very truly yours,

Kelly Sutherlin McLeod, AIA
Architect

Francesca Smith
Architectural Historian

Attachments

National Park Service
U.S. Department of the Interior

Technical Preservation Services

ITS NUMBER 41

Interpreting The Secretary of the Interior's Standards for Rehabilitation

Subject: Incompatible Alterations to the Setting and Environment of a Historic Property

Applicable Standards:
2. Retention of Historic Character
9. Compatible New Additions/Alterations
10. Reversibility of New Additions

Issue: Setting is essential to a historic property's significance. Drastic changes to the surrounding grading, landscape features, or incompatible new construction on the site, diminish a historic property's ability to convey its historic significance. Therefore, such alterations do not conform to the Secretary of the Interior's Standards for Rehabilitation.

Application *(Incompatible treatment)*: The rehabilitation of this 1935 Spanish Colonial Revival-style railroad depot involved temporarily removing the structure from the site in order to prepare the site for redevelopment, and then returning the building to the site in a slightly different location. The depot would be relocated about 85 feet south and 21 feet west of its original location, but otherwise it would maintain the same orientation to the street and to the railroad tracks. Relocation of the depot, which required approval from the National Register of Historic Places, did not have a significant impact on the historic setting of the building and appeared to meet the Standards.

However, as more details of the project were provided, it became apparent that the proposed site development would have a negative impact on the historic character of the property. The proposed relocation of the building was not a matter of simply moving the building some distance south and west from its original location. The rehabilitation project also involved excavating the site in order to build an underground parking structure and placing the historic building on top of it. In addition, extensive new landscaping features and new construction several stories taller than the historic depot were also proposed on the site.

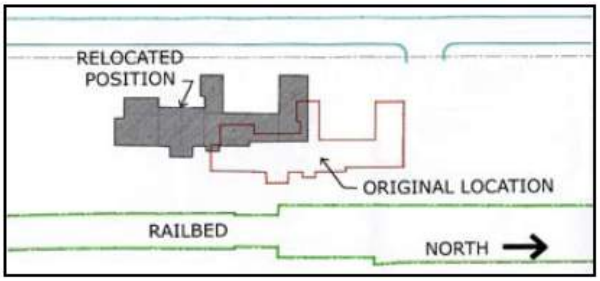


Passenger waiting area before rehabilitation.



Primary street elevation before rehabilitaiton.

The extensive reconfiguration of the site significantly altered the historic setting of the depot. Originally, the building sat



Site plan showing the relocation of the depot on the site.



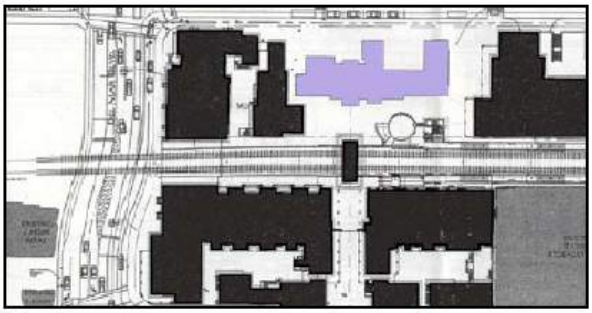
Exit leading to train platform before rehabilitation.



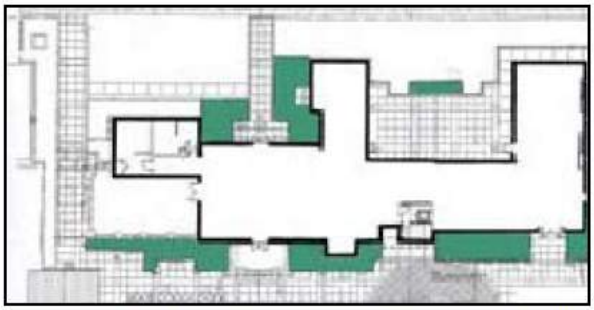
Exit with new steps to former train platform after rehabilitation.

on a slab poured at grade. Historically, minimal changes in elevation between the surrounding grade and the interior floor permitted passengers to pass smoothly from the sidewalk through the building and on to the railroad platform. This gradual, almost imperceptible, change in grade was a significant aspect of the building's design.

When the building was relocated on the site, it was placed on a raised foundation. Because the moved building sits higher than the surrounding grade, steps have been added at the depot's exit onto the former train platform. The new difference in grade also required adding railings between the columns of the formerly open arcaded area. New planters, fountains, diverse paving patterns, and other new features also created an elaborate landscape that is not compatible with the simple and functional setting of the historic depot.



Site plan showing new construction as dark shaded areas.



New landscape plan showing new paving patterns and raised planters (shown in green).



View from northwest corner of depot after rehabilitation showing the surrounding new construction.

Furthermore, the formerly expansive, almost pastoral, landscape that surrounded the depot consisting largely of grass-covered areas dotted with small shrubs, olive trees, and clusters of palm trees has been drastically reduced by the new construction. In addition, the height, massing, scale, and proximity of the new construction dwarf the historic depot building. The cumulative effect of all these changes negatively impacts the historic character of the former depot. Accordingly, the project does not meet the Standards.

Antonio Aguilar, Technical Preservation Services, National Park Service

These bulletins are issued to explain preservation project decisions made by the U.S. Department of the Interior. The resulting determinations, based on the Secretary of the Interior's Standards for Rehabilitation, are not necessarily applicable beyond the unique facts and circumstances of each particular case.

October 2006, ITS Number 41

18

Secretary of the Interior's Rehabilitation Guidelines SETTING (District/Neighborhood)	
Recommended	**Not Recommended**
Design for the Replacement of Missing Historic Features Designing and constructing a new feature of the building or landscape when the historic feature is completely missing, such as row house steps, a porch, a streetlight, or terrace. It may be a restoration based on documentary or physical evidence; or be a new design that is compatible with the historic character of the setting.	Introducing a new building or landscape feature that is out of scale or otherwise inappropriate to the setting's historic character… Comment: The proposed project is out of scale at six stories in height; it need not match the existing historic buildings' heights. It is located an area of lower-rise one- and two-story buildings as well as taller buildings, thus its height should be more transitional to the neighborhood than fulfill its maximum. The proposed bland contemporary design is inappropriate and intrusive to the immediate setting of the separately significant Castle Green and Green Hotel buildings and to the Old Pasadena Historic District.
Alterations/Additions for New Use Designing and constructing new additions to historic buildings when required by the new use. New work should be compatible with the historic character of the setting in terms of size, scale, design, material, color, and texture.	Introducing new construction into historic districts that is visually incompatible or that destroys historic relationships within the setting. Comment: The proposed project is not compatible with the sizes of contributing buildings in the historic district it faces on the west side, the scale and proportion is inappropriate and not clearly articulated, the design is trend-driven, not timeless, and does not respond to its elements in its setting. The proposed design is neither a respectful neighbor to its historic setting and does it impart any special sense of place that is particular to Pasadena or to the Castle or Hotel Green property.
Building Site Minimizing disturbance of terrain around buildings or elsewhere on the site, thus reducing the possibility of destroying or damaging important landscape features or archeological resources.	Introducing heavy machinery into areas where it may disturb or damage [fragile historic buildings] important landscape features or archeological resources. Comment: Failure to use specialized shoring and pile driving methods may cause damage to the Castle or Hotel Green Buildings and potentially to other nearby and adjacent historical resources. This would constitute "material impairment" to the historic resources and therefore "substantial adverse change," an impact as defined in CEQA.
Surveying and documenting areas where the terrain will be altered to determine the potential impact to important landscape features or archeological resources.	Failing to survey the building site prior to the beginning of rehabilitation work which results in damage to, or destruction of, important landscape features or archeological resources. Comment: Unknown.

18

Secretary of the Interior's Rehabilitation Guidelines SETTING (District/Neighborhood)	
Recommended	**Not Recommended**
Protecting, e.g., preserving in place important archeological resources.	Leaving known archeological material unprotected so that it is damaged during rehabilitation work. Comment: Unknown.
Planning and carrying out any necessary investigation using professional archeologists and modern archeological methods when preservation in place is not feasible.	Permitting unqualified personnel to perform data recovery on archeological resources so that improper methodology results in the loss of important archeological material. Comment: Impacts unknown.
Alterations/Additions for the New Use Designing new onsite parking, loading docks, or ramps when required by the new use so that they are as unobtrusive as possible and assure the preservation of the historic relationship between the building or buildings and the landscape. Designing... adjacent new construction which is compatible with the historic character of the site and which preserves the historic relationship between the building or buildings and the landscape. Removing non-significant buildings, additions, or site features which detract from the historic character of the site.	Locating any new construction ...in a location which contains important landscape features or open space, for example removing a lawn and walkway and installing a parking lot. Comment: Requires removal of 6 protected trees (ARG). See discussion of contributing features. Placing parking facilities directly adjacent to historic buildings where automobiles may cause damage to the buildings or landscape features, or be intrusive to the building site. Introducing new construction onto the building site which is visually incompatible in terms of size, scale, design, materials, color, and texture; which destroys historic relationships on the site; or which damages or destroys important landscape features. Removing a historic building in a complex of buildings; or removing a building feature, or a landscape feature which is important in defining the historic character of the site.

Source: Weeks and Grimmer. The *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating Restoring & Reconstructing Historic Buildings:* 102-108 and 112-113.

18

This page is intentionally left blank.

Letter No. 6 Kelly Sutherlin McLeod, FAIA

Kelly Sutherlin McLeod, FAIA
March 11, 2014

Responses

Response 6-1

Comment noted. A single letter dated November 8, 2010 was included as an attachment. While the 2010 letter is not directed towards the Draft EIR, consideration has been given to the comments therein and written responses are provided below in Responses to Comments 6-8 through 6-15.

Response 6-2

Section 3.3, along with Appendix D, of the Draft EIR provides the analysis of potential impacts to historic resources and sets forth the basis and expert opinion for concluding that the proposed building would be subordinate to the historic resources nearby including the existing Green Hotel Apartments and Castle Green. See also Topical Response TR-CR-1.

Response 6-3

Please see Topical Response TR-CR-1 regarding the Draft EIR analysis of impacts to historic resources.

Response 6-4

The alterations to the surroundings of the Hotel Green/Castle Green, Central Park and the Historic District were analyzed in the Historic Resources Technical Report – See Appendix D of the Draft EIR, specifically pages 42 through 46. The individual National Register nomination boundary for Hotel Green/Castle Green was discussed several times in the Technical Report (p. 12) and described in the Draft EIR, specifically in Section 3.3.2. The subject boundary follows the perimeter of the block bound by Green Street on the north, Raymond Avenue on the east, Dayton Street on the south, and Fair Oaks Avenue on the west. Cumulative impacts to cultural resources, including historic resources, are addressed in Section 3.3.7 on pages 3.3-30 and 3.3-31 of the Draft EIR.

Response 6-5

Section 3.5 of the Draft EIR provides a complete analysis of potential construction-related noise and vibration impacts to structures nearby, including the existing Green Hotel Apartments and Castle Green. The commenter provides no elaboration on, or facts in support of, the allegation that the Draft EIR analysis is inadequate. Section II.7, Cultural Resources, in the Initial Study contained in Appendix A of the Draft EIR addresses the potential for encountering archaeological resources and concludes that, with implementation of the standard condition described therein regarding the potential for encountering historic archaeologic resources during project excavation, there would be no significant impact to such resources. The standard condition calls for a targeted archaeological monitoring program that includes, but will not be limited to, having an archeological consultant complete a records search and review the cultural/historic resource reports to identify any areas of archaeological sensitivity onsite, conduct a meeting with the construction crew to assist the crew in identifying potentially significant cultural resources and to identify any potential related concerns, monitor the first two days of grading activities and initial activities associated with the removal of basements, foundations, and/or concrete slabs, monitor the disturbance (e.g., grading, trenching, etc.) of any archaeologically sensitive areas identified through records review and/or preliminary investigation, and prepare a summary report at the completion of monitoring.

Response 6-6

Section 4 of the Draft EIR addresses alternatives to the proposed project. Section 3.3 of the Draft EIR concludes that implementation of the proposed project would not result in significant impacts to historic resources, consequently the identification of alternatives to avoid or substantially lessen significant impacts to historic resources is not required under CEQA. Regardless, the analysis in Section 4 includes consideration of historic resources.

Response 6-7

The City has carefully considered the information contained in the Draft EIR, along with the comments received during the Draft EIR review period and the written responses to those comments, and has made appropriate revisions in this Final EIR.

Response 6-8

Based on the date of this comment letter (November 8, 2010), the comments in the letter are not directed towards the Draft EIR or the historical resources technical report prepared for the currently proposed project. Nevertheless, the City has considered the comments therein and provided the following responses.

Response 6-9

The statements in this comment are consistent with the information provided in Section 3.3 of the Draft EIR.

Response 6-10

The statements in this comment are consistent with the information provided in Section 3.3 of the Draft EIR and the Historic Resources Technical Report (Draft EIR Appendix D); that the boundaries of Castle Green and Hotel Green, which includes the project site, are noted in National Register nomination and reiterated in the Historic Resources Technical Report (page 12) completed for the project.

Response 6-11

This comment in this 2010 letter appear to be directed at a project design that has since changed. The 2013 Draft EIR and associated Historic Resources Technical Report address the potential impacts of the currently proposed project design, including building size, massing, scale, proportions. Also, the subject analyses address view sheds towards the existing historic resources, as may be viewed by the general public, but not from those historic resource, as such view shed are private views not public views.

Response 6-12

The analysis in Section 3.3 of the Draft EIR, along with the supporting technical data in Appendix D, objectively and comprehensively analyzes the proposed project's effects on the adjacent historic resources and the district as a whole. The Zoning Code defines the term "environmental setting" but the National Register nomination for Hotel Green does not state that the environmental setting on the project site is significant. Further, the analysis of the project site in the Draft EIR concludes that there are no historically significant features on the project site.

Response 6-13

There are no federal actions or approvals associated with the proposed project and no federal funding is being used for the project. As such, the requirements of Section 106 of the National Historic Preservation Act do not apply to the currently proposed project.

Response 6-14

Subsequent to the 2010 comment letter, a comprehensive EIR was prepared for the currently proposed project.

Response 6-15

Notwithstanding that comment letter is from 2010, which precedes the design of the currently proposed project and the preparation of the Draft EIR, the types of issues raised in the comment are addressed in Section 3.3 of the Draft EIR, as supported by the technical analyses contained in Appendix D.

Response 6-16

Subsequent to the 2010 comment letter, a comprehensive EIR was prepared for the currently proposed project and included a complete analysis, prepared by qualified professionals, of potential impacts to historic resources. Additionally, as indicated in Section 1.3 of the Draft EIR and reiterated in Topical Response TR-ALT-1, the currently proposed project reflects and evolution and refinement of the development plan introduced in 2007, with the subsequent modifications to the plan being responsive to comments received. Specifically, the project applicant submitted in 2007 an application to the City of Pasadena for a Preapplication Conference for the construction of a six-story, 103,350-square-foot mixed-use project consisting of 8,000 square feet of ground-floor commercial space and 68 residential units with parking for 179 vehicles. The building was a contemporary design that was U-shaped in plan with the building footprint essentially covering the entire lot. In 2010, an application for Preliminary Consultation (the first phase of the design review process) was submitted, which reduced the building to 97,086 square feet and the number of residential units to 64 (commercial space was proposed to remain at 8,000 square feet). The design remained contemporary, although modified from the previous contemporary design. The plan of the building was also modified but essentially remained covering the entire project site with a slightly increased setback from the easterly property line adjacent to the Castle Green. In response to comments provided by both the Design Commission and the public, the design of the proposed project was modified to be more consistent with a late-nineteenth-century design for an addition to the Hotel Green that was planned for this parcel. In 2011, a second application for Preliminary Consultation was submitted which further reduced the size of the building to 84,797 square feet, with the commercial space reduced to 7,450 square feet and the number of units remaining at 64. The design was revised to be more traditional in character and to limit the building footprint to the westerly portion of the project site. The applicant's refinement of the development concept into the plan that is currently proposed included the involvement of a professional architectural historic resources consulting firm – Archaeological Resources Group, Inc. (ARG).

Response 6-17

Subsequent to the 2010 comment letter, a comprehensive EIR was prepared for the currently proposed project.

Response 6-18

The subject attachment has been reviewed and taken into consideration, but does not change the findings of the historic resources assessment completed for the project.

3.3.3 Comments Received at the Public Hearing on the Draft EIR

The following summarizes comments received from the City of Pasadena Design Commission and the public at the public hearing held on the Draft EIR on Tuesday, March 11, 2014, as specifically related to the Draft EIR. Such comments are paraphrased and not written verbatim. In some cases, public comments expressed during oral testimony were read from, or otherwise reflected by, the written comments submitted by the speakers. Comments expressed at the hearing that were not submitted in writing are responded to below, whereas comments expressed at the hearing that were also submitted in writing are responded to above in the responses to individual comment letters received on the Draft EIR.

City of Pasadena Design Commission Opening Questions and Comments

Commissioner Byram: The new building will obscure and block views from Central Park.

> **Response**: See Topical Response TR-AES-1, which describes the additional view analyses completed for the project including view impacts from Central Park.

Commissioner Miller: Why was the segment of Fair Oaks Avenue between Dayton and Del Mar not studied?

> **Response**: See Response to Comment 3-42 for further discussion of this segment of Fair Oaks Avenue.

Commissioner Barar: If you put this new building in its historic context, is the impact on the historic resource considered negligible? The building puts another shade on how view of the historic resources is taken.

> **Response**: See Topical Response TR-CR-1 for further discussion of the cultural resources impacts of the project relative to primary and secondary facades.

Commissioner Moreno: The whole block is historic. Is there a requirement of building material for this certain building development? Is there an impact on historic resources relative to building materials? How does Draft EIR address issues on external materials or construction building type?

> **Response**: The compatibility of building materials and construction building types does not typically come up in an EIR analysis. See discussion in TR-CR-1 related to design review.

Commissioner Hansen: The visual simulations in the EIR show substantial changes in appearance. How did the EIR analysis conclude that there were no significant visual impacts?

> **Response**: The issue of assessing visual impacts is subjective in nature. The EIR describes the thresholds used to determine significance. The visual simulations in the Draft EIR focused on most prominent public views and represent the most impact from the project (i.e., worst-case scenario). The analysis also took into account other existing views around the project site that would not be impacted. The conclusions were based on overall impacts. See also Topical Response TR-AES-1.

Commissioner Hansen: How closely do we need to study the compatibility of building appearances, relative to historic resources?

> **Response**: See TR-CR-1 above.

Public Comments

Doug Carstons (Attorney for Castle Green Homeowner Association):

The comments presented in the oral testimony from Mr. Carstons are included in the written comments that he subsequently submitted to the City. Please see Comment Letter No. 4 above and the associated written responses.

Mike Salazar (Castle Green Homeowners Association):

The comments provided by Mr. Salazar at the public hearing on March 11, 2014 are excerpts from the Draft EIR comment letters submitted by the Castle Green Homeowners Association on March 8 and 9, 2014. Responses to all the comments submitted by the Castle Green Homeowners Association, including, but not limited to, those reiterated by Mr. Salazar, are provided above in Responses to Comments 3-1 through 3-103.

Ann Scheid:

The comments provided by Ms. Scheid at the public hearing on March 11, 2014 are similar to several of the comments contained in her Draft EIR comment letter submitted earlier that day. Responses to all of the comments from Ms. Scheid are provided above in Responses to Comments 5-1 through 5-12.

Jesse Lattig (Pasadena Heritage):

The comments provided by Ms. Lattig at the public hearing on March 11, 2014 are similar to several of the comments contained in the Draft EIR comment letter submitted by Pasadena Heritage earlier that day. Responses to all of the comments from Pasadena Heritage are provided above in Responses to Comments 2-1 through 2-8.

Jack Green (President of Castle Green Homeowners Association): My biggest concern is the massing of the proposed project. This issue cannot be predetermined in this EIR. Because the zoning entitlement goes along with it, and Design Commission's hands are pretty much tied. I think it has to be looked in totality. I'm afraid that the hands of Design Commission would be tied in order to lower the massing of proposed project. Another issue is that parking is highly dependent on Dayton Street. The traffic right of way on Dayton Street is only one car wide. The parking is limited. Where is the construction crew going to park? There is a park playground structure at Central Park. The EPA has determined that children are eight times more susceptible to air quality effects. All the people that own unit property at the Castle Green are subject to Secretary of Interior. You have to have a love for history to live there. The building itself may not be impacted; however, the people that live and own property in that building would suffer the consequences and their ability to preserve the Castle Green is compromised. I think the City has to weight these issues.

> **Response**: The discussion on page ES-3 of the Draft EIR acknowledges that the height, floor area ratio, and setbacks (i.e., building massing) of the proposed project meet the existing development standards for the CD-1 zoning district. No changes to the existing zoning for the project site are proposed. As also noted on that same page, the required parking for the

project would be provided onsite in compliance with the City's Zoning Ordinance; project-related parking is not dependent on Dayton Street. Construction worker parking would be determined as part of the overall development of the Construction Management and Staging Plan as required by the City's Department of Public Works and Department of Transportation. Possible locations for construction working parking in the vicinity of the project site include three existing public parking lots (Park and Walk located at Green Street directly across the street from the main entrance of the existing Green Hotel Apartments, Unified Public Parking Lot located at Fair Oaks Avenue between Dayton Street and Green Street, and Unified Public Parking Lot located on the corner of Fair Oaks Avenue and Dayton Street near the Fire Station). The presence and proximity of the existing playground near the project site are specifically acknowledged on page 3.2-11 in the air quality analysis of the Draft EIR and, based on the application of SCAQMD localized significance thresholds (LSTs), no significant impacts would occur. The comment regarding property owners is noted and is included as part of the Final EIR, which will be considered by decisionmakers in taking action on the Project.

Design Commission Summary Closing Comments

Commissioner Rawlings: I would like to see a review of the scenic views (i.e., of the park) and evaluation of more alternatives. The spatial compatibility of size and mass, in general, suggests having more alternatives.

Response: Please see Topical Response TR-AES-1 regarding the Draft EIR analysis of visual impacts, which includes additional evaluation of view impacts from within Central Park.

Commissioner Hansen: The original (1903) development plan for the project site should be evaluated as a project alternative.

Response: Please see Topical Response TR-ALT-1 regarding the Draft EIR analysis of project alternatives

Commissioner Miller: There is potential for real transportation impacts, especially the way the proposed project is designed. There may be potential for queuing. My suggestion is to have Dayton Street be a westbound one-way street.

Response: The conversion of Dayton Street to a westbound one-way street would not mitigate the traffic impact. This street conversion would only restrict traffic to a westbound direction and not reduce the amount of traffic along Dayton Street.

Commissioner Byram: Need to study alternatives with varied footprint.

Response: Please see Topical Response TR-ALT-1 regarding the Draft EIR analysis of project alternatives.

Commissioner Barar: I suggest that all facades of Green Hotel be considered primary views.

Response: As indicated above in Topical Response TR-CR-1, the related new construction will alter spatial relationships that characterize the property. The most significant spatial relationships of the Hotel Green/Castle Green are the relationships between the primary facades and the public right-of-way (Raymond Avenue, Green Street and Fair Oaks Avenue), and the secondary facades that face south to Dayton Street and Central Park. Views of the

secondary facades will be partially obscured from Dayton Street and Fair Oaks Avenue, however major portions of those façades will remain visible (See Topical Response TR-AES-1). The proposed project will alter but not destroy spatial relationships that characterize the Hotel Green/Castle Green. Even if all of the views of the Castle Green and existing Green Hotel Apartments were considered equally as primary views, the conclusions of the Draft EIR would not change; that the visual/aesthetic impacts of the proposed project would be less than significant for the reasons detailed in Topical Responses TR-CR-1 and TR-AES-1, which include: the project would have no impact on the street-facing facades on Raymond Avenue, Green Street or Fair Oaks Avenue; in circumnavigating the perimeter of the adjacent historic property and the project site, all of the facades of the historic buildings remain open to view from a public right of way, and from Central Park; while views of the west bays of the Green Hotel would be obstructed, those west bays would still be viewable obliquely from the public right of way; no part of the existing buildings on the block would be obscured by the proposed project except for the west end of the south façade of the Hotel Green, and that part of the facade would remain visible from the Fair Oaks sidewalk and from points on the project site.

Additionally, it should be noted that all of the facades of the Hotel Green/Castle Green are significant, character-defining features of the historic property. *Preservation Brief 14*, "New Exterior Additions to Historic Buildings: Preservation Concerns," which is published by the National Park Service as guidance for interpretation of the Standards for Rehabilitation, utilizes the term "primary elevation," which is equivalent to "primary façade" where used.

Following are relevant statements from *Preservation Brief 14*:

"A new addition should not be highly visible from the public right of way; a rear or other secondary elevation is usually the best location for a new addition."

"Generally speaking, preservation of historic buildings inherently implies minimal change to primary or 'public' elevations and, of course, interior features as well."

"Exterior features that distinguish one historic building or a row of buildings and which can be seen from a public right of way, such as a street or sidewalk, are most likely to be the most significant."

"Because significant materials and features should be preserved, not damaged or hidden, the first place to consider placing a new addition is in a location where the least amount of historic material and character-defining features will be lost."

It is acknowledged that all of the facades of the historic structures are significant and can be seen from a public right of way. However, the facades that are contiguous with or nearby and facing a public right of way (e.g., a building line at the property line) are the "most significant," and therefore classified as primary. In this case, the building facades at Fair Oaks Avenue, Green Street, and Raymond Avenue are the most significant, and primary facades. The building facades that face south, mid-block, and the rear side of the east-facing primary façade on Raymond Avenue, are significant and secondary facades. The secondary facades are also differentiated by simpler and less decorative architectural designs.

3.3.4 Individual Responses to Comments on the Recirculated Draft EIR

The following provides individual responses to comments received on the Recirculated Draft EIR published on January 20, 2015, with a copy of each comment letter bracketed to identify the individual comments for which the attendant written responses are then presented.

Letter No. 7

City of San Marino

Planning & Building Department

January 26, 2015

City of Pasadena,
Planning Department
175 N. Garfield Avenue
Pasadena, CA 91109-7125

SUBJECT: **NOTICE OF A RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC HEARING**

Dear Mr. Kevin Johnson:

The City of San Marino has reviewed the Recirculated Draft Environmental Impact Report and appreciates the efforts to mitigate environmental impacts from the project. At this time the City of San Marino has no comment on the proposed project. Thank you for the opportunity to review the Recirculated Draft Environmental Impact Report. We appreciate the notice of a public hearing for planning commission to be held on February 24, 2015. 1

Sincerely,

Emy-Rose Hanna
Intern Planner
2200 Huntington Drive
San Marino, CA 91108
626-300-0784

This page is intentionally left blank.

Letter No. 7 City of San Marino

City of San Marino
2200 Huntington Drive
San Marino, California 91108
Emy-Rose Hanna, Intern Planner
January 26, 2015

Response

Response 7-1

Comment Noted.

This page is intentionally left blank.

Green Hotel Apartments Recirculated Draft EIR **Comments**
February 24, 2015 Presentation to the Design Commission
Mike Salazar for the Castle Green Homeowners Association.

March 2, 2015 DRAFT

City of Pasadena
Design Commission

RE: Comments on Recirculated Draft Environmental Impact Report for 86 S. Fair Oaks Avenue and February 24, 2015 Design Commission Hearing.

Dear Design Commissioners:

Pertaining to the Recirculated Draft Environmental Impact Report for the above-noted project, and in regards to the recent Feb. 24, 2015 Hearing at the Design Commission, there are areas of the Staff Report that should be clarified or corrected. Of note are: **1**

1. While the DEIR has found less than significant impacts *except* for Transportation and Circulation, it should be noted that the community at large has, continually since before the Initial Study up to this R-DEIR, raised significant objection to this limited conclusion. Speakers and written comments have cited possible impacts continually ignored or under-evaluated, such as but not limited to Aesthetics, Air Quality, Cultural Resources, Greenhouse Gas Emissions and Noise & Vibration, as well as in regards to Transportation and Circulation. **2**
2. The Staff Report anticipates this Commission will eventually adopt a Statement of Overriding Considerations. However, that is only if the Design Commission accepts the Final EIR as adequate. Staff Report fails to note out that there are other alternative routes that the Commission may consider. The Design Commission has not been briefed as to the full range of its review options, as is required under CEQA guidelines. In addition to the Statement of Overriding Considerations, to certify/adopt the Final EIR the Design Commission would have to also have to create a Mitigation Monitoring and Reporting Program and EIR Findings addressing the EIR conditions and those continually raised by the comments but potentially not addressed in the Final EIR. **3**
3. The Staff Report states the “remaining four levels” above the ground floor retail contain 64 residential units. In fact, it is “five remaining floors” above ground floor retail. *PLEASE NOTE that this same error was contained in the March 11, 2014 Staff Report. It was then pointed out, but was forgotten or overlooked.* **4**
4. The Staff Report erroneously states ground floor parking at grade is tucked under the eastern side of the building. In fact, fully 50% of ground floor surface parking is exposed and dominates the open space on the ground floor. And not all “replacement” parking is below ground. In fact, four (4) of the ground floor surface parking spots are replacement parking for the existing Green Hotel Apartments. *PLEASE NOTE that this same error was contained in the March 11, 2014 Staff Report. It was then pointed out, but was effectively forgotten or overlooked. It was also contained in the 2013 Initial Study, pointed out in public comment and not addressed.* **5**
5. The Staff Report states 167 Project parking spaces, yet plans and other areas of the DEIR state both 167 and 169 parking spaces. I believe it is Table 2-3 (Floor by Floor Details) that states 20 parking spaces on ground floor, and Figure 2-5 (Site Plan First Floor Layout) that shows 24 spaces on the ground floor. *PLEASE NOTE that this same error was contained in the March 11, 2014 Staff Report. It was then pointed out, but was effectively forgotten or ignored*. **6**
6. The Staff Report should clarify the “entitlements” stated that will be brought to the Design Commission are merely the Concept and Final Design Review. **7**

The basis for the "Recirculated Draft Environmental Impact Report” (**R-DEIR**) seems to be that the public is being asked to consider the **R-DEIR**'s "important correction" (“correction”) and its impacts that doubles the daily trips generated by the Project and Alternative 2 onto the Dayton Street Segment above levels previously reported in **8**

the Draft EIR and Traffic Study Appendix H. This "correction" is being characterized as essentially a numerical error in the DEIR than a substantive one – a 'correction' that only impacts the traffic trips from the Project & two Alternatives on the Dayton Street Roadway Segment. This 'correction' is reinforced as such because ***no other corresponding traffic & circulation data*** - like intersection loads or other Roadway Segment loads - no other traffic 'numbers' in Section 3 and throughout the R-DEIR have been adjusted in the least. **8**

Yet this "correction" *has* impacted other areas of the DEIR, most notably the Alternatives (Section 4), *albeit selectively*. The 'correction' has had a *major impact* on the Smaller Scale Alternative that is "considered but rejected as [financially] infeasible," apparently requiring this Alternative to be cut down to *less than half its size*. We still have no data or proof that financial infeasibility exists, (or at what level of project size that financial feasibility exists), the reason this Smaller Scale Alternative was rejected.

But while the "correction" doubles the "significant traffic and circulation impacts" for the big Alternative 2, it has failed to generate the slightest of change to Alternative 2; just the numerical corrections, and again without any explanation of the scope of change as noted above. What this "correction" should have done is generated a more appropriate and less-impactful Alternative 3 around the 50% or less size range (below the last year's acceptable 313 daily trip range), utilizing mitigation measures ignored in every single Alternative proposed or rejected. **9**

We also need to know if any other **full Project** and the **Reduced Height Alternative 2** impacts dealing with vehicles in the remaining DEIR, such as but not limited to Air Quality (operational emissions) and Greenhouse Gasses (operational GHG emissions) have been examined due to this "correction," and if in fact they are reflective of the "corrected" 626 and 479 daily trips (respectively). These two Sections mentioned (Air Quality & Greenhouse Gasses) have *not been adjusted in the R-DEIR.* This must be confirmed as well, as Staff was unable to confirm this at the Feb. 24, 2015 hearing. Which begs the question, "Are there other areas that may have *vehicular impacts* due to the doubling of trips on the Dayton Street Segment that require further adjustment/review/comments prior to issuing the Final EIR?" **10**

In addition, essentially none of the impacts outlined in the Castle Green HOA Comments (March 10, 2014 letter from Chatten-Brown & Carstens LLP, including Tom Brohard Comments) in last year's (2014) DEIR hearing seem to be addressed, let alone resolved. These comments by and large stand, and should be considered *resubmitted* for question under this R-DEIR. *This letter is attached to this submission.* **11**

Ultimately Staff must clarify these and other points, but more importantly the Final EIR must address and resolve them or risk being declared inadequate. The Design Commission, under their CEQA responsibilities, must also insist the above points are clearly addressed and resolved in order to make legal Findings, one way or another. **12**

The following are comments on the R-DEIR Sections that are specifically noted as affected by the "correction" and those that elaborate on comments so far presented. I will apologize in advance, as there is some repetitive discussion of issue that cross the Section divides. But I have chosen to err on the side of being more inclusive so as not to risk the varied and often related impacts from the R-DEIR "correction" and items still seen as omissions or incompletely addressed.

SECTION 1.0
In the first Section of the R-DEIR, "Introduction to the Recirculated Draft EIR," the first paragraph says, "Specifically, important new information is presented in this Recirculated Draft EIR relative to the proposed project's impact on Dayton Street between Fair oaks Avenue and Raymond Avenue. That important new information consists of a correction to the amount of project-related trips indicated in the Draft EIR as occurring on Dayton Street. No other aspects of the original Draft EIR, including environmental setting, impacts, mitigation measures, and alternatives, have materially changed. As such, consistent with …. (CEQA) Guidelines, this Recirculated Draft EIR only includes the traffic-related information that was updated/revised from the Draft EIR." **13**

This is false, and should require a re-notification effort in order to factually portray the scope of material changes related to Alternatives that are identified in Section 4 of this R-DEIR. This statement says that, No other aspects of the original Draft EIR, including the… alternatives, have materially changed." In fact, the "Smaller Scale Alternative significantly changed solely because of this "new information." The change to this alternative went well beyond traffic-related information. It went to the very make-up of the alternative. **13**

While Section 1.3 additionally mentions "related corrections within Section 4," this again is a false characterization of the complete change required of the Smaller Scale Alternative.

SECTION 3.6
In the Recirculated Draft EIR (**R-DEIR**), what is described as "an important correction" to the **Section 3.6 Transportation and Circulation** is that last year's DEIR's Average Daily Trips impacting Dayton Street Segment is *not the stated* 313 trips (a 35.4% increase), but a doubling of that number to a whopping **626 daily trips.**

Yet despite this, there is still:
- NO specified Project-related "hard measures" studied or required for needed mitigation for the Dayton Street Segment that is now impacted *twice the rate* of the DEIR. In fact, not even any "soft" measures for traffic/circulation mitigation are proposed, identified and studied, which seems necessary for this project to move forward. **14**
- NO specified Project-related "soft measures" studied or required for mitigation for the Dayton/Fair Oaks & Dayton/Raymond unsignalized intersections that are impacted by Dayton Segment trips, yet not addressed. In fact, no "hard" measures for traffic/circulation mitigation are proposed for these two intersections, which seem necessary for this project to move forward.
- NO revised study of the impacts on Pedestrian or Biking quality ratings for the Dayton Street Segment. In fact, it has not be clarified which traffic numbers both the PEQI & BEQI studies used to come up with their DEIR conclusions, unchanged in the R-DEIR.

Pg. 3.6-45. Why, if the Dayton Street Segment trips have doubled, is there no change or additions in the ADT impact in Table 3.6-10 in the form of specific soft and hard measures? This table sets a 7.5% increase threshold for daily trips, yet instead of the DEIR's 35.4% Project increase and 27.9% Alternative 2 increase in trips on the Dayton Street Segment, we have a whopping 70.9% & 54% increase, respectively. In doubling the significant and unavoidable traffic/circulation impacts (and the severity), why is the Project and Alternative 2 still only subject to some future "soft" measures for future mitigation after project is approved? ***This Project is now almost 10x the City-accepted threshold of 7.5% increase in daily trips.*** **15**

With this "correction," still only a "Payment of fees to fund overall general transportation and circulation improvements in the project vicinity" per P. 3.6-45 with a "Do Not Block Driveway" sign at a singular Project driveway remains all that is called for – absolutely NO CHANGE from the DEIR. This is not only inadequate, but the doubling of the impact from DEIR to R-DEIR should require the proposal of specific soft and alternative hard mitigation measures as a condition of Project approval.

Which further begs the question, given the "correction," what additional studies/evaluations were made beyond last year's DEIR to continue to conclude that no feasible measures are available to mitigate this new impact?

Pg. 3.6-46. Why isn't Table 3.6-11 (Mobility Elements Policies), Policy 4.4 further reviewed given the doubling of Dayton Segment trips? It states, "Design intersections… to achieve safe interactions for all modes of travel…" This must happen as part of Project review, and not after the fact. Ignoring the Dayton Segment and the connected intersections is not consistent with CEQA guidelines, and grounds for declaring the Final EIR inadequate. **16**

Pg. 3.6-48.
Why is there no clarification of the RED text, and no ~~strikeout~~ of the erroneous DEIR numbers in Figure 3-6.13? **17**

Why is there no corresponding “Raymond Ave. & Dayton Street” intersection diagram included in figure 3.6-13, as it has an almost equal impact as the included Fair Oaks & Dayton intersection?
Why is there no queuing analysis of Dayton Street at the Raymond intersection?

17

Pg. 3.6-49. Figure 3.6-14.
Why is the Fair Oaks & Dayton St. intersection falsely indicated as a simple cross-traffic intersection, and not as the hazardous, full offset intersection it is?
Why does Figure 3.6-14 omit queuing at Raymond Ave.?
Why does Figure 3.6-14 omit driveway indications for Castle Green rear parking?
Why is there no indication here (nor mention *anywhere* in this report) of the Fire Access route for the Castle Green at the south edge of the frontage on Dayton Street?

18

Now that traffic numbers have doubled on the Dayton Segment, connected intersections should require mitigation measures to be identified and evaluated as part of this Project as called for in the DEIR review comments. It is the proposed Project, as well as Proposed Alternative 2 that both make this Segment and connecting intersections go from bad to worse in the severity of significant and unavoidable impacts. This should be likened to the omission of the pedestrian crosswalk/access at the controversial IDS project, only worse. That omission was a much simpler fault, compared to this issue, and that resulted in a successful action requiring the mitigating of impact and the restudy of Alternatives that significantly reduced the IDS Project overall size and impacts.

Pg. 3.6-51. Doubling the daily trip volume on the Dayton Segment will surely impact emergency access, yet no change has been analyzed, no additional review of the Fire Department has been indicated in the R-DEIR. Current analysis is based on 50% less impact/traffic, and must be updated in the Final EIR to include all relevant Fire Access issues, such as (but not limited to): a) Dayton & Fair Oaks intersection in relation to trips and Fire Signal crowding of intersection, b) Fire Access roadway standards for all roadway segments (including the unstudied Fair Oaks segment south of Dayton to Del Mar Blvd., c) Fire Access to the existing Green Hotel Apartments, d) Fire Access to the existing Castle Green.

19

Pg. 3.6-52. Doubling the daily trips volume on this Segment will surely lower the PEQI & BEQI scores, yet no additional review has been made despite doubling vehicular traffic on this Segment and connected intersections. Also, no mention of this “correction” affecting the relatively new increase in vehicular and pedestrian traffic for the larger new Central Park Playground directly opposite the project.

20

SECTION 4 - Alternatives
It should be noted that in the introduction paragraph (Pg. 4-1) to this Section, the “correction” is only partially represented, specified as impacting 4.6.2.6, yet omits its major impact on 4.4.4. This has the effect of not only diminishing the actual impact of the “correction” changes, but could lead to the public possibly skipping over the important revision to Section 4.4 “Smaller Scale Alternative,” and this error must be corrected.

How this “correction” impacts 4.6.2.6 is inadequately specified in the intro paragraph, with the R-DEIR using a generically vague phrase, “updated to present new information” in describing the impacts one part of Section 4. What's important to note is that the "correction" of doubling the daily trips on the Dayton Street Segment as described in Section 3.6 actually impacts Section 4 Alternatives, *albeit for some reason applied selectively*, in the R-DEIR.

21

From our perspective, all comments on Alternative 2, a still-missing Alternative 3 and the unrealistic *Smaller Scale* 6-unit Rejected Alternative, as well as all Alternatives considered are valid topics for comment in this R-DEIR review.

The R-DEIR applied the "correction" to the "4.4 Alternatives Considered but Rejected as Infeasible," requiring a *significant modification* to downsize the still-rejected "Smaller Scale Alternative" (4.4.4) as noted below. Yet when applied to Alternative 2 in "4.3 Selection of Alternatives for Analysis," it only changed traffic counts for Dayton Street Segment, and nothing else, despite the doubling of significant and unavoidable traffic/circulation impacts.

That is cherry picking and biased, in not applying it *further* to Alternative 2 and more importantly in not creating Alternative 3 with significant mitigation measures required. Here's how it breaks down: **21**

Alternative 2: The proposed **Alternative 2 (4.3)** in the **R-DEIR** is recalculated to add 479 daily total trips to the Dayton Street Segment, a 54% project increase that is *7-times* the City-accepted 7.5% ADT increase – a *doubling* of the DEIR's erroneous total of 239 daily trips. Yet there are absolutely NO OTHER CHANGES to Alternative 2, and we are now to accept that it actually makes traffic much worse than last year's DEIR full Project's reported 313 trips. Alternative 2 should have been reexamined for reconsideration, with mitigation measures identified and applied to meet CEQA requirements. Yet nothing of the sort happened.

In the DEIR **Section 4.6.2.6** on Alternative 2, there are *four specific references* to the erroneous 313 daily trips for the Project and 239 trips (and 27.1% reduction) in Alternative 2, corrected in the R-DEIR. Yet in the DEIR, (in the 3rd, 4th and 5th paragraphs and in Table 4-6) the erroneous trip numbers are referenced as the *justification for* Alternative 2. (Only one table - 4-5 - does have the 'corrected' figures in the DEIR). Yet the **R-DEIR** only corrects these numerical entries to reflect the 626 & 479 respective Dayton Segment trips, and provides no further explanation, unlike the completely revised 13-unit Smaller Scale Alternative (4.4 below) that is completely revised. **22**

Alternative 3: Due to Alternative 2's increased severity of significant and unavoidable impacts on the Dayton Street Segment, to better represent CEQA's purpose, a valid **Alternative 3** should have then been created and analyzed in this **R-DEIR**. This should be around the 50% density figure (or less if necessary), and include actual mitigation 'soft' and 'hard' measures. This was likely a judgment call that seems to fail CEQA intent if not requirements.

An Alternative 3 in this case should be required to *not exceed* the 313 daily trips erroneously reported for the Project in the DEIR. The 313 trips seemed to be a level of impact that both the City and Developer supported. *It should be noted that Table 4-5 from the DEIR already had the correct Trip Generation numbers (626 for the Project on Dayton Segment), and 479 for Alternative 2.* **23**

However, if there was an Alternative 3 with 313 maximum trips or there about, that would represent a 50% reduction of the severity of impacts from the Project, a common threshold for CEQA Alternatives that is missing. This possible Alternative 3 would also represent a 35% reduction from Alternative 2, and would clearly be the superior Alternative. This is a missed opportunity, which is why this EIR remains inadequate. There is also no doubt that an Alternative 3 would be considered 'financially feasible' as well. With 'soft' and 'hard' mitigation measures a possibility, we see this option as necessary per CEQA rules.

"Alternatives Considered but Rejected as Infeasible" (4.4): Because last year's DEIR Alternatives were apparently based on the *erroneous* 313 daily trips on the Dayton Segment, the DEIR's proposed a 13-unit residential-only project (with no retail) as the "Smaller Scale Alternative" (4.4.4), because **13 units** was then the artificially induced threshold to keep traffic and circulation impacts "less than significant" without any mitigation whatsoever. The DEIR rejected this Alternative *only* because it was determined to be "financially infeasible" without providing one bit of evidence or guidelines to make this determination. (Public comments at the time asked for the back-up data to prove this, yet the R-DEIR provides none). Nor was there any explanation of why the Smaller Scale Alternative had no mitigation to allow a more financially feasible and realistic option. **24**

Now, in the **R-DEIR** as a result of the "correction," the "Smaller Scale Alternative" is reexamined and **significantly reduced to only 6 residential units,** *less than 50% of last year's 13 units,* to reduce traffic/circulation to less than significant levels. Again, this Alternative is rejected for the same stated reason (Section 4.6.2.6) in the R-DEIR. And again, there is no explanation (or guidelines) of why the

Smaller Scale Alternative had no mitigation measures to allow a more financially feasible and realistic option. Clearly the "correction" significantly affected this Smaller Scale Alternative, triggering a complete revision. **So why did it NOT require the same for other "considered but rejected Alternatives**? **24**

Why, for a Smaller Scale Alternative, wasn't the *existing* Fair Oaks driveway retained to allow a more realistic and financially feasible project for consideration by taking direct trips off of Dayton Street Segment? (See the following 4.4.1 for more on this existing Fair Oaks driveway). To use the excuse that only a 6-unit project would result in *less than significant traffic impacts* on Dayton Segment, when the existing 60-space lot has a second driveway on Fair Oaks, seems disingenuous, given the massive impact the Project and Alternative 2 have. How does this meet the spirit, if not the letter of CEQA? **25**

Providing such a lowly Alternative of 6 units only is laughable, and so close to "no project" that it is viewed as a waste to consider seriously by the community or the developer. It is hard to see how this meets CEQA, as its *only* justification is the artificial application of "less than significant impacts" *without any mitigation whatsoever.* **26**

Section 4.4 "Alternatives Considered but Rejected as Infeasible." In addition to the "Smaller Scale Alternative" changes noted above, this Section says that the R-DEIR again considered three other rejected alternatives: "Alternate Access Alternative," "Off-Site Parking Alternative," and "Alternate Site Alternative" yet made no changes whatsoever despite the doubling of Dayton Street Segment traffic impacts. What new review has taken place since last year's DEIR on these Alternatives, in light of the increased severity of significant and unavoidable impacts in the R-DEIR on the Project, Alternative 2, and the Smaller Scale Alternative (rejected)? This lack of revision is subject to question, since these Alternatives – individually, partially or in some combination - could help mitigate some of the 50% increase in daily trips from the R-DEIR's Project & Alternative 2 on the Dayton Segment. This was a choice by the **R-DEIR** not to partially or fully reconsider these Alternatives, and that's reason enough to declare the inadequacy of this Report. **27**

4.4.1 Alternate Access Alternative: Perhaps what remains missing in all of the evaluations of this EIR process to date is the overlooked fact that **today their exists a second driveway from the existing 60-space surface parking area** that actually is **on Fair Oaks Avenue.** This Alternate Access driveway is virtually *omitted* from identification and discussion in the body of this R-DEIR and the DEIR. I can only find one indication of it, albeit without any identifying text, on the unrelated Figure 3.1-2 (in the DEIR), "Location of On-Site Trees."

Was this existing Fair Oaks Avenue driveway studied for retention? Is it buried in the Appendix H, making it hard for the public to find? Why has a project (and alternatives) been selected that actually removes this existing mitigation access from use, effectively *choosing to* creating a high level of significant and unavoidable impacts and unnecessarily increasing the severity of them on tiny Dayton Street when faced with the true level of impact of the R-DEIR's "correction." **28**

Again any consideration of a Fair Oaks Avenue access – for all or some of the Project or Alternative 2 daily trips – was again explained away without any modification from the DEIR. Was the severity of Dayton Street Segment traffic "correction" not enough to reconsider this opportunity? Was the fact that the Dayton & Fair Oaks intersection remains unchanged and unstudied in the R-DEIR why a Fair Oaks Avenue Project or Alternative 2 access still is not considered? And why has the R-DEIR failed (as did the DEIR) to present any quantifiable data confirming exactly what study of this (and other rejected Alternatives) has been made and when?

It's easy math to say that if the current 60 replacement parking spots for the existing Green Hotel building use Dayton Street both presently and in the R-DEIR scenarios, why not consider the separate Fair Oaks

Avenue access for these vehicles? Has this existing driveway been studied for limited use? We're talking about providing a driveway, not necessarily a second ramp. Already, the vast majority of the ground floor "open space" is paved/access/parking use. If this takes a proportionate number of daily trips off Dayton Street, then that proportional number of new units, in addition to the 6 units, would lead to "less than significant" impacts. This should be the basis of Alternative 3, triggered by the doubling of daily trips on Dayton.
And if there is even any hope of this project providing on-block parking for the adjacent Castle Green Condominiums, this Alternative Access MUST be studied.

The R-DEIR can't on one hand say that a Fair Oaks Ave. access is infeasible due to the high volume on Fair Oaks without providing any proof (or aspects studied), then say that the Fair Oaks & Dayton intersection needs no improvements. It is most likely that retaining the existing Fair Oaks access is a challenge due to the *existing* roadway configurations at the West Dayton & East Dayton intersections and lesser due to solely the "volume." Yet there is a failure to analyze this issue – one that is left ONLY to create significant & unavoidable impacts.

Another aspect that remains incomplete in this R-DEIR is that this Alternative only considers southbound [INBOUND] project traffic as reason to eliminate Alternate Access on Fair Oaks, by reasoning that because southbound [inbound] traffic would turn left on Green ST., the make successive right turns on Raymond, Dayton and Fair Oaks to get into a FO driveway, so the number of vehicles using Dayton Street would still be high.

Yet this 'analysis' again fails to objectively balance its review in examining Fair Oaks Ave. access 'outflow' or northbound traffic *benefits* as well. The correlating *outflow* traffic from a Fair Oaks access would *benefit* Dayton Street. That outflow traffic leaving the Project (and Alternatives) would *significantly* reduce the additional trips on Dayton, as traffic would primarily head north (in using the 'southbound' reasoning). Then outbound traffic to south could turn right on Green Street (low impact), then turn right on Raymond (low impact) and head south to Del Mar (very low impact). Seems like a win-win. This is easily achieved by restricting left turns on Fair Oaks from project, thereby eliminating most Dayton traffic outbound. Was this considered?

Unfortunately 4.4.1 only appears to consider one particular type of trip to make a snap judgment against *any benefits* of Fair Oaks Ave. access, yet provides NO evidence or studies to validate the omission of any Fair Oaks Ave. access for the Project or Alternatives. This one-sided consideration of the inbound traffic points out yet another BIG inadequacy of this R-DEIR process.

28

4.4.2 Off-Site Parking Alternative: Staff has again cited that Off-Site parking is not permitted by code, yet this is NOT adequate reason for it not to be restudied (or studied in the first place as the case may be). This section fails to acknowledge that the current Castle Green's 51 units predominantly rely on Off-Site parking, with City approve, to this day. This is a prime example of why Off-Site parking has been inadequately studied, and why it deserves to be studied.

29

For such a significantly historic block, and because of the proposed Project and Alternative 2 significant and unavoidable impacts on Dayton Street, this should be reason enough to have brought forth as a possible required mitigation measure. Yet Staff says it is not allowed, and nothing more, raising the question, why this adequately studied giving the R-DEIR "correction."

4.4.3 Alternative Site Alternative: Was this option again restudied for the R-DEIR process? If not studied since last year's DEIR, this is another inadequacy. And what is the point of this section if it can be explained away simply because an owner has no other adjacent property or no "control" of other area properties. What efforts has this owner made to investigate this for the R-DEIR process since last year's DEIR review? Has the City required the owner to make new efforts for this R-DEIR? This needs to be answered.

30

The R-DEIR, along with all previous iterations, avoids the necessary/required work of an adequate EIR to actually consider appropriate Alternatives with mitigation measures that would *reduce the severity* of and the level of significant and unavoidable project impacts. Alternative 2 begins to do that, but clearly a "feasible" Alternative 3 should have been created by now. In fact, Staff stated that it was not the City's responsibility to create every single alternative. Yet this appears to be an excuse to avoid more appropriate Alternatives scenarios with soft and hard measures that actually mitigate some impacts.

This R-DEIR continues to hide behind the statement that "the addition of 43 new daily trips would exceed the threshold and result in a significant and unavoidable traffic impact to this street segment," as if no mitigation measures or alternative measures should or can be considered for study and application to the Project and Alternatives. This R-DEIR fails to objectively state the actual situation: "WITHOUT ANY MITIGATION, the addition of 43 new daily trips would exceed the threshold and result in a significant and unavoidable traffic impact to this street segment." With mitigation measures such as, but not limited to the rejected Alternatives, a new Alternative 3 project could actually be the most appropriate project. Without any mitigation measure for Alternative 2 and no Alternative 3, the inadequacy of this R-DEIR is glaring. **30**

Section 5.0 Other CEQA Considerations
The **R-DEIR** also has reference to the "correction" in **Section 5.2 Significant and Unavoidable Impacts**. It states that Section 3 used the erroneous trip numbers, then corrects those numbers, and eliminates the phrase "to this intersection" without a replacement phrase. What they failed to correct is to *change* this phrase ("to this intersection") to "in this segment," referring to the Dayton Street Roadway Segment where impacts have doubled. Here is where the R-DEIR should have provided more clarification of what type of error the "correction" represented and its full scope of impact. **31**

Appendix H
This is the last identified area of change in the **R-DEIR, the Traffic Impact Study.** What's most inadequate about how the R-DEIR 'correction' is handled is that the Traffic Impact Study makes absolutely no mention, nor explanation anywhere in its body of the "correction" until you actually come across the first *numerical-only* correction (identified only by RED text) on the 40th page. Appendix H retains the same June 2013 general date, and the same June 11, 2013 internal letter with *absolutely no mention of corrections* or *being part of* or *as a result of* the "correction" in the **R-DEIR**. This puts the public at a disadvantage. **32**

These *three* numerical changes are only reflected in RED text, on pages 40, 41 & 57. These appear to be minimal numerical corrections only, without so much as a single explanation and raise the question if they have impacts on other data, and if not, why is it? **33**

It also seems that this Study omits any mention of the existing site driveway on Fair Oaks Avenue, and why it was removed and not considered. No plan document indicates the two driveway access points (on Dayton Street and on Fair Oaks Street). **34**

No explanation why Green Street at Fair Oaks and Green Street at Raymond intersections were not studied. **35**

There is no mention of the Fire Station signalized stop in Fair Oaks Avenue description (Pg. 9), nor of the Valley signalized intersection and Orange Pl., compounding the question why this Fair Oaks Roadway Segment is omitted from study. While it appears that the Project increase trips on this Segment may not meet the City's *numerical* threshold for study, clearly its challenges should have required its study. **36**

Apparently Table-8 had the correct 626 daily trip numbers in the DEIR, as no correction is noted. **37**

Did the PEQI & BEQI results utilize Figure 23 of the Traffic Study? **38**

There is no description of Green Street in description (Pg. 8-9). **39**

ADDITIONAL AREAS of Concern raised by "Correction"

Economic Feasibility as a measure to restrict, disqualify or reject Alternatives.
To date, it should be clear that the City has provided absolutely no quantifiable material to the Design Commission or to the public of the financial infeasibility of project Alternatives, nor has the City provided any information on how this determination was made, nor of the information used to make such a determination, such as thresholds or standards.

It is not easy to initially comprehend how a property purchased in the early 1970s for about $106,000 must have such an impactful level of construction to be financially feasible, given that it is the smaller portion of this property purchased decades ago. The fact that this remained 'open space' as unimproved land *essentially since its 1895 inception as park of West park, and since its 1970s purchase* seems to indicate some financial viability as a low-or-no-build parcel.

We are now at the Recirculated Draft EIR phase and once again call upon this and other relevant information determining financial infeasibility be made public, and an appropriate Public Comment period and hearing be provided for public review, analysis and comments to be made. To wait until the Final EIR is released for disclosure of feasibility standards seems to be a detrimental and unnecessary delay. Given that Staff has been able to make a financial infeasibility judgments in last year's DEIR, and then again due to this R-DEIR's "correction," why is there a delay in making this information available right away?

Until such time, it is with the utmost level of concern that this R-DEIR is inadequate as presented. It is essential to understand the CEQA rules allowing disqualifications based on financial infeasibility, and to not appear or to show bias in consideration of Alternatives. **40**

DESIGN REVIEW
The instructions to the Design Commission on Feb. 24, 2015 for the anticipated Concept Design Review are of concern. Staff's instructions at this hearing may have given the casual observer the impression that only numerical proscriptive building codes are what dictate Concept Design approval of the Project. Furthermore, Staff mentioned that no height, size, etc. could be changed due to concerns about the Final EIR. However, what Staff failed to objectively acknowledge is the ability of the Design Commission to consider and apply the Secretary of Interior Standards, and to not approve the project. **41**

Here are some reasons for being able to reduce the height or size due at Design Review (and not inadequacy of the EIR issues):

Reason 1: The EIR fails to adequately address impacts to historic and cultural resources, as myriad public comment has pointed out over the multiple hearings. Citing Old Pasadena Guidelines and Standards with findings could actually make a case for less height and size. Because a numerical threshold may not have achieved an "impact" in an EIR doesn't mean that there is no impact to address. **42**

Reason 2: The building envelope of the original proposed project was reduced after great outcry in 2008 & then again in 2010 or 2011. The code allows a ridiculous 97,069 square feet of buildable area, based on lot size and an FAR of 3.00. This zoning capacity was protested in the 1990s before becoming law as part of the General Plan overhaul. Giving this most historic site *TOD* density was a mistake then and is proven by the very modifications we have witnessed by the Applicant over this project's long life.

The City approved an overbearing FAR on this parcel, essentially ignoring the highest historic significance for this block, and all of the surrounding parcels of this block that have *significantly lower buildings*. In fact, the average height *allowed* in the four adjacent blocks is 38.75' of building height (Central District Height Map). And most buildings (except the Schoolhouse Parking Structure) surrounding this site, many from the turn of the 20th century-era, are at or around the 40-foot threshold. And Central Park is a zero-build site.

Reason 3: The lot coverage of this project has significantly reduced after great outcry, and is far less than the prescriptive code allowances. Far more lot coverage is actually allowed, and if only codes were used, the project would cover far more than it does today. In fact, why wasn't a bit *more* lot coverage considered in Project Alternatives to reduce impacts, such as height, view, air, light, etc.? Even though these were not identified in the EIR as being *significantly* impacted, the public comment sees it otherwise, and the application of codes and guidelines would provide the ability to identify this impact and mitigate it (as possible with the Secretary of Interior Standards). **42**

Reason 4: Just because zoning in place allows for 6 stories doesn't mean that it is allowable under guidelines in place. There are many zoning components in Old Pasadena that govern this site. The zoning numbers state that a particular FAR and a maximum height is permitted, or "allowed" on this site. They are not the only requirements – just the most easily quantifiable requirements. The negative impacts of a 6 story building, similar if not almost equal in height to the most historically significant existing building complex in Old Pasadena, "allowed" by current zoning numbers is hard to mitigated, but arguably would not be *allowable* in objectively applying the Secretary of Interior Standards & other Guidelines applicable in Old Pasadena – guidelines with more 'subjective,' non-numerical application.

Bullet points on the DEIR's general project issues (Areas of Controversy) that need to be addressed with this the "correction" to the Traffic/Alternatives in the R-DEIR: **43**

1. Height inappropriate for this most-significant historic site, with the Project being similar height to landmark structures on the very same block. Further reduction of height could have significantly lessened the severity of significant and unavoidable impacts beyond Alternative 2. **44**
2. Setbacks on Dayton Street could go a long way to provide the physical area to attempt to realign Dayton Street to reduce traffic impacts driven by the R-DEIR corrections. As it is, this Project and Alternative 2 with a Dayton Street zero-setback eliminates any ability to address this significant and unavoidable impact. This is a glaring inadequacy, as the one physical location to make needed mitigation is not studied or even discussed. **45**
3. Additionally, a setback on Dayton Street is necessary for Project (and Alternative 2) not to dominate this historic site, to appropriately respect/acknowledge the adjacent Castle Green that is setback 18 feet at the ground, and about 30 feet 2nd-6 floors from the Dayton frontage, and the *zero-density* historic Central Park. This Project completely crowds the Dayton/Fair Oaks corner, blocking historic views and unnecessarily eliminating the only logical area to physically address traffic mitigation measures. A Zero setback dominates and disrespects this historic settings and historic surroundings (and is detrimental to historic views and traffic access/safety). **46**
4. Fair Oaks Avenue access now must be reviewed and made feasible, especially in light of the *doubling* of the actual traffic loads on narrow Dayton Street (and the City policy declaration that NO parking should be removed from Dayton Street). **47**
5. The 626 added daily trips on Dayton Street Segment represent a 70.9% increase in Average Daily Traffic (ADT) volumes. The City maximum increase is 7.5% (Page 3.6-23) to create significant impacts. This Project represents a 9.4x increase, and 8.4x above the acceptable 7.5% increase. Dayton Street is an important eastbound fire access roadway, and provides the ONLY fire apparatus access to the City Treasure Castle Green. **48**

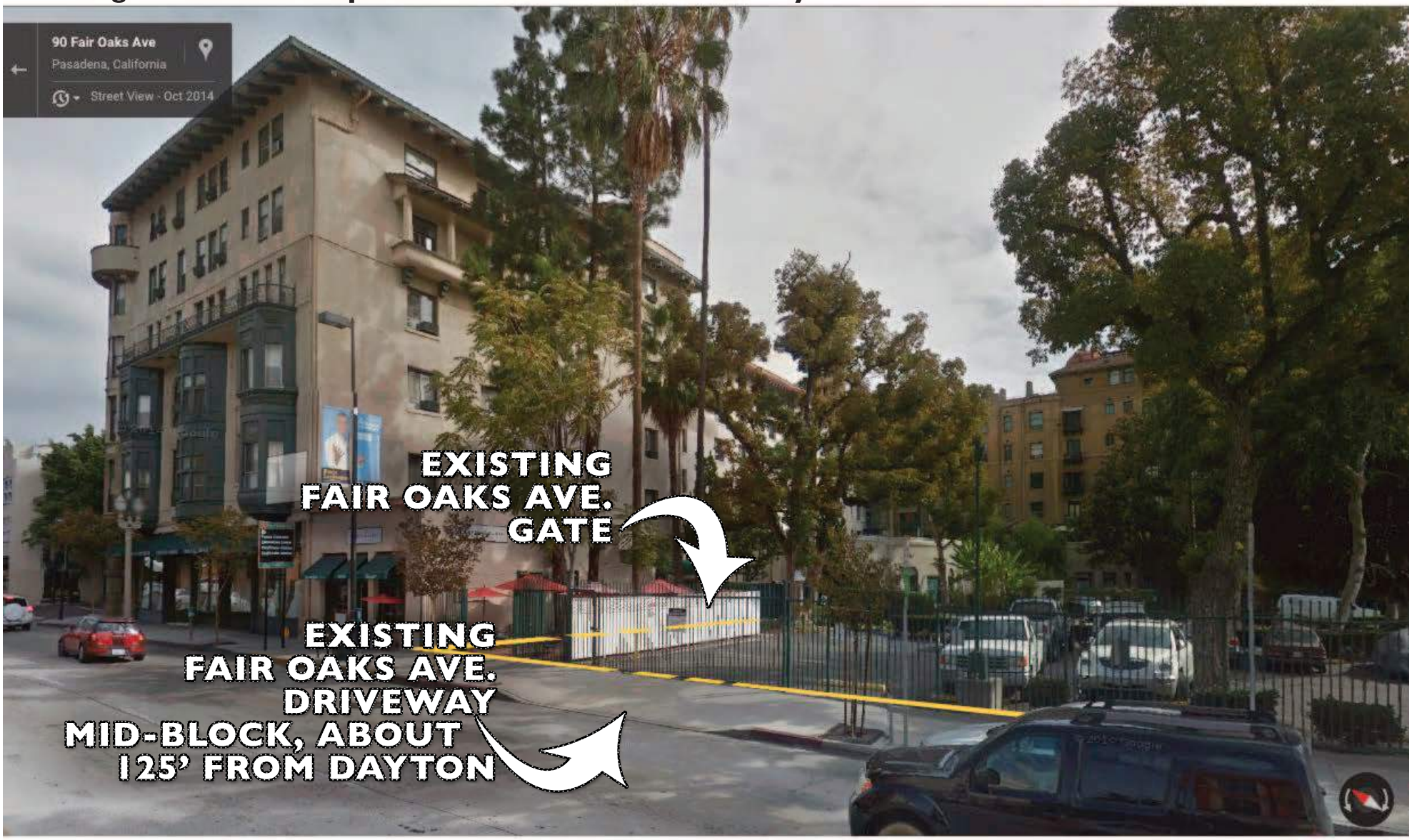
6. Study of Dayton Street Segment and of hard measures to be explored. This should have been required by now. Among the topics requiring study: traffic loads, parking, general accessibility and fire access. Hard improvements must be required in this Report. **49**
7. Study of the Dayton & Fair Oaks intersection – it remains unsignalized and again ignored, still wrongly represented in Figure 3.6-14 & Appendix H traffic study Figure 23, and fails any real-world navigation tests except in the lightest of traffic conditions. This now must not only be studied, but hard improvements must be required as part of this Report, not put off or ignored further. The Fire Signal that requires traffic to block this intersection must be studied as well. **50**
8. The Raymond & Dayton intersection remains unsignalized, and hard improvements should be identified and required, as the traffic impact is similar to that on Dayton & Fair Oaks intersection. **51**
9. The Green Street & Fair Oaks and Green Street & Raymond intersections should be included in traffic studies, as they are on the same project block and will handle over 50% of project traffic. **52**
10. The Roadway Segment of Fair Oaks *from Dayton south to Del Mar* is still omitted and should be studied. This contains the failed Dayton/Fair oaks intersection with the signalized Fire Station stop at its south edge, and two intersections (at Valley and Orange Place) that may be impacted and carry much more traffic from the additional residential units of the East Ambassador campus. **53**
11. A restudy to further analyze impacts of the doubling of daily trips as required in PEQI & BEQI studies on the Dayton Street Segment. It seems hard to believe that in doubling the load on this street that there is NO impact to these two analyses. At minimum, if the impact is purely numerical in nature, at least provide this explanation. But by not addressing it, it is unknown if the R-DEIR impacts these analyses. **54**
12. Real and historic View corridors are in fact eliminated but still not studied: corridors that would be less impacted by a lower project alternative, or by a setback project alternative. These views are *from* historic Green Hotel and Castle Green, and from historic vantage points, like new residential areas of East Gateway, or from south end of historic Central park. Alternatives could study this oft-stated community concern. **55**
13. Accurate and realistic analyses of air circulation (it was a consideration for the historic Castle Green's design) and daylight impacts of a 6-story project that could have been studied or further addressed in Alternatives. **56**

I look forward to these and all other comments being considered for necessary revisions to be made before a Final EIR is prepared, for a less impactful project if this is to move forward. **57**

Mike Salazar
for the Castle Green Homeowners Association
99 S. Raymond Avenue
Pasadena, CA 91105

Encl.: March 10, 2014 DEIR Comment Letter from Castle Green HOA/Chatten-Brown & Carstens.

Existing Green Hotel Apartments surface lot/driveway at 86 S. Fair Oaks Avenue



No where in the DEIR is this existing Fair Oaks Avenue driveway mentioned. It only appears in one site plan, unlabeled: FIGURE 3.1-2, "Location of On-Site Trees." It does not appear or receive mention in Appendix H Traffic Study. What is baffling is that this access on Fair Oaks exists today, and I have seen it in use. It is at the edge of this parcel, so why is it not even considered viable, let alone actually used to mitigate the significant impact on Dayton Street?

58

Letter No. 8 Castle Green Homeowners Association

Castle Green Homeowners Association Michael Salazar
March 2, 2015

Responses

Response 8-1

Section 21091(d)(2)(A) of CEQA and Section 15088 of the state CEQA Guidelines require the lead agency to prepare written responses to comments submitted on a draft EIR during the public review period. While there is no requirement to address comments on a project staff report, such as those submitted by the commenter, the City has prepared the following responses to address the expressed concerns regarding the staff report.

Response 8-2

All comments submitted to the City during the public review period for the original Draft EIR, as well as comments submitted on the Recirculated Draft EIR, are addressed in the written responses contained in the Final EIR. The conclusions of the Draft EIR and Recirculated Draft EIR, as supported by substantial evidence provided therein and augmented by information in the Final EIR (i.e., responses to comments), have not changed – the only unavoidable significant impact that would occur with implementation of the proposed Project is the traffic impact on the segment of Dayton Street between Fair Oaks Avenue and Raymond Avenue. No substantial evidence has been submitted to the City that would change the conclusions provided in the Final EIR.

Response 8-3

The Final EIR for the proposed Project provides a complete and accurate environmental review of the Project, including evaluation of a reasonable range of alternatives, in full accordance with the requirements of CEQA. The Design Commission has received the Final EIR, which includes written responses to all comments received on the Draft EIR and the Recirculated Draft EIR, for review and consideration prior to taking action on the project. At the time the agenda packets are finalized for the hearing at which the Final EIR is presented for certification and the project is presented for approval, the Design Commission will be provided with the Mitigation Monitoring and Reporting Program (MMRP) for the Project, the appropriate CEQA Findings for the Project, pursuant to Section 21081 of CEQA, and a Statement of Overriding Considerations, all of which will be taken into account in conjunction with the Design Commission taking action on the Project. These additional documents will become public at the same time they are provided to the Design Commission.

Response 8-4

The error in the staff report is noted. The project description in the Draft EIR Section 2.7.1 correctly describes the project as"…a six-story mixed-use building with 64 residential units and 5,000 square feet of commercial space…" and this project description was the basis for the environmental analysis.

Response 8-5

The error in the staff report is noted. The project description in the Draft EIR Section 2.7.1 correctly describes the ground floor of the project as having "…20 parking spaces, with 11 of the 20 parking spaces 'tucked under' the building." This project description was the basis for the environmental analysis.

Response 8-6

The staff report and Draft EIR Section 2.7.1 (Tables 2-2 and 2-3 in particular) all state that the project provides 167 parking spaces. Figure 2-5 in the Draft EIR has been replaced with Figure 2-5a in the Final EIR to reflect the removal of four parking spaces that were erroneously included at the southeast corner of the site. With this revised exhibit incorporated, the Final EIR accurately reflects the total number of parking spaces provided as 167.

Response 8-7

The commenter is correct that the only entitlements required for this project are Concept and Final Design Review. The Draft EIR specifies this in section 2.8.

Response 8-8

The commenter's characterization of the correction made to the traffic data in the Draft EIR is inaccurate and not consistent with the facts presented in the Recirculated Draft EIR. Contrary to the commenter's assertion, the correction presented in the Recirculated Draft EIR does not result in, or reflect, a doubling of the daily trips generated by the Project and Alternative 2. As described on page 3.6-1 of the Recirculated Draft EIR, the original Draft EIR inadvertently indicated only the number of daily vehicle trips travelling between the Project site driveway on Dayton Street and either of the intersections located at end of the street. In other words, the 313 daily trips indicated in the Draft EIR as occurring on Dayton Street would either be on the segment extending between the Project site driveway and Fair Oaks Avenue to the west or be on the segment extending between the Project site driveway and Raymond Avenue to the east. When the 313 daily trips occurring on each of those two "half-segments" of Dayton Street are added together, the total would be 626 daily trips. As indicated throughout the Transportation and Circulation section of the Draft EIR (Section 3.6), the daily trip generation associated with the proposed Project was always indicated as 626 (see, in particular, Table 3.6-7 and the associated narrative discussion in the section), and that trip generation number did not change in the Recirculated Draft EIR. The correction made in the Recirculated Draft EIR to indicate a total of 626 average daily trips travelling on Dayton Street comports with that trip generation number, since all project-related trips would occur via the Project site driveway on DaytonStreet. Similarly, the corrections reflected in Section 4.6.2.6 of the Recirculated Draft EIR regarding the transportation and traffic impacts associated with Alternative 2 are simply a matter of adding the daily traffic travelling on the two half-segments of Dayton Street between Fair Oaks Avenue and Raymond Avenue (i.e., 239 daily trips on the segment between Fair Oaks Avenue and the Project site driveway plus 239 daily trips on the segment between the Project site driveway and Raymond Avenue), as reflected by the 479 average daily trips shown for that segment of Dayton Street in Table 4-6 of the Recirculated DEIR (Note: The 239 daily trips indicated in that table was inadvertently not shown in strikeout, but is now included in Section 2, *Corrections and Additions,* of the Final EIR). As indicated by comparing Table 4-5 in the Draft EIR to Table 4-5 in the Recirculated Draft EIR, there was no change in the trip generation for the proposed Project or Alternative 2 (the Reduced Height Alternative). The subject correction to the characterization of total daily trips on Dayton Street does not affect the remainder of the traffic impacts analysis, including the intersection analyses for Dayton Street/Fair Oaks Avenue and Dayton Street/Raymond Avenue, or any other environmental impacts addressed in the Draft EIR because the assignment/distribution of vehicle trips outside the Project site was correct to begin with and did not change.

Response 8-9

The revisions made to the Draft EIR's discussion of the Smaller Scale Alternative that resulted from the correction made to daily traffic volumes on Dayton Street reflect the fact, as stated in the second sentence in Section 4.4.4 of both the Draft EIR and the Recirculated Draft EIR, "The intent of this alternative would be to build a project that would result in less than significant impacts to the Dayton Street segment between Fair Oaks Avenue and Raymond Avenue." The underlined text that follows that statement in the Recirculated Draft EIR explains the nature of, and basis for, reducing the Smaller Scale Alternative by half. Information regarding the financial feasibility or infeasibility of a reduced scale alternative is not part of the EIR, and is expected to be provided to the Design Commission and the public within the discussion to come in the staff report and/or CEQA findings. Regarding the commenter's suggestion to generate an "Alternative 3 around the 50 percent or less size range (below the last year's acceptable 313 daily trip range)," the Draft EIR already considered and addressed a reasonable range of alternatives. This includes, as specifically related to traffic impacts on Dayton Street, the Reduced Height Alternative with 42 units, which lessened, but did not avoid, the significant traffic impact, and the Smaller Scale Alternative with six units, which would avoid the subject significant impact, but is not a feasible alternative. As discussed in Topical Response TR-ALT-1, Project Alternatives, it is not necessary to further refine and evaluate an additional hypothetical reduced development alternative that does not reduce impacts appreciably, such as the one suggested by the commenter, because the Draft EIR has already addressed a range of alternatives with specific development scenarios that would reduce or avoid the subject significant impact. Furthermore, the suggested alternative of "around the 50 percent or less size range (below the last year's acceptable 313 daily trip range)" would not reduce the significant Dayton Street segment impact to a less than significant level. Rather, as noted in Section 4.4.4 of the Recirculated DEIR, the maximum number of residential units that could occur without resulting in a significant traffic impact on Dayton Street would be six.

Response 8-10

As indicated in the responses immediately above, the correction reflected in the Recirculated Draft EIR pertains to only the characterization of total daily trips on Dayton Street, and all other aspects of the environmental analysis of the proposed Project presented in the Draft EIR are unaffected and unchanged. In particular, the data used to calculate air quality and greenhouse gas emissions was not faulty and did not have to be changed or updated, and daily trip generation associated with the proposed Project and the Alternative 2 (the Reduced Height Alternative) did not change, as evidenced by comparing Table 4-5 in the Draft EIR to Table 4-5 in the Recirculated Draft EIR, nor did the assignment/distribution of trips associated with the project. As such, there is no change to the Draft EIR analyses of Air Quality (operational emissions), Greenhouse Gasses (operational GHG emissions), or any other topic area studied in the Draft EIR.

Response 8-11

Written responses to all of the comments and allegations presented in the letter submitted by Chatten-Brown & Carstens LLP on March 10, 2014, on behalf of Castle Green Homeowners Association, are included in the Final EIR. See, specifically, Responses to Comments 4-1 through 4-18. Written responses to other comments submitted by Castle Green Homeowners Association on the Draft EIR are also contained in the Draft EIR (See Responses to Comments 3-1 through 3-103), along with written responses to all other comments received in the Draft EIR and Recirculated Draft EIR. The intent of the Recirculated Draft EIR was to present important new information and not to respond to previously provided comments, which is required to be part of the Final EIR per CEQA Guidelines

§15088.5, Recirculation of an EIR Prior to Certification and §15132, Contents of Final Environmental Impact Report.

Response 8-12

Written responses have been prepared for all comments received on the Draft EIR and Recirculated Draft EIR, and the Final EIR has been completed in accordance with the requirements of CEQA and the state CEQA Guidelines. Additionally, the appropriate CEQA Findings, Statement of Overriding Considerations, and MMRP have been provided to the Design Commission for their review and consideration prior to taking action on the proposed Project.

Response 8-13

The statements quoted from the Recirculated Draft EIR are true and correct. As indicated in the Recirculated Draft EIR and further supported by substantial evidence presented in the above and below responses to comments, the only aspects of the Draft EIR that were materially affected by the correction to the characterization of total daily trips on Dayton Street were limited to only that - the characterization of total daily trips on Dayton Street. The changes in Section 4 related to alternatives were driven solely by the correction to traffic volumes on Dayton Street, both directly for Alternative 2 (i.e., correction to the daily traffic volume indicated for Dayton Street under a Reduced Height Alternative scenario) and indirectly for the Smaller Scale Alternative (i.e., the point of that alternative was to identify a development scenario that would avoid the significant traffic impact on Dayton Street, which, based on the corrected doubling of traffic on Dayton Street, meant that the amount of allowable development generating trips on Dayton Street would need to be reduced by half in order to avoid a significant traffic impact on that street). As these changes were provided in the Recirculated Draft EIR, the public was provided adequate opportunity to understand and comment on them.

Response 8-14

As indicated above in Responses to Comments 3-26 and 4-9, there are no feasible mitigation measures available for the traffic impacts on Dayton Street, either at the numbers stated in the Draft EIR or the numbers stated in the Recirculated Draft EIR.

Some theoretical mitigation measure examples include the installation of curb extensions, traffic signal upgrades/enhancements, and installation of center medians to name a few. These measures will not mitigate or appreciably reduce significant impacts to Dayton Street. As Dayton Street is such a low volume street, the project would have to radically alter its scope in order to reduce its daily trips to a point where impacts would be appreciably reduced or reduced to below a level of significance. The Draft EIR and Recirculated Draft EIR evaluated such a scenario, in terms of the Smaller Scale Alternative, and found it to be infeasible.

Examples of “soft” measures which help to reduce vehicular trips is to provide bicycle parking and the development of a Travel Demand Management Plan (TDM), which the project is subject to by Code. A TDM plan may include but not limited to a bikesharing program, a carsharing program, shuttle service to major transit stops, an on-site transit kiosk, and provide transit passes just to name a few. Such soft mitigation measures would not appreciably reduce impacts or reduce the impacts of the project to below a level of significance.

The PEQI and BEQI scores are a function of existing daily traffic volume collected in March 2013. Therefore, the correction to the total daily trips on Dayton Street does not affect PEQI, BEQI.

Response 8-15

The right-hand column in Table 3.6-10 indicates the types of traffic improvement measures appropriate for specific levels of traffic growth on a street segment, as specified by the City's Transportation Impact Review Current Practices and Guidelines in effect at the time of the analysis. Table 3.6-5 presented earlier in Section 3.6 of the Draft EIR and the Recirculated Draft EIR delineates the types of multi-modal measures that are associated with various increments of traffic grown on street segments. As indicated in Table 3.6-5, any increase in traffic growth of 7.5 percent or more is subject to the same set of multi-modal measures. Given that the Draft EIR indicated the daily traffic growth on Dayton Street to be 35.4 percent, which was already well above the 7.5 percent threshold, the fact that the corrected traffic volume on Dayton Street increased that number to 70.9 percent does not change the types of multi-modal measures previously specified in the Draft EIR (i.e., the measures are the same for any increase of 7.5 percent or more). As indicated on page 3.6-45 and reiterated on page 3.6-47 of the Recirculated DEIR, no feasible mitigation measures are available to reduce impacts along the Dayton Street segment between Fair Oaks Avenue and Raymond Avenue. That infeasibility finding is unaffected by the correction to the traffic volumes on Dayton Street, and remains the same whether the traffic increase on the subject street segment is 35.4 percent or 70.9 percent. Please also see Response to Comment 8-14 above.

Response 8-16

As indicated above in Response to Comment 8-8, the correction to the characterization of total daily trips on Dayton Street does not affect the analysis of intersection impacts presented in the Draft EIR, including the intersections of Dayton Street/Fair Oaks Avenue and Dayton Street/Raymond Avenue.

Response 8-17

As discussed above in Response to Comment 8-8, the correction to the characterization of total daily trips on Dayton Street has to do with the fact that the Draft EIR inadvertently indicated the traffic volume of 313 trips on each half-segment of Dayton Street between Fair Oaks Avenue and Raymond Avenue (i.e., the half-segment extending between the Project site driveway and Fair Oaks Avenue to the west and the half-segment extending between the Project site driveway and Raymond Avenue to the east), which when added together would be 626 daily trips. Figure 3.6-13 in the Draft EIR presents the PM peak hour turning movement on Dayton Street, as related to potential queuing impacts on Dayton Street. The correction to the daily traffic volumes on Dayton Street does not affect or relate to that peak hour queuing analysis. Regarding the commenter's question regarding why the information in Figure 3.6-13 does not include the intersection of Dayton Street and Raymond Avenue, it is because there is not a potential queuing issue at that intersection due to its distance from the Project site driveway, as shown on Figure 3.6-14 of the Draft EIR and the Recirculated Draft EIR.

Response 8-18

None of the four questions at the beginning of this comment pertain to the new information presented in the Recirculated Draft EIR, and, as indicated above in Response to Comment 8-8, the correction to the characterization of total daily trips on Dayton Street does not affect or change the intersection impacts analyses presented in the Draft EIR. Also, the subject correction does not affect the analysis of potential traffic hazards, which are addressed on pages 3.6-45 through3.6-49 of the Draft EIR.

Response 8-19

As discussed in Response to Comment 3-27, the City Fire Department has identified Fair Oaks Avenue as the preferred and primary emergency access for the Project, and Dayton Street would only be used as a secondary emergency access for the Project, if circumstances warrant. The City Fire Department

has stated that Dayton Street meets the Code-required 20 feet of clear roadway width to provide emergency services to the Project site (see page 3.6-49 of the Draft EIR). The intersections at both ends of Dayton Street currently operate at Level of Service A and would continue to operate at Level of Service A with the addition of Project-related traffic on Dayton Street. As indicated above, the intersection impacts analyses in the Draft EIR, including the intersection of Fair Oaks Avenue and Dayton Street, are not affected by the correction to the characterization of total daily trips on Dayton Street.

Response 8-20

Please see Response to Comment 8-14 above.

Response 8-21

Please see Responses to Comments 8-8, 8-9, 8-10, and 8-13 above.

Response 8-22

Please see Response to Comment 8-8 above.

Response 8-23

Please see Response to Comment 8-9 above regarding why the formulation and analysis of an "Alternative 3" is unwarranted, and Response to Comment 8-15 regarding the infeasibility of mitigation measures for the traffic impact on Dayton Street.

Response 8-24

As indicated in Response to Comment 3-23, there are no feasible mitigation measures to address the significant traffic impact on Dayton Street, and the only way to reduce the impact below a level of significance is to reduce the number of trips along this segment. The Smaller Scale Alternative was formulated for that very reason and while the Draft EIR indicated that a reduced scale alternative with no more than 13 units would avoid the significant impact, the correction to the characterization of total daily trips on Dayton Street provided the basis for having to reduce the Smaller Scale Alternative to only six units in order to avoid the significant impact. See Response to comment 8-9 regarding financial infeasibility information

Response 8-25

Section 4.4.1 of the Draft EIR addresses the Alternative Access Alternative, which proposes access to and from the Project's parking garage would be via Fair Oaks Avenue, and explains the basis for why that alternative access is infeasible. Response to Comment 3-87 provides additional discussion regarding the infeasibility of that alternative.

Response 8-26

As indicated in the introduction of Section 4.4.4 of the Draft EIR and Recirculated Draft EIR, the intent of the Smaller Scale Alternative would be to build a project that would result in less than significant traffic impacts to the Dayton Street segment between Fair Oaks Avenue and Raymond Avenue. The intent of formulating such an alternative is completely consistent with the CEQA requirement to consider alternatives that could avoid significant impacts. The Draft EIR also includes Alternative 2, the Reduced Height Alternative, which would reduce, but not avoid, that same significant impact, which is also consistent with CEQA requirements relative to considering a reasonable range of alternatives that could reduce or avoid significant impacts. The fact that the Smaller Scale Alternative could only include six units in order to avoid the significant traffic impact and such an alternative is

infeasible is not, in any way, "a waste to consider" but rather meets the very purpose of CEQA to disclose to the public and decision makers what it would take to avoid the significant traffic impact on Dayton Street. As indicated in Response to Comment 3-23, there are no feasible mitigation measures to address the significant traffic impact on Dayton Street.

Response 8-27

Contrary to the commenter's claim, Section 4.4 of the Recirculated Draft EIR does not say "that the R-DEIR again considered three other rejected alternatives: 'Alternative Access Alternative,' 'Off-Site Parking Alternative,' and 'Alternative Site Alternative'." Section 1.3 of the Recirculated Draft EIR describes the format of the document, noting that it "focuses on updates to the transportation and traffic analysis (Section 3.6) that was presented in the Draft EIR as well as related corrections within Section 4, Alternatives…" and then goes on to explain how changes to the Draft EIR are indicated (i.e., underlining for new text and strike-out for deleted text). The three subject alternatives were carried into the Recirculated Draft EIR because they are part and parcel of Section 4 of the Draft EIR, and the fact that the Recirculated Draft EIR shows no changes to the discussion of those alternative reflects the fact that the correction to the characterization of total daily trips on Dayton Street does not affect those alternatives in any way.

Response 8-28

Response to Comment 8-25 above notes the fact that the Alternate Access Alternative was addressed in the Draft EIR and further discussed in Response to Comment 3-87, and Response to Comment 8-27 immediately above notes that the correction to the characterization of total daily trips on Dayton Street does not affect the analysis of that alternative in any way. Notwithstanding, the first paragraph in Section 2.2 of the Project Description in the Draft EIR has been revised to acknowledge that access to the project site currently exists on Dayton Street and Fair Oaks Avenue, as presented below and also included in Section 2, Corrections and Additions, of the Final EIR:

> The project site is located within the City of Pasadena (the City), which is located approximately 10 miles northeast of the City of Los Angeles in the County of Los Angeles (Figure 2-1, Regional Location). Regional access to the City is provided by State Route 134 (SR 134), Interstate 210 (I-210 or Foothill Freeway), State Route 110 (SR 110), and Interstate 710 (I-710). The project site is located at 86 South Fair Oaks Avenue, at the northeast corner of Fair Oaks Avenue at Dayton Street. Vehicle access points at the project site currently exist on Dayton Street and South Fair Oaks Avenue. The project site is bordered by a one-story commercial building and the existing Green Hotel Apartments on the north, Castle Green on the east, Dayton Street on the south, and South Fair Oaks Avenue on the west, as shown in Figure 2-2, Local Vicinity and Figure 2-3, Aerial Overview.

Response 8-29

Response to Comment 8-27 immediately above notes that the correction to the characterization of total daily trips on Dayton Street does not affect the analysis of that Off-Site Parking Alternative in any way. It should also be noted that Castle Green's reliance on off-site parking stems from the fact that it was built before parking requirements were established. No further response is required.

Response 8-30

Response to Comment 8-27 immediately above notes that the correction to the characterization of total daily trips on Dayton Street does not affect the analysis of that Alternative Site Alternative in any way. No further response is required.

Response 8-31

The deletion of the words "to this intersection" simply corrects an inadvertent reference to the word "intersection" when it is clear from the entirety of the paragraph, and the remainder of the specific sentence itself, that the only subject at hand is the segment of Dayton Street between Fair Oaks Avenue and Raymond Avenue. Notwithstanding, replacement of the words "to this intersection" with the words "to this segment" is hereby incorporated into the Final EIR, as reflected in Section 2, Corrections and Additions, of the Final EIR.

Response 8-32

The last sentence of the first paragraph on page 3.6-1 of the Recirculated Draft EIR clearly indicates that: The complete Traffic Impact Study for the Proposed Green Hotel Apartments Mixed-Use Development (2013), with the aforementioned correction made in a manner similar to the format of this section of the Recirculated Draft EIR (i.e., deletions indicated in strikethrough text and additions shown as underlined text) can be found in Appendix H of this Recirculated EIR." The fact that there are very few changes shown in the Traffic Impact Study contained in Appendix H of the Recirculated Draft EIR reflects the fact that the correction to the characterization of total daily trips on Dayton Street has absolutely no material effect on the overall traffic analysis and conclusions, other than the change in the way the volume of project trips on Dayton Street is portrayed. Similarly, the numerical correction does not affect the content of the Traffic Impact Study report cover letter of June 11, 2013.

Response 8-33

The nature of, and basis for, the correction to the characterization of total daily trips on Dayton Street are clearly explained in Section 1, Introduction to the Recirculated Draft EIR, and in the Summary of Revisions as the introduction to Section 3.6, Recirculated Transportation and Circulation, of the Recirculated Draft EIR. The revised Traffic Impact Study, with the changes noted by the commenter, was included as an integral part of the Recirculated Draft EIR, and, as noted in Response to Comment 8-32 above, the nature of the changes made to the Traffic Impact Study is clearly explained on page 3.6-1 of the Recirculated Draft EIR. As explained above in Response to Comment 8-8, and reiterated in several responses thereafter, the subject correction affects only the characterization of total daily trips on Dayton Street as related to the proposed Project, Alternative 2, and the Smaller Scale Alternative; it does not affect other any data or analyses in the Draft EIR.

Response 8-34

Please see Response to Comment 8-28 above.

Response 8-35

Please see Response to Comment 8-8 and 3-25 above.

Response 8-36

Please see Response to Comment 8-19 and 3-42 above.

Response 8-37

Please see Response to Comment 8-8 above, which notes the fact that the daily trip generation associated with the proposed Project was always indicated as 626 (see, in particular, Table 3.6-7 and the associated narrative discussion in the section), and that trip generation number did not change in the Recirculated Draft EIR. The commenter's observance that Table 8 in the Traffic Impact Analysis had the correct number and did not change as part of the Recirculated Draft EIR comports with that fact.

Response 8-38

The PEQI analysis and the BEQI analysis are addressed in Sections 9 and 10, respectively, of the Traffic Impact Analysis. Figure 23 of the Traffic Impact Analysis pertains to vehicle queuing conditions, as indicated by the figure title, which does not pertain to the PEQI and BEQI. The correction to the characterization of total daily trips on Dayton Street does not affect PEQI, BEQI, and vehicle queuing.

Response 8-39

Green Street is described in Section 3.6.2.1, Existing Street System, of the Draft EIR, and is unaffected by the correction to the characterization of total daily trips on Dayton Street, as evidenced by the absence of any revisions to that description in Section 3.6.2.1 of the Recirculated Draft EIR.

Response 8-40

The City may consider economic, social, environmental, legal and technological factors when determining the feasibility of alternatives and mitigation measures. There is no requirement that any economic consideration take place in the EIR, and it may take place elsewhere in the administrative record.

Response 8-41

This comment does not pertain to the Recirculated Draft EIR; consequently, no response is required.

Response 8-42

This comment does not pertain to the Recirculated Draft EIR, and in the case of Reasons 2, 3 and 4 in the comment, does not pertain to environmental issues (i.e., pertains to design and code compliance); consequently, no response is required. Notwithstanding, the types of environmental concerns raised in Reason 1 of the comment are generally similar to those previously submitted by the commenter on the Draft EIR, which have been responded to elsewhere in the Final EIR. In particular, please see Topical Response TR-CR-1 regarding potential impacts to historic and cultural resources.

Response 8-43

As explained above in Response to Comment 8-8, and reiterated in several responses thereafter, the subject correction affects only the characterization of total daily trips on Dayton Street as related to the proposed Project, Alternative 2, and the Smaller Scale Alternative; it does not affect other any data or analyses in the Draft EIR. As such, it does not warrant any additional analysis of the Areas of Known Controversy presented in page ES-5 of the Draft EIR.

Response 8-44

This comment does not pertain to the Recirculated Draft EIR; consequently, no response is required. Notwithstanding, the nature and content of the comment are similar to those of other comments previously submitted by the commenter on the Draft EIR, which have been responded to elsewhere in the Final EIR, including but not limited to Responses to Comments TR-CR-1 and 3-11.

Response 8-45

This comment does not pertain to the Recirculated Draft EIR; consequently, no response is required. Notwithstanding, the nature and content of the comment are similar to those of other comments previously submitted by the commenter on the Draft EIR, which have been responded to elsewhere in the Final EIR, including but not limited to Responses to Comments TR-CR-1, 3-44, and 5-11.

Response 8-46

Please see Response to Comment 8-45 above.

Response 8-47

Please see Responses to Comment 3-87, 8-25, and 8-28 above.

Response 8-48

The increase in vehicle trips on Dayton Street was disclosed in several locations in the Recirculated Draft EIR. Please see Response to Comment 8-19 above regarding Fire Department emergency access.

Response 8-49

Please see Response to Comment 8-14 above.

Response 8-50

Please see Response to Comment 8-8 above regarding the fact that the correction to the characterization of total daily trips on Dayton Street does not affect the intersection analysis presented in the Draft EIR. No significant impacts would occur to the intersection of Dayton Street and Fair Oaks Avenue; hence, no improvements to, or mitigation for, that intersection are warranted. Please also see Response to Comment 3-42 regarding the Fire Signal.

Response 8-51

Please see Response to Comment 8-8 above regarding the fact that the correction to the characterization of total daily trips on Dayton Street does not affect the intersection analysis presented in the Draft EIR. No significant impacts would occur to the intersection of Dayton Street and Raymond Avenue; hence, no improvements to, or mitigation for, that intersection are warranted.

Response 8-52

Please see Response to Comment 8-8 above regarding the fact that the correction to the characterization of total daily trips on Dayton Street does not affect the intersection analysis presented in the Draft EIR. No significant impacts would occur to the intersections of Green Street and Fair Oaks Avenue and Green Street and Raymond Avenue; hence, no improvements to, or mitigation for, those intersections are warranted. Please also see Response to Comment 3-25 for discussion of the specific intersections cited in this comment.

Response 8-53

The correction to the characterization of total daily trips on Dayton Street does not affect the Draft EIR analysis of traffic on Fair Oaks Avenue; consequently no further analysis of traffic on Fair Oaks Avenue is warranted. Please also see Response to Comment 3-42 for discussion of the segment of Fair Oaks Avenue south of Dayton Street.

Response 8-54

As indicated above in Responses to Comments 8-8 and 8-38, the correction to the characterization of total daily trips on Dayton Street is, indeed, numerical only and does not affect the PEQI and BEQI analyses completed for the Draft EIR.

Response 8-55

Please see Response to Comment 8-44 and TR-AES-1 above.

Response 8-56

Please see Response to Comment 8-44, 3-6 and 3-7 above.

Response 8-57

Comment noted.

Response 8-58

The presence of the existing driveway on Fair Oaks Avenue is the focus of the Alternative Access Alternative addressed in Section 4.4.1 of the Draft EIR. Please also see Response to Comment 8-28 above.

3.3.5 Comments Received at the Public Hearing on the Recirculated Draft EIR

The following summarizes comments on environmental topics that were received from the public and the City of Pasadena Design Commission at the public hearing held on the Recirculated Draft EIR on Tuesday, February 24, 2015 and provides responses to these comments. Comments are paraphrased and not written verbatim. In one case, public comments expressed during oral testimony were read from, or otherwise reflected by, the written comments submitted by the speaker. Comments expressed at the hearing that were not submitted in writing are responded to immediately below, whereas comments expressed at the hearing that were also submitted in writing are responded to above in the responses to individual comment letters received on the Recirculated Draft EIR.

Public Comments

Mike Salazar on behalf of Castle Green Homeowners Association

The comments presented in the oral testimony from Mr. Salazar are included in the written comments that he subsequently submitted to the City. Please see Comment Letter No. 8 above and the associated written responses.

Dianne Patrizzi

Comment No. 1: Ms. Patrizzi expressed concern that development of the proposed project would block the view of Castle Green from Dayton Street.

> **Response:** View impacts associated with the proposed Project are addressed in Section 3.1, *Aesthetics,* of the Draft EIR, and further discussed in Topical Response TR-AES-1. The analysis concluded that existing views will be impacted by development of the Project; however, the impacts would be less than significant.

Comment No. 3: Ms. Patrizz**i** expressed concern about constructing two levels of subterranean parking beneath "a crumbling building."

> **Response:** As shown in Figures 2-6 and 2-7 of the Draft EIR, the proposed subterranean parking garage for the Project would not extend beneath any existing structures, such as the existing Hotel Green Apartments or Castle Green, and would be well removed/distant from those buildings. In addition, MM-NOISE-4 and MM-NOISE-5 provide measures to ensure that vibration associated with construction of the project would not affect the adjacent historic buildings and that any damage that may occur be repaired by the project applicant.

Comment No. 3: Habitat loss from the removal or relocation of existing trees was not addressed in the Draft EIR.

> **Response:** As indicated in Section II.6 of the Initial Study completed for the EIR, contained in Appendix A of the Draft EIR, the project is currently used as a surface parking lot and located in a highly developed urbanized area of the City. The project site is surrounded by commercial, retail, and high-density residential land uses, along with Central Park to the south. Although trees are present on the project site, no known candidate, sensitive, or special status species exist on or in the immediate vicinity of the site, per the CDDB database. In addition, the project site and surrounding area do not provide suitable habitat for sensitive species and the project would not directly affect or modify the habitat of any identified sensitive species. As such, the issue of habitat impacts associated with the loss/relocation of on-site trees did not require further evaluation in the Draft EIR.

City of Pasadena Design Commission Comments on the Recirculated DEIR

Commissioner Maitless: Was off-site parking considered for the project?

> **Response:** Explanation of the Off-Site Parking Alternative is provided in Section 4.4.2 of the Draft EIR.

Commissioner Rawlings: Are there measures that could reduce the traffic impacts on Dayton Street, even if they don't completely eliminate the significant impact?

> **Response:** Appendix H to the Draft EIR includes a Traffic Impact Study – Acceptance Letter dated June 12, 2013 and includes recommended conditions of approval to incorporate into the project that would assist in reducing but not eliminating the identified significant traffic impact on Dayton Street. Also see Response to Comment 8-14 above.

Commissioner Rawlings: Relative to the infeasibility of the alternatives, was a "*pro forma*" done on all the alternatives?

> **Response***:* See Response to Comment 8-9 for information about provision of financial feasibility information.

Section 4
Mitigation Monitoring and Reporting Program

A Mitigation Monitoring and Reporting Program (MMRP) describes the procedures that will be followed to implement the mitigation measures adopted in connection with the approval of the proposed project and the methods for monitoring such actions. The MMRP has been prepared in conformance with Section 21081.6 of the California Environmental Quality Act (CEQA). The intent of the program is to (1) verify satisfaction of the required mitigation measures of the EIR; (2) provide a methodology to document implementation of the required mitigation; (3) provide a record of the monitoring program; (4) identify monitoring responsibility; (5) establish administrative procedures for the clearance of mitigation measures; (6) establish the frequency and duration of monitoring; and (7) utilize existing review processes wherever feasible. A MMRP is necessary only for impacts which would be significant if not mitigated. The following table consists of the mitigation measures associated with the proposed project, as well as specific conditions of approval identified for the purpose of addressing significant impacts, and provides and entry for each measure that notes the timing of the measure, the responsible entity for mitigation monitoring, an entry to record when the mitigation measure was completed, and the measures effectiveness.

This page is intentionally left blank.

Table 4-1 Mitigation Monitoring and Reporting Program

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Monitor/ Reporter/ Monitoring Agency	Documentation of Compliance		
				Action/Reports	Effectiveness	Sign-off/Date
Air Quality						
MM AQ-1: Construction Equipment Engine Requirements. The construction contractor shall ensure that off-road construction equipment be equipped with engines that meet the model year 2007 or Tier 3 emission standards for off-road compression-ignition (diesel) engines (13 CCR 2420-2425.1). Older model year engine may also be used if they are retrofit with a diesel particulate filter to reduce PM emissions to the applicable emission standards.	Construction Contractor	During construction	Department of Planning and Development, Building & Safety Division			
MM AQ-2: Construction Equipment Limitations. The construction contractor shall ensure that the cumulative hours of operation for all off-road diesel equipment do not exceed 60 hours per day.	Construction Contractor	During construction	Department of Planning and Development, Building & Safety Division			
Noise and Vibration						
COA NOISE-1: Noise Barriers. Before the start of pavement demolition, the contractor shall erect a 20-foot-high temporary noise barrier, such as a curtain of durable flexible composite material with sound-absorptive material on one or both sides and solid wall composed of $^{5}/_{8}$-inch plywood or heavier, on the northern and eastern sides of the project site. The noise barrier shall be installed without any gaps and with the sound absorptive side facing the construction activity area. The barrier shall be maintained and any damage that may occur be promptly repaired. The barrier shall remain in place until the completion of outdoor construction requiring use of diesel-powered equipment.	Construction Contractor	Prior to start of construction	Department of Planning and Development, Building & Safety Division			

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Monitor/ Reporter/ Monitoring Agency	Documentation of Compliance		
				Action/Reports	Effectiveness	Sign-off/Date
COA NOISE-2: Noise Reduction Measures. Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, the following noise-reduction measures shall be included in the construction plans or specifications: ▪ The construction contractor shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. ▪ The construction contractor shall place all stationary construction equipment so that the equipment is as far as reasonably feasible from noise-sensitive receptors and so emitted noise is directed away from noise-sensitive receptors. ▪ The construction contractor shall locate equipment staging in areas that will create the greatest distance between staging area noise sources and noise-sensitive receptors.	City of Pasadena Building Department	Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits	Department of Planning and Development, Building & Safety Division			
COA NOISE-3: Adherence to Noise Restrictions Ordinance. The project shall adhere to all applicable requirements of the Noise Restrictions Ordinance during project construction and operation. A Construction Related Noise Plan is required as part of the Construction Staging Plan and must be reviewed by the Building Division and the Department of Transportation and approved prior to the issuance of a grading permit. This plan should show the location of any construction equipment and how the noise from this equipment will be mitigated by such methods as: temporary noise attenuation barriers; preferential location of equipment; and use of current technology and noise suppression equipment.	Construction Contractor	During construction and operation	Department of Planning and Development, Building & Safety Division			

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Monitor/ Reporter/ Monitoring Agency	Documentation of Compliance		
				Action/Reports	Effectiveness	Sign-off/Date
MM NOISE-1: Construction Time Limits. Prior to issuance of grading and/or building permits, contractor specifications shall include a note indicating that noise-generating construction activities shall be limited to between the hours of 7:00 AM and 7:00 PM Monday through Friday and between the hours of 8:00 AM and 5:00 PM Saturday. On Sundays and Federal holidays, no noise-generating construction activities shall be permitted.	City of Pasadena Building Department	Prior to issuance of grading and/or building permits	Department of Planning and Development, Building & Safety Division			
COA NOISE-4: HVAC Noise Levels. Prior to the issuance of building permits, the Applicant shall provide data to the Director of Planning and Community Development demonstrating that the noise level from heating, ventilation, and air conditioning (HVAC) units, swimming pool equipment, and similar mechanical equipment when measured inside any dwelling unit on the same property or 20 feet from the outside of the dwelling unit in which the noise source or sources may be located would be less than 50 dBA.	City of Pasadena Building Department	Prior to issuance of building permits	Department of Planning and Development, Building & Safety Division			
COA NOISE-5: Exterior to Interior Noise Reduction. Prior to the issuance of building permits, the applicant shall present data to the Director of Planning and Community Development demonstrating that the exterior-to-interior noise reduction for residential units facing Fair Oaks Avenue would be at least 24 A-weighted decibels (dBA).	City of Pasadena Building Department	Prior to issuance of building permits	Department of Planning and Development, Building & Safety Division			
COA NOISE-6: Noise Notification. Prior to the issuance of a Certificate of Occupancy for the project, the applicant shall present information to the Director of Planning and Community Development demonstrating that appropriate sale or lease transfer documents for residential units include an advisory that the residence is located in the Central District, an area where there is a potential for noise from commercial and nighttime activities. The following language is provided as an example: *All potential buyers and/or renters of residential property in the Green Hotel Apartments, which is in Pasadena's Central District Specific Plan area, are hereby notified that they may be subject to audible*	City of Pasadena Building Department	Prior to issuance of an occupancy permit	Department of Planning and Development, Building & Safety Division			

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Monitor/ Reporter/ Monitoring Agency	Documentation of Compliance		
				Action/Reports	Effectiveness	Sign-off/Date
noise levels attributed to business and entertainment-related activities common to such areas, including amplified sound, music, delivery vehicles, pedestrian and vehicular traffic, and other urban noise.						
MM NOISE 2: Noise Restrictions within the Common Outdoor Area. Prior to the issuance of an occupancy permit, the Applicant shall provide evidence to the Director of Planning and Community Development demonstrating that the building's Covenants, Conditions and Restrictions (CC&Rs) or equivalent regulations include a prohibition on the use of radios, televisions, "boom boxes", and similar devices in the pool area and other outdoor common areas unless the devices are used with headphones, ear buds, or similar device and that signs with such restrictions are posted at the pool area.	City of Pasadena Building Department	Prior to issuance of an occupancy permit	Department of Planning and Development, Building & Safety Division			
MM NOISE-3: Pool Hours of Operation. Prior to the issuance of an occupancy permit, the Applicant shall provide evidence to the Director of Planning and Community Development demonstrating that the building's CC&Rs or equivalent regulations include a prohibition on the use of the pool area between 10:00 p.m. and 5:00 a.m. and that signs with pool hours are posted at the pool area.	City of Pasadena Building Department	Prior to issuance of an occupancy permit	Department of Planning and Development, Building & Safety Division			
COA NOISE-3: Adherence to Noise Restrictions Ordinance. The project shall adhere to all applicable requirements of the Noise Restrictions Ordinance during project construction and operation. A Construction Related Noise Plan is required as part of the Construction Staging Plan and must be reviewed by the Building Division and the Department of Transportation and approved prior to the issuance of a grading permit. This plan should show the location of any construction equipment and how the noise from this equipment will be mitigated by such methods as: temporary noise attenuation barriers; preferential location of equipment; and use of current technology and noise suppression equipment.	Construction Contractor	During construction and operation	Department of Planning and Development, Building & Safety Division			

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Monitor/ Reporter/ Monitoring Agency	Documentation of Compliance		
				Action/Reports	Effectiveness	Sign-off/Date

MM NOISE-4: Consult with Structural Engineer and Project Historical Architect. Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, and to the satisfaction of the City of Pasadena, the applicant shall retain a Professional Structural Engineer with experience in structural vibration analysis and monitoring for historic buildings and a Project Historical Architect as a team to perform the following tasks:
▪ Review the project plans for demolition and construction;
  ▪ Survey the project site and the existing Green Hotel Apartment building and the 84 Fair Oaks Avenue structure, including geological testing, if required; and
▪ Prepare and submit a report to the Director of Planning and Community Development to include, but not be limited to, the following:
  ○ Description of existing conditions at the existing Green Hotel Apartment building and the 84 Fair Oaks Avenue structure;
  ○ Vibration level limits based on building conditions, soil conditions, and planned demolition and construction methods to ensure vibration levels would be below 0.12 ppv in/sec, the potential for damage to the existing Green Hotel Apartment building and the 84 Fair Oaks Avenue structure;
  ○ Specific measures to be taken during construction to ensure the specified vibration level limits are not exceeded; and
  ○ A monitoring plan to be implemented during demolition and construction that includes post-construction and post-demolition surveys of the existing Green Hotel Apartment building and the 84 Fair Oaks Avenue structure.
  ○ Examples of measures that may be specified for implementation during demolition or
	City of Pasadena Building Department	Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits.	Department of Planning and Development, Building & Safety Division			

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Monitor/ Reporter/ Monitoring Agency	Documentation of Compliance		
				Action/Reports	Effectiveness	Sign-off/Date
construction include, but are not limited to - Prohibition of certain types of impact equipment; - Requirement for lighter tracked or wheeled equipment; - Specifying demolition by non-impact methods, such as sawing concrete; - Phasing operations to avoid simultaneous vibration sources; and - Installation of vibration measuring devices to guide decision making for subsequent activities.						
MM NOISE-5: Post-Construction Survey and Documentation. To the satisfaction of the City of Pasadena, at the conclusion of vibration-causing activities, in the unanticipated event of discovery of vibration-caused damage, the Structural Engineer and the Project Historical Architect shall document any damage to the existing Green Hotel Apartment building and the 84 Fair Oaks Avenue structure caused by construction of the project and shall recommend necessary repairs. The project applicant shall be responsible for any repairs associated with vibration-caused damage as a result of construction of the project. Any repairs shall be undertaken and completed as required to conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 Code of Federal Regulations 68), and shall apply the California Historical Building Code (California Code of Regulations, Title 24, Part 8) and other applicable codes.	City of Pasadena Building Department	At construction completion and prior to issuance of occupancy permit	Department of Planning and Development, Building & Safety Division			

Mitigation Measure	Responsible Implementation Party	Monitoring Period	Monitor/ Reporter/ Monitoring Agency	Documentation of Compliance		
				Action/Reports	Effectiveness	Sign-off/Date
Transportation and Circulation						
COA TRANS-1: Regulatory Signage. Regulatory signage shall be installed at the project driveway's intersection with Dayton Street to prevent motorists from blocking the driveway. This signage shall conform to Pasadena Police Department signage standards for signage installed along driveways with blocked driveways violations and any violations shall be subject to citations by PD.	City of Pasadena Department of Transportation	At completion of construction and prior to issuance of occupancy permit	Department of Planning and Development, Building & Safety Division; Department of Transportation			
MM TRANS-1: Coordination with Metro. The construction contractor shall contact and notify Metro Bus Operations Control Special Events Coordinator at 213-922-4632 a minimum of 10 working days prior to any construction activities that may impact Metro bus lines. Additionally, the construction contractor shall contact and include other bus services, such as ARS and Foothill Transit, in construction outreach efforts that may be affected by construction activities. A quarterly compliance report submitted by the construction contractor would satisfy Metro's monitoring requirements.	Construction Contractor	During construction	Department of Planning and Development, Building & Safety Division; Department of Transportation			
MM TRANS-2: Maintain Pedestrian Access. Construction activity shall not be allowed to block or interfere with pedestrian access to the existing transit stop located along Fair Oaks Avenue, near the corner of Fair Oaks Avenue and Dayton Street.	Construction Contractor	During construction	Department of Planning and Development, Building & Safety Division; Department of Transportation			

This page is intentionally left blank.

Attachment 1

Design Process Memorandum

This page intentionally left blank.

Design Process Memorandum

Green Hotel Apartments

86 South Fair Oaks Ave., Pasadena
Prestige Homes, Inc.
August 1, 2014

The proposed Hotel Green Apartments (the "Project") has been designed to provide an attractive project that is compatible with the adjacent Hotel Green and Castle Green and to meet the Secretary of the Interior's Standards. In fact, ARG undertook an extensive effort to research, design, and improve the Project to adhere as closely as possible to Colonel Green's original vision for the Project Site. Thus, the Project that respects and complies with the general parameters of the historic vision, including the size, scale, and function of the buildings and landscape. Further, the Historic Resources Technical Report for the EIR, prepared by Historic Resources Group, thoroughly analyzed the Project and determined that it meets the Secretary of the Interior's Standards. Provided below is a discussion of ARG's design process for the project with respect to size, footprint, and massing.

Background

Renderings of an addition to the hotel appeared after the turn of the 20th century, at which time the hotel consisted of 1) the original hotel building on the east side of S. Raymond Ave. (completed in 1889) and 2) the West Annex (1899), later known as the Castle Green, on the west side of S. Raymond Ave. along with the connecting bridge built over the street to serve both buildings.

A third unit, now known as the Hotel Green, lies perpendicular to the Castle Green/West Annex along E. Green St. When it was first proposed in 1902, it was conceived as an L-shaped block that would span the Green St. as well as the Fair Oaks Ave. frontage. However, only the Green St. block was completed. The current proposed Project would place a new apartment building in the general configuration of the unrealized Fair Oaks block that hotel owner Colonel George Gill Green proposed in 1902. After the opening of the Green St. block, he still intended to pursue construction of the Fair Oaks block, which would have added more hotel rooms, a theater, and ground-floor retail, as well as the opportunity to redefine the garden in the center of the property.

In order to adhere as closely as possible to Col. Green's intentions, ARG had two tasks in the design process: the first was to determine, lacking any available plans, the volume and the footprint of the wing as it was proposed and illustrated in 1902-1903. Second was to evaluate the program for the Project and determine how to make it complement the parameters of the 1902 building with respect to size, scale, and function of the buildings and landscape. To determine the height, massing, design, and placement of the building, we had three historic illustrations at our disposal as well as descriptions from newspaper articles.



1) *Birdseye View, Annual Report of the Auditor of the City of Pasadena, 1902-1903.*



2) *Collection of Pasadena Museum of History.*



3) *Board of Trade publication/illustrated souvenir pamphlet: Pasadena, California. Directors of Board of Trade. 1903.*

Size and Massing: 1902

The height of the proposed Fair Oaks block was six stories, consistent with the other blocks of the hotel and equal to the height of the Castle Green/West Annex so as to balance it visually.[1] There also appears (in Figs. 2, 3) to be an attic story in the north and south ends below the hipped roofs. The massing of the building, which we noted mainly from Figure 1, was two larger hipped-roof pavilions at the north and south ends with a narrower connecting segment in between. The footprint of the north pavilion is, for the most part, defined by its hipped roof, but much of that roof over north pavilion, then, is incorporated within the Wooster Block (see overlap of north hipped roof and mass of Wooster Block in Fig. 1).

From Fig. 3 we determined that the first floor of the building was proposed to meet the sidewalk on S. Fair Oaks, with a small setback on Dayton St. to the south. The building is connected to the Green St. block on the north end. Above the first floor, portions of the building are set back on the west, south, and east to create a kind of gallery or promenade overlooking the streets and parks. An open arcade with a pavilion in the center (recalling the bridge over S. Raymond Ave.) spans the garden, enclosing the north portion of it from Dayton St.

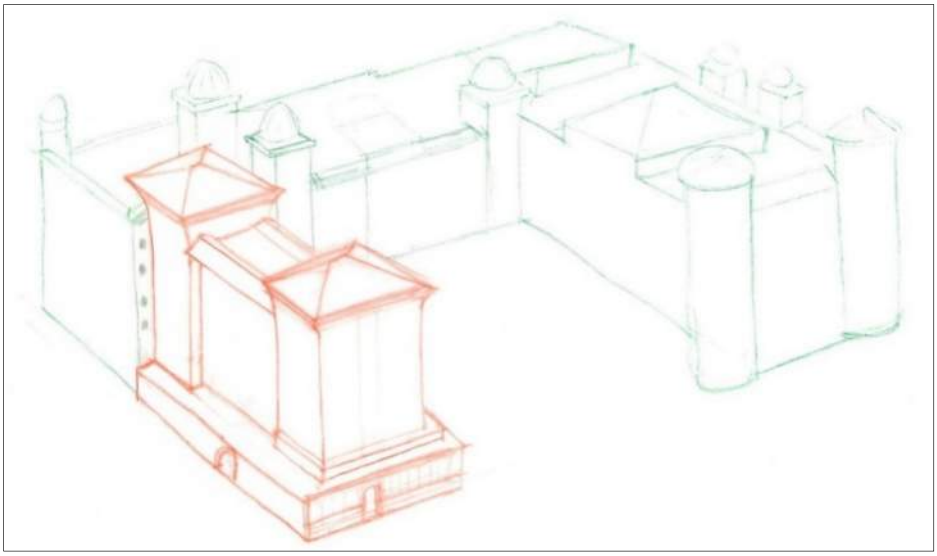
We referred to Fig. 1 to determine the east-to-west width of the building. The west side is shown to be aligned at the sidewalk but stepped back on the upper floors by a width of one bay. A newspaper article from February, 1902 noted that the balcony was to be up to 16 feet deep in places, giving an indication of the depth of the setback. The width of the building would have accommodated a double-loaded corridor and rooms along each side. A south-end unit, or perhaps the end of each corridor, terminated in a recessed balcony at the south end as seen in Fig. 3.

An article nearly a year later, on Jan. 1, 1903, noted that there would be 165 rooms in the Fair Oaks wing (and a similar number in the Green St. wing). This translates to approximately 33 rooms per floor, but the number of window bays in the renderings does not allow for nearly that many units (there are only nine full-size windows facing out on each flank of the wing per floor). The rooms are noted to be 14-16 feet by 18-20 feet, or in the range of 250 to 320 square feet, but it is unclear from the description whether this includes the bathrooms and closets which are mentioned separately. With these discrepancies, the room count does not align with the renderings. In addition, the volume of the theater may have occupied some portion of the upper floors. These discrepancies seem to indicate that the design for the building may have still been in development and not yet fully resolved.

[1] Note that the massing of the Castle Green is significantly distorted in the birds eye view in Fig. 1. This is easily seen by comparing the actual footprint of the building in Fig. 4 with its appearance in Fig. 1. It is likely that the two north-south wings (Fair Oaks and Castle Green/West Annex) were to be similar in massing, as seen in Fig. 3.



4) Aerial view of the existing Castle/Hotel Green with proposed (1902) footprint indicated in orange.



5) ARG sketch showing approximation of the volume of the Fair Oaks block as proposed by Col. Green.

The orange dotted line in Fig. 4 above shows the approximate footprint of Col. Green's proposed Fair Oaks block. This outline is based mainly on Fig. 1 above. The east line is based on the alignment with the cupola near the inside corner (i.e., the northwest corner of the garden). The west boundary is indicated at the sidewalk, as seen in Fig. 3, and the south boundary was set back from the sidewalk, as seen in Fig. 1. Note, however, that the articulation of the bays, fenestration patterns, and the roofline of the Green Street block were not built as proposed in these illustrations, and the south elevation was greatly simplified. Fig. 5 is a diagrammatical view by ARG intended to complement and clarify what is seen in the historic renderings.

ARG's Design Response

The dimensions of the addition proposed in 1902 described above are based on the renderings circulated in the press and some specific information from newspaper sources, as noted. The Project applicant also commissioned a professional surveyor to determine the measurements of the existing buildings so that the relative heights of the historic buildings and the proposed building could be accurately compared. Having accurate figures for the size of the historic buildings was necessary so that the discussion of relative heights could have a factual basis.

The footprint of the existing, historic buildings are based on a professional surveyor's measurements. We have used these surveyor's measurements and our CAD drawings to determine the relative distances between the proposed and historic buildings on the property. From the historic renderings shown above, we determined that the width of the garden (i.e., the space between the West Annex and the Fair Oaks Block) proposed in 1902 was approximately 155'-160' based on the known dimensions of the existing buildings on the property and the renderings of architect Frederick Roehrig's design for the Fair Oaks Block. Leaving room for error due to the imprecise nature of the historic renderings, ARG's design has moved as close as possible to adhering to the width of garden as it was proposed in 1902 by remaining comparable to the width of the footprint that was proposed at that time.

The Project's proposed design also had to take into account modern day constraints and protecting the historic features of the Hotel Green itself which Col. Green's 1902 plan would have modified. Thus, the proposed Project does not touch or extend from the south face of the former Wooster Block and so does not form a continuous L-shape. The proposed building is free-standing. Col. Green's early proposal was for an L-shaped wing to be built all at once, with the Fair Oaks and Green St. wings to be connected. Later, a small commercial building, now a contributor to the Old Pasadena National Register District, was constructed just south of the former Wooster Block (northwest corner of the property) on Fair Oaks.

The connection of the two buildings (historic Hotel Green and new apartment building) has not been proposed in this Project for several reasons. First, the connection would cause physical changes to the historic features of the Hotel Green itself, including the removal of a south-facing hanging balcony at the fifth floor. Second, it avoids the need to demolish a contributing building to the Old Pasadena Historic District. The retention of the space between the buildings also allowed all of the existing apartment units in the Hotel Green to remain intact.

The provision of this buffer space between the two buildings, however, also added to the necessary volume of the proposed building when compared to a longer, narrower (1902) building that would have reached an additional 38 feet (approximately) to the north (see Fig. 4) to connect with the Green St. block. The north-to-south dimension proposed today is shorter than that proposed in 1902 due to the space retained between the Green St. and Fair Oaks blocks. The east-to-west dimension, however, is comparable to that of the 1902 proposal. This means that the currently proposed footprint is actually smaller in area than that of the 1902

proposal. The overall volume, however, is wider above the first floor since there is no significant setback at the 2nd floor level as Col. Green's scheme proposed.

ARG designed the project to preserve as much as feasible of the width of the garden as a buffer between the new building and the Castle Green, as well as to maintain light and views for the south-facing apartments in the Hotel Green. The proposed Project was modified multiple times, with the unit count reduced from 68 to 64 units, the unit mix adjusted to further reduce the volume, and the total gross square footage reduced from 103,350 square feet (in 2008) to 75,770 square feet (in 2014).

Meeting the Standards for Rehabilitation

Adhering as closely as possible to the historically proposed volume of the Fair Oaks block was a strategy for achieving compatible new construction on the property and meeting the Secretary of the Interior's Standards. Although the current project is not a treatment of a historic building, the new construction is proposed within the historic property of the Hotel Green and, due to the historic association, the subject parcel was included within the National Register listing for the property (though by that time it had been subdivided into three parcels).

Through the process of analyzing the existing historic buildings as well as the information we have about the early, unbuilt designs for the property, ARG has designed a project that successfully meets the Standards. The Historic Resources Technical Report for the EIR made the same finding as well. The critical measurement of the width of the building, and therefore the distance between the new building and the historic Castle Green, appears to be consistent with what was intended with the proposed 1902 addition. Based on historic illustrations and current measurements, the proposed Project is compatible with the adjacent historic buildings and consistent with the historic plans for an addition to the property.



cdmsmith.com

APPENDIX J

Supplemental Noise Analysis for Section 7.10

Federal Transit Administration
Noise Impact Assessment Spreadsheet

version: 1/29/2019

Project:	86 Fair Oaks Avenue

Receiver Parameters	
Receiver:	Green Hotel Apartments
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	56 dBA

Noise Source Parameters	
Number of Noise Sources:	1

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Parking Garage
Daytime hrs	Avg. Number of Autos/hr	53
Nighttime hrs	Avg. Number of Autos/hr	20
Distance	Distance from Source to Receiver (ft)	150
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

	Noise Barrier?	No
	Joint Track/Crossover?	No
	Embedded Track?	No
	Aerial Structure?	No

	Noise Barrier?	

	Noise Barrier?	

	Noise Barrier?	

	Noise Barrier?	

Project Results Summary

Existing Ldn:	56 dBA
Total Project Ldn:	35 dBA
Total Noise Exposure:	56 dBA
Increase:	0 dB
Impact?:	None

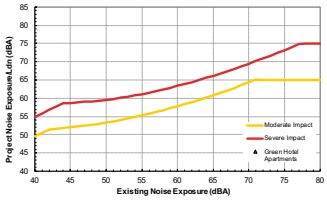
Distance to Impact Contours

Dist to Mod. Impact Contour (Source 1):	23 ft
Dist to Sev. Impact Contour (Source 1):	13 ft

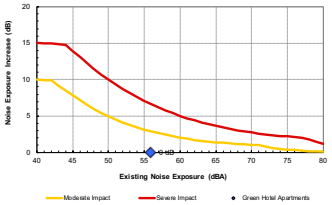
Source 1 Results

Leq(day):	31.7 dBA
Leq(night):	27.5 dBA
Ldn:	34.8 dBA

Noise Impact Criteria
(FTA Manual, Fig 4-2)



Increase in Cumulative Noise Levels Allowed
(FTA Manual, Figs 4-3 and 4-4)



Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual* , 10th Edition

Land Use Code			221			
Setting			Multifamily Housing (Mid-Rise)			
Time Period	General Urban/Suburban		Dense Multi-Use Urban		Center City Core	
Trip Type	Weekday		Weekday		Weekday	
# Data Sites	Vehicle		Vehicle		Vehicle	
	8		4		3	
	% of 24-Hour Traffic		% of 24-Hour Traffic		% of 24-Hour Traffic	
Time	Entering	Exiting	Entering	Exiting	Entering	Exiting
12-1 AM	0.7	0.3	0.8	0.2	2.6	0
1-2 AM	0.3	0.2	1.3	0.1	0.4	0
2-3 AM	0.2	0.2	0.8	0.3	0.9	0.9
3-4 AM	0.4	0.3	0.6	0.3	0.4	0
4-5 AM	0.3	0.8	0.6	0.0	0.4	1.8
5-6 AM	0.6	2.7	2.3	1.6	0.4	3.1
6-7 AM	1.5	6.5	4.1	4.1	1.8	8.0
7-8 AM	2.8	12.1	4.2	17.7	5.3	12.0
8-9 AM	3.5	8.8	5.1	9.2	4.8	10.2
9-10 AM	2.9	5.7	2.5	5.6	5.7	4.9
10-11 AM	2.7	4.7	4.4	3.8	2.2	4.9
11-12 PM	4.5	4.5	3.1	5.7	3.9	2.7
12-1 PM	4.8	4.6	4.7	5.2	4.4	2.7
1-2 PM	4.1	4.8	5.3	3.7	3.9	6.7
2-3 PM	5.8	5.0	5.9	3.3	3.9	4.9
3-4 PM	6.7	4.9	6.2	4.4	6.1	4.0
4-5 PM	10.6	6.2	10.0	4.7	4.8	5.8
5-6 PM	12.6	7.7	8.7	4.1	8.3	7.6
6-7 PM	9.3	6.6	6.7	8.6	8.8	4.0
7-8 PM	7.8	4.8	6.7	4.4	7.9	4.4
8-9 PM	7.0	3.3	5.1	4.3	7.0	2.2
9-10 PM	5.5	2.2	4.6	3.1	5.3	4.9
10-11 PM	3.6	1.9	4.4	2.8	7.0	3.1
11-12 AM	2.0	1.1	1.9	2.8	3.5	1.3

			Hourly Trips	Average Daytime	Average Nighttime
12-1 AM	1.0	0.5	4		4
1-2 AM	0.5	0.25	2		2
2-3 AM	0.4	0.2	2		2
3-4 AM	0.7	0.35	3		3
4-5 AM	1.1	0.55	5		5
5-6 AM	3.3	1.65	14		14
6-7 AM	8.0	4	35		35
7-8 AM	14.9	7.45	65	65	
8-9 AM	12.3	6.15	53	53	
9-10 AM	8.6	4.3	37	37	
10-11 AM	7.4	3.7	32	32	
11-12 PM	9.0	4.5	39	39	
12-1 PM	9.4	4.7	41	41	
1-2 PM	8.9	4.45	39	39	
2-3 PM	10.8	5.4	47	47	
3-4 PM	11.6	5.8	50	50	
4-5 PM	16.8	8.4	73	73	
5-6 PM	20.3	10.15	88	88	
6-7 PM	15.9	7.95	69	69	
7-8 PM	12.6	6.3	55		55
8-9 PM	10.3	5.15	45		45
9-10 PM	7.7	3.85	33		33
10-11 PM	5.5	2.75	24		24
11-12 AM	3.1	1.55	13		13
ADT			866		
				53	20