

ATTACHMENT E1

RESPONSES TO COMMENTS ON THE INITIAL STUDY / MITIGATED NEGATIVE DECLARATION & MITIGATION MONITORING AND REPORTING PROGRAM

740–790 East Green Street Mixed-Use Project

Prepared for:

City of Pasadena

175 North Garfield Avenue

Pasadena, California 91101-1704

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Pasadena, California 91101

JUNE 2023

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
AAQS	ambient air quality standards
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
City	City of Pasadena
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
ESA	Environmental Site Assessment
FAR	floor-to-area ratio
HMCP	Hazardous Material Contingency Plan
IS/MND	Initial Study/Mitigated Negative Declaration
LACSD	Los Angeles County Sanitation Districts
LEED	Leadership in Energy and Environmental Design
LOS	level of service
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
NO2	nitrogen dioxide
PD	Planned Development
PM2.5	particulate matter less than or equal to 2.5 microns in diameter
Project	740–790 East Green Street Mixed-Use Project
TDF	Travel Demand Forecasting
UST	underground storage tank
VMT	vehicle miles traveled

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PREFACE

An Initial Study and proposed Mitigated Negative Declaration (IS/MND) for the proposed 740–790 East Green Street Mixed-Use Project (Project) was circulated for public review from December 3, 2020 to January 4, 2021. This document includes a copy of each comment letter that was received by the City of Pasadena (City) during the public review period for the IS/MND. The purpose of this document is to provide the City’s responses to the public comments received during the review period, to show minor changes that have been made to the IS/MND since publication in December 2020 as a result of these comments, and to set forth a Mitigation Monitoring and Reporting Program (MMRP) for the proposed Project. In addition, the Project Applicant has withdrawn the Planned Development (PD) application and changed components of the proposed Project accordingly. The changes to the project description and other applicable sections are located in Section 2.0 of this Final MND. As part of this Final MND, the following attachments are included:

- Attachment A Revised IS/MND

- Attachment B Transportation Impact Analysis, prepared by Pasadena Department of Transportation on February 24, 2022

- Attachment C Protected Tree Report, prepared by Carlberg Associates on February 4, 2022

The comment letters received during the public review period and the City’s associated responses are presented in Section 1.0 of this document. The changes that have been made to the IS/MND are shown in Section 2.0, and the MMRP constitutes Section 3.0. The MMRP has been prepared pursuant to California Environmental Quality Act (CEQA) Guidelines, Section 15074(d), which requires that a lead or responsible agency adopt a mitigation monitoring plan when approving or carrying out a project when an MND identifies measures to mitigate or avoid significant environmental effects.

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1 RESPONSES TO COMMENTS RECEIVED

The City has prepared responses to each comment received, which are ordered as presented in Table 1-1, List of Commenters. Each comment letter received has been categorized and labeled, then divided into sequential numbered comments (i.e., Letter 1, Comments 1-1, 1-2, 1-3 etc.). The City’s responses to comments on the proposed IS/MND represent a good-faith, reasoned effort to address the environmental issues identified in the comments. Pursuant to State CEQA Guidelines Section 15074(b), the decision makers will consider the IS/MND together with the comment received during the public review process.

Table 1-1. List of Commenters

Comment Letter	Name	Type	Date
<i>Federal or State Agencies</i>			
	None	N/A	N/A
<i>Regional or Local Agencies</i>			
1	Los Angeles County Sanitation Districts	Regional Agency	December 28, 2020
<i>Organizations and Individuals</i>			
2	Rebecca L. Davis, Lozeau Drury LLP on behalf of Supporters Alliance for Environmental Responsibility (“SAFER”)	Organization	January 18, 2021
3	David Diaz, MPH (ActiveSGV)	Organization	December 16, 2020
4	Richard A. McDonald, Esq. (Carlson & Nicolas, LLP)	Organization	December 10, 2020
5	Andrew Salimian (Pasadena Heritage)	Organization	December 17, 2020
6-PC	Andrew Salimian (Pasadena Heritage) (2)	Organization	December 17, 2020
7	Barry Brenner	Individual	January 4, 2021
8	Nina Chomsky	Individual	January 17, 2021
9-PC	Nina Chomsky	Individual	December 17, 2020
10	Christine Fedukowski	Individual	January 18, 2021
11	Erika Foy	Individual	January 15, 2021
12	Erika Foy	Individual	December 17, 2020
13-PC	Mic Hansen	Individual	December 17, 2020
14	Joseph Paggi	Individual	December 10, 2020
15	Gail Price	Individual	December 22, 2020

N/A = not applicable

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Comment Letter 1



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

December 28, 2020

Ref. DOC 5992858

Mr. David Sinclair
Senior Planner
City of Pasadena
175 North Garfield Avenue
Pasadena, CA 91101

Dear Mr. Sinclair:

NOI Response for Planned Development No. 37

The Los Angeles County Sanitation Districts (Districts) received a Notice of Intent to Adopt a Mitigated Negative Declaration (NOI) for the subject project on December 7, 2020. 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' Chapel Avenue Trunk Sewer Section 2, located in Los Robles Avenue north of Mission Street. The Districts' 15-inch diameter trunk sewer has a capacity of 8.1 million gallons per day (mgd) and conveyed a peak flow of 0.2 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.
3. The expected increase in average wastewater flow from the project site, described in the notice as 16,481 square feet of commercial and 264 residential units, is 34,101 gallons per day, after the structures on the project site are demolished. 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.

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1-2
1-3
1-4

DOC 6012237.D16

Mr. David Sinclair

2

December 28, 2020

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.

1-5

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717 or at araza@lacsdc.org.

Very truly yours,



Customer Service Specialist
Facilities Planning Department

AR:ar

cc: A. Schmidt
A. Howard

DOC 6012237.D16

**Response to Comment Letter No. 1
Los Angeles County Sanitation Districts
Facilities Planning Department
Adriana Raza, Customer Service Specialist
December 28, 2020**

1-1 This comment states the Los Angeles County Sanitation Districts (LACSD) received the Notice of Intent to Adopt a Mitigated Negative Declaration for the proposed Project. The comment further provides information and background on existing conditions and facilities serving the Project site. This comment does not contain any specific concerns related to the adequacy of the environmental analysis in the Initial Study/Mitigated Negative Declaration (IS/MND). However, the information presented in the comment has been added to the IS/MND. These additions clarify minor facts and do not result in any new significant impacts or a substantial increase in the severity of any environmental impacts. See Attachment A to this Final MND for revisions to Section 2.19, Utilities and Service Systems, page 120.

1-2 This comment notes which wastewater facilities would serve the proposed Project and cites the anticipated average flow and capacity. The information presented in the comment has been added to the IS/MND. These additions clarify minor facts and do not result in any new significant impacts or a substantial increase in the severity of any environmental impacts. Since the publication of the IS/MND, the Project Applicant has changed components of the proposed Project. For example, the Project would continue to include 263 residential units (including 41 affordable housing units). However, the Project has been revised to include 14,346 square feet of office instead of 16,481 square feet of commercial uses. The revisions do not result in any new significant impacts or a substantial increase in the severity of any environmental impacts. See Response to Comment 1-3 and Section 2.0 of this Final MND for more details. See Attachment A to this Final MND for revisions to Section 2.19, Utilities and Service Systems, pages 125 and 126.

Furthermore, the commenter's letter has now been cited in the IS/MND. Thus, Section 3.1, References Cited, of the IS/MND has been revised. See Attachment A to this Final MND for revisions to Section 3.1, page 136.

1-3 This comment states the Notice of Intent described the Project as 16,481 square feet of commercial and 264 residential units. The comment correctly cites the previously proposed square footage for commercial uses; however, the Project is proposing 263 units of residential. The comment further cites LACSD's average wastewater generation factors based on each class of land use designation and anticipates an average wastewater flow of 34,101 gallons per day after the structures on the Project site are demolished (LACSD 2020). The calculations and particular generation factors were not specific by the comment. As noted, the comment incorrectly cited the number of residential units proposed, thus the comment's average wastewater flow of 34,101 gallons per day is not correct. Since the publication of the IS/MND, the Project Applicant has withdrawn the Planned Development application and changed components of the proposed Project. For example, the Project would continue to include 263 residential units (including 41 affordable housing units); however, the Project has been revised to include 14,346 square feet of office instead of 16,481 square feet of

commercial uses. See Section 2.0 of this Final MND for more details. These revisions do not result in any new significant impacts or a substantial increase in the severity of any environmental impacts. Using the generation factors provided by LACSD, the previously proposed project would have result in approximately 57,509 gallons per day¹ (without considering the existing uses) and the revised Project is anticipated to result in 43,897 gallons per day.² As such, the revised Project would generate less wastewater as compared to the previously proposed project.

- 1-4** This comment discussed LACSD’s jurisdiction under the California Health and Safety Code to charge a fee for connecting facilities to LACSD’s Sewerage System or for increasing the strength or quantity of wastewater discharged from connected facilities. The information presented in the comment has been added to the IS/MND. These additions clarify minor facts and does not result in any new significant impacts or a substantial increase in the severity of any environmental impacts. The addition of an LACSD connection fee is a ministerial action and is included under the proposed Project’s permits and approvals, see Attachment A, Revised IS/MND, page 10.

- 1-5** This comment outlines the LACSD’s methodology for available capacity at treatment facilities as defined by the Federal Clean Air Act, the Southern California Association of Governments’ regional growth forecast, and clean air plans as mandated by the California Clean Act. In addition, the comment states “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.” This comment does not contain any specific concerns related to the adequacy of the environmental analysis in the IS/MND.

¹ (263 units x 156 gallons per day) + [16,481 sf x (1000 gallons per day/1000 square feet)] = 57,509 gallons per day

² (263 units x 156 gallons per day) + [14,346 sf x (200 gallons per day/1000 square feet)] = 43,897 gallons per day



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January 18, 2020

Via E-mail

David Sinclair, Senior Planner
City of Pasadena
175 North Garfield Avenue
Pasadena, CA 91101
dsinclair@cityofpasadena.net

Re: Comment on the Initial Study/Mitigated Negative Declaration for the 740-790 East Green Street Mixed-Use Project

Dear Mr. Sinclair:

I am writing on behalf of Supporters Alliance for Environmental Responsibility and its members living in and around the City of Pasadena (“SAFER”) regarding the Initial Study/Mitigated Negative Declaration (“IS/MND”) for the 740-790 East Green Street Mixed-Use Project proposed for the City of Pasadena (the “Project”). After reviewing the IS/MND, we conclude that it fails to adequately analyze all environmental impacts and to implement all necessary mitigation measures. SAFER respectfully requests that the City of Pasadena (the “City”) prepare an EIR in order to incorporate our concerns discussed below.

2-1

This comment has been prepared with the assistance of Certified Industrial Hygienist, Francis “Bud” Offermann, PE, CIH. Mr. Offerman’s comment and curriculum vitae are attached as Exhibit A hereto and is incorporated herein by reference in its entirety.

I. PROJECT DESCRIPTION

The Project involves the demolition of five existing commercial buildings, and the construction and operation of a new mixed-use project within the City of Pasadena Playhouse District. The mixed-use project would include one 4-story mixed-use building and one 5-story residential building. The two buildings would be connected by an outdoor ground-level breezeway and external pedestrian bridges at Levels 2, 3, and 4. The two buildings would be located on top of a two-level subterranean parking garage that encompasses the majority of the 2.33-acre property, and would include 443 parking spaces. The Project would include 16,481 square feet of commercial use and 263 for-rent residential units, 41 of which would be designated as affordable units. The Project relies on the density bonus provision of the Zoning

2-2



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Code to increase the maximum density by 30% over the proposed density of 87 dwelling units per acre. The Project requires a zone change from CD-4 to Planned Development No. 37.

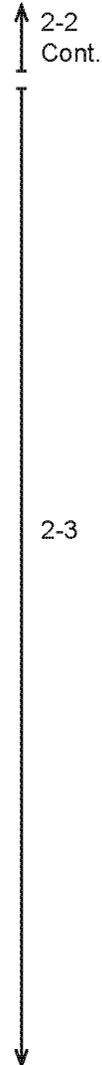
II. LEGAL STANDARD

As the California Supreme Court has held, “[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR.” *Communities for a Better Env’t v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 319-320 (*CBE v. SCAQMD*) (citing *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 88; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 504-505). “Significant environmental effect” is defined very broadly as “a substantial or potentially substantial adverse change in the environment.” Pub. Res. Code (“PRC”) § 21068; see also 14 CCR § 15382. An effect on the environment need not be “momentous” to meet the CEQA test for significance; it is enough that the impacts are “not trivial.” *No Oil, Inc.*, 13 Cal.3d at 83. “The ‘foremost principle’ in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.” *Communities for a Better Env’t v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 109 (*CBE v. CRA*).

The EIR is the very heart of CEQA. *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1214 (*Bakersfield Citizens*); *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927. The EIR is an “environmental ‘alarm bell’ whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return.” *Bakersfield Citizens*, 124 Cal.App.4th at 1220. The EIR also functions as a “document of accountability,” intended to “demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.” *Laurel Heights Improvements Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 392. The EIR process “protects not only the environment but also informed self-government.” *Pocket Protectors*, 124 Cal.App.4th at 927.

An EIR is required if “there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment.” PRC § 21080(d); see also *Pocket Protectors*, 124 Cal.App.4th at 927. In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR (14 CCR § 15371), only if there is not even a “fair argument” that the project will have a significant environmental effect. PRC, §§ 21100, 21064. Since “[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process,” by allowing the agency “to dispense with the duty [to prepare an EIR],” negative declarations are allowed only in cases where “the proposed project will not affect the environment at all.” *Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440.

Where an initial study shows that the project may have a significant effect on the environment, a mitigated negative declaration may be appropriate. However, a mitigated



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negative declaration is proper *only* if the project revisions would avoid or mitigate the potentially significant effects identified in the initial study “to a point where clearly no significant effect on the environment would occur, and... there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.” PRC §§ 21064.5 and 21080(c)(2); *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 331. In that context, “may” means a reasonable possibility of a significant effect on the environment. PRC §§ 21082.2(a), 21100, 21151(a); *Pocket Protectors*, 124 Cal.App.4th at 927; *League for Protection of Oakland’s etc. Historic Res. v. City of Oakland* (1997) 52 Cal.App.4th 896, 904–05.

Under the “fair argument” standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency’s decision. 14 CCR § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-51; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602. The “fair argument” standard creates a “low threshold” favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. *Pocket Protectors*, 124 Cal.App.4th at 928.

The “fair argument” standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

This ‘fair argument’ standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily, public agencies weigh the evidence in the record before them and reach a decision based on a preponderance of the evidence. [Citations]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact. The lead agency’s decision is thus largely legal rather than factual; it does not resolve conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

Kostka & Zishcke, *Practice Under CEQA*, §6.29, pp. 273-274. The Courts have explained that “it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency’s determination. Review is de novo, with a preference for resolving doubts in favor of environmental review.” *Pocket Protectors*, 124 Cal.App.4th at 928 (emphasis in original).

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III. DISCUSSION

A. There is Substantial Evidence of a Fair Argument that the Project Will Have a Significant Health Risk Impact from its Indoor Air Quality Impacts.

One component of an air quality impact analysis under CEQA is evaluating the health risk impacts of toxic air contaminant (“TACs”) emissions contributed by a proposed project as well as cumulatively with other nearby TAC sources. Certified Industrial Hygienist, Francis “Bud” Offermann, PE, CIH, has conducted a review of the Project, the CEQA Analysis, and relevant appendices regarding the Project’s indoor air emissions. Indoor Environmental Engineering Comments (Jan. 13, 2021) (“Offermann Comment”) (attached hereto as Exhibit A). Mr. Offermann is one of the world’s leading experts on indoor air quality and has published extensively on the topic. As discussed below and set forth in Mr. Offermann’s comments, the Project’s emissions of formaldehyde to air will result in very significant cancer risks to future residents. As a result of this significant effect to air quality, the Project requires preparation of an EIR to analyze and mitigate this significant impact.

The MND’s analysis includes a discussion of the Project’s anticipated TAC emissions. *Id.* at 39. The MND concludes that while TACs will be generated during Project construction, “the duration of the proposed construction activities would only constitute a small percentage of the total 30-year exposures period,” and therefore TACs from construction “would not result in concentrations causing significant health risks.” *Id.* The MND also concludes that “the proposed Project would not involve operational activities that would generate TAC emissions.” *Id.*

The MND identifies the significance thresholds established by the South Coast Air Quality Management District (“SCAQMD”) for a project’s TAC emissions as “an incremental cancer risk threshold of 10 in 1 million. ‘Incremental cancer risk’ is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a Project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of Environmental Health Hazard Assessment (OEHHA) risk-assessment methodology (OEHHA 2015).” *Id.* at 39.

Although the MND identifies TAC emissions associated with the Project’s construction equipment, the Analysis fails to acknowledge the significant indoor air emissions that also will result from the Project. Specifically, there is no discussion, analysis or identification of mitigations for significant emissions of formaldehyde to air from the Project.

Mr. Offermann explains that many composite wood products typically used in home and apartment building construction contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. He states, “The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particle board. These materials are commonly used in residential building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims.” Offermann Comment, pp. 2-3.



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Formaldehyde is a known human carcinogen. Mr. Offermann states that there is a fair argument that future residents of the Project will be exposed to a cancer risk from formaldehyde of approximately 120 per million, assuming all materials are compliant with the California Air Resources Board’s formaldehyde airborne toxics control measure. *Id.*, p. 3. This is 12 times the SCAQMD’s CEQA significance threshold for airborne cancer risk of 10 per million. Mr. Offermann concludes that this significant environmental impact should be analyzed in an EIR and mitigation measures should be imposed to reduce the risk of formaldehyde exposure. *Id.*, p. 2. Mr. Offermann suggests several feasible mitigation measures, such as requiring the use of no-added-formaldehyde composite wood products, which are readily available. Offermann Comments, pp. 12-13. Mr. Offermann also suggests requiring air ventilation systems which would reduce formaldehyde levels. *Id.* Since the CEQA Analysis does not analyze this impact at all, none of these or other mitigation measures are considered.

When a Project exceeds a duly adopted CEQA significance threshold, as here, this alone establishes a fair argument that the project will have a significant adverse environmental impact and an EIR is required. Indeed, in many instances, such air quality thresholds are the only criteria reviewed and treated as dispositive in evaluating the significance of a project’s air quality impacts. See, e.g. *Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 (County applies BAAQMD’s “published CEQA quantitative criteria” and “threshold level of cumulative significance”). See also *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 110-111 (“A ‘threshold of significance’ for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant”). The California Supreme Court made clear the substantial importance that an air district significance threshold plays in providing substantial evidence of a significant adverse impact. *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 327 (“As the [South Coast Air Quality Management] District’s established significance threshold for NOx is 55 pounds per day, these estimates [of NOx emissions of 201 to 456 pounds per day] constitute substantial evidence supporting a fair argument for a significant adverse impact”). Since expert evidence demonstrates that the Project will exceed the SCAQMD’s CEQA significance threshold, there is a fair argument that the Project will have significant adverse impacts and an EIR is required.

Mr. Offermann also notes that the high cancer risk that may be posed by the Project’s indoor air emissions likely will be exacerbated by the additional cancer risk that exists from vehicle emissions from the adjacent and nearby roadways such as I-210, E Green Street, Hudson Street, Colorado Boulevard, S. Lake Avenue, and Oak Knoll Avenue. *Id.* at 10.

He observes that the Project is located in south Coast Air Basin, which is a State and Federal non-attainment area for PM_{2.5}, and that “[a]n air quality analyses should be conducted to determine the concentrations of PM_{2.5} in the outdoor and indoor air that people inhale each day. *Id.* at 11. Because the City’s analysis of the cumulative health risk impacts of the Project fails to include these sources as well as the TAC emissions to air from the Project itself, the cumulative impact analysis and conclusion is not supported by substantial evidence. Mr. Offermann concludes that:

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2-5

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It is my experience that based on the projected high traffic noise levels, the concentration of PM_{2.5} will exceed the California and National PM_{2.5} annual and 24-hour standards and warrant installation of high efficiency air filters (i.e. MERV 13 or higher) in all mechanically supplied outdoor air ventilation systems

Id.

The failure of the CEQA Analysis to address the Project’s formaldehyde emissions is contrary to California Supreme Court decision in *California Building Industry Ass’n v. Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 386 (“*CBLA*”). In that case, the Supreme Court expressly holds that potential adverse impacts to future users and residents from pollution generated by a proposed project **must be addressed** under CEQA. At issue in *CBLA* was whether the Air District could enact CEQA guidelines that advised lead agencies that they must analyze the impacts of adjacent environmental conditions on a project. The Supreme Court held that CEQA does not generally require lead agencies to consider the environment’s effects on a project. *CBLA*, 62 Cal.4th at 800-801. However, to the extent a project may exacerbate existing environmental conditions at or near a project site, those would still have to be considered pursuant to CEQA. *Id.* at 801. In so holding, the Court expressly held that CEQA’s statutory language required lead agencies to disclose and analyze “impacts on **a project’s users or residents that arise from the project’s effects** on the environment.” (*Id.* at 800 (emphasis added).)

The carcinogenic formaldehyde emissions identified by Mr. Offermann are not an existing environmental condition. Those emissions to the air will be from the Project. People will be residing in and using the Project once it is built and begins emitting formaldehyde. Once built, the Project will begin to emit formaldehyde at levels that pose significant health risks. The Supreme Court in *CBLA* expressly finds that this type of air emission and health impact by the project on the environment and a “project’s users and residents” must be addressed in the CEQA process.

The Supreme Court’s reasoning is well-grounded in CEQA’s statutory language. CEQA expressly includes a project’s effects on human beings as an effect on the environment that must be addressed in an environmental review. “Section 21083(b)(3)’s express language, for example, requires a finding of a ‘significant effect on the environment’ (§ 21083(b)) whenever the ‘environmental effects of a project will cause substantial adverse effects *on human beings*, either directly or indirectly.’” (*CBLA*, 62 Cal.4th at 800 (emphasis in original).) Likewise, “the Legislature has made clear—in declarations accompanying CEQA’s enactment—that public health and safety are of great importance in the statutory scheme.” (*Id.*, citing e.g., §§ 21000, subs. (b), (c), (d), (g), 21001, subs. (b), (d).) It goes without saying that the hundreds of future residents at the Project are human beings and the health and safety of those residents is as important to CEQA’s safeguards as nearby residents currently living adjacent to the Project site.

Because Mr. Offermann’s expert review is substantial evidence of a fair argument of a significant environmental impact to future users of the project, an EIR must be prepared to disclose and mitigate those impacts.



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B. The IS/MND fails to establish a baseline for hazardous substances and its conclusion that the Project will not have significant impact on human health from hazardous substances is not supported by substantial evidence.

It is well-established that CEQA requires analysis of toxic soil contamination that may be disturbed by a Project, and that the effects of this disturbance on human health and the environment must be analyzed. CEQA requires a finding that a project has a “significant effect on the environment” if “the environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.” PRC §21083(b)(3). As the Court of Appeal recently stated, “[a] new project located in an area that will expose its occupants to preexisting dangerous pollutants can be said to have substantial adverse effect on human beings.” *Cal. Building Industry Assn. v. Bay Area Air Quality Mgm’t Dist.* (“*CBLA v. BAAQMD*”), 2013 Cal. App. LEXIS 644, *46 (Cal. Ct. App. 2013). The existence of toxic soil contamination at a project site is a significant impact requiring review and mitigation in an EIR. (*McQueen v. Bd. of Dir.* (1988) 202 Cal.App.3d 1136, 1149; *Assoc. For A Cleaner Env’t v. Yosemite Comm. College Dist.* (“*ACE v. Yosemite*”) (2004) 116 Cal.App.4th 629.) This mitigation may not be deferred until a future time after Project approval. (*Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d 296, 306; *Citizens for Responsible Equitable Env’t Dev. v. City of Chula Vista* (“*CREED*”) (2011) 197 Cal.App.4th 327, 330-31.)

The Project site has the potential to be significantly impacted with hazardous substances as a result of past land uses. A Phase I Environmental Site Assessment (“ESA”) was conducted and found numerous recognized environmental conditions (“RECs”) including:

- The east portion of the Project site was formerly used as a gas station. Car and battery repair and greasing also took place on site. There is no regulatory agency documentation that tanks were removed or soil sampled.
- The adjacent properties to the north of the Project site were used historically for auto repair since 1932. Based on the close proximity (within 100-feet) and the long-term utilization of the property for auto repair purposes, the north adjacent property poses a potential vapor encroachment concern

MND, p. 70.

Limited steps were taken to investigate these potentially harmful RECs. A Vapor Intrusion Risk Assessment was performed, but it was far from sufficient. First, it only included seven vapor probes for the entire 2.33-acre property. While six of the probes were taken to the rear of existing commercial structures to assess the former onsite auto repair and gas station, only one probe was taken in the northeastern corner of the Project site to assess the potential for vapor encroachment from the former gas station and auto repair operations just north of the Project site. EFI Global, Vapor Intrusion Assessment (Dec. 22, 2016), p. 2. Moreover, these probes were only taken to a depth of 5 feet below ground, while the two story subterranean parking garage proposed for the majority of the site will require excavation far below this level. In addition, the vapor sampling was conducted more than four years ago, and is therefore out of date now. It

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does not tell the public or decision makers how contamination plume may have migrated since the sampling.

Based on this incomplete sampling protocol, the MND concludes that “a threat to human health was not identified as a result of the former gasoline and auto repair operations at the Project site and at the north adjacent property. Therefore, potential risks associated with the vapor encroachment REC are less than significant.” MND, p. 70. But then in the next sentence, the MND admits that “[t]here are still potential impacts associated with the presence of the former gasoline service station, including potential underground storage tanks and impacts to subsurface soils. Potential contaminants of concern associated with former automotive and gasoline service station activities include, but are not limited to, petroleum hydrocarbons (gasoline, diesel, heavy oil), and volatile organic compounds (VOCs).” MND, p. 70. Rather than investigate these potentially dangerous conditions, the MND simply defers that analysis. *Id.* at 71.

The Project may have significant impacts due to the presence of toxic and cancer-causing chemicals in the soil at the Project site, but the MND failed to conduct the analysis to make such a determination. The MND admits that, “[s]hould construction occur in an area where a UST was/is located or contaminated soils are found, this could result in an upset or accident resulting in a release of hazardous materials.” *Id.* at 71. While some steps were taken to assess hazardous vapors, the City has done nothing to assess the potential for construction workers and others to be exposed to hazardous materials as a result of soil contamination. No soil samples were taken or tested, and no effort has yet been made to determine if USTs are or are not still on the property.

Construction workers, such as the members of SAFER, will be at the highest risk from such chemicals, as will be future residents of the Project and neighboring residents, who may be exposed during construction and operation. Construction workers will be directly disturbing and excavating potentially contaminated soil during Project construction.

To avoid these risks, and to establish an environmental baseline, the City should halt the MND process until an investigation of the USTs and soil contamination are assessed and cleanup completed. Additional vapor sampling is also needed at appropriate depths. Without this information, the MND does not include substantial evidence to support its conclusion that the Project will not have a significant impact on human health from hazards and hazardous substances.

C. The IS/MND’s greenhouse gas analysis is based on unsupported assumptions.

In support of its greenhouse gas analysis, the IS/MND states:

CalEEMod default values for energy consumption assume compliance with the 2016 Title 24 Building Energy Efficiency Standards. However, since the Project would be required to comply with the more stringent 2019 Title 24 Building Energy Efficiency Standards that became effective January 1, 2020, a 30% reduction was applied in



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CalEEMod based on the California Energy Commission’s estimate that compared to the 2016 standards, “nonresidential buildings [built to 2019 standards] will use about 30% less energy due mainly to lighting upgrades” (CEC 2018).

IS/MND, p. 61. The assumption that compliance with 2019 Title 24 Building Standards will result in a 30% reduction in GHG emissions compared to 2016 Building Standards is not supported by substantial evidence. The IS/MND states that the 30% reduction is based on the California Energy Commission’s estimate that compared to the 2016 standards, “nonresidential buildings [built to 2019 standards] will use about 30% less energy due mainly to lighting upgrades.” *Id.* The problem with the assumption is that the CEC’s determination was based on **non-residential** buildings, while the Project here consists mainly of residential uses. The MND provides no evidence that a 30% reduction is warranted in such a case. As a result, the City lacks evidence to support its finding that the Project’s GHG impacts will be less than significant.

D. There is no evidence that mitigation measures MM-TRA-1 will reduce the Project’s transportation impact to a less-than-significant level.

In general, mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or compensate for that impact. (CEQA Guidelines § 15370.) A CEQA analysis “must contain facts and analysis, not just the agency’s bare conclusions or opinions ... to support the inference that the mitigation measures will have a quantifiable ‘substantial’ impact on reducing the adverse effects.” *Sierra Club*, 6 Cal. 5th at 522; *Friends of Oroville v. City of Oroville* (2013) 219 Cal. App. 4th 832, 842-843 (EIR must quantify effectiveness of mitigation measures).

Moreover, CEQA disallows deferring the formulation of mitigation measures to post-approval studies. 14 CCR § 15126.4(a)(1)(B); *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308-309. An agency may only defer the formulation of mitigation measures when it possesses “‘meaningful information’ reasonably justifying an expectation of compliance.” *Sundstrom* at 308; *see also Sacramento Old City Association v. City Council of Sacramento* (1991) 229 Cal.App.3d 1011, 1028-29 (mitigation measures may be deferred only “for kinds of impacts for which mitigation is known to be feasible”). A lead agency is precluded from making the required CEQA findings unless the record shows that all uncertainties regarding the mitigation of impacts have been resolved; an agency may not rely on mitigation measures of uncertain efficacy or feasibility. *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727 (finding groundwater purchase agreement inadequate mitigation because there was no evidence that replacement water was available). This approach helps “insure the integrity of the process of decisionmaking by precluding stubborn problems or serious criticism from being swept under the rug.” *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935.

The IS/MND admits that the Project will have a significant transportation impact because the Project’s vehicle trips (“VT”) per capita will exceed the City’s threshold of significance. IS/MND, p. 109. In order to reduce this impact to a less-than-significant level, a 27% reduction in vehicle trips is required. As a result, the IS/MND required mitigation measure MM-TRA-1,



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which requires the Project Applicant/Developer to develop and implement a Transportation Demand Management Plan (“TDM”) “that includes strategies to reduce the Project’s vehicle trips by a minimum of 27%.” *Id.* The mitigation measures goes on to state that “strategies to reduce VT per capita shall complement City’s Trip Reduction Ordinance minimum requirements and shall include, but not necessarily be limited to, the following:”

- Unbundled parking for residential uses
- The Project Applicant/Developer shall purchase 121 Metro passes and offer them to interested residents at 50% discount for five consecutive years from the issuance of Certificate of Occupancy.
- The Project Applicant/Developer shall provide an Annual TDM Survey beginning one year after issuance of Certificate of Occupancy to demonstrate the minimum 27% reduction of Project vehicular trips per capita is maintained.

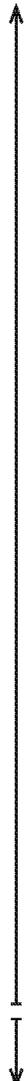
The MND concludes that, with implementation of MM-TRA-1, the Project’s transportation impact will be less-than-significant. This conclusion is not supported by substantial evidence, and MM-TRA-1 does not constitute adequate mitigation under CEQA.

First, despite knowing the amount of VT reduction that is needed, MM-TRA-1 defers identification of measures to mitigate impacts until some unspecified time, after CEQA review is complete. An agency must have, and must articulate, a good reason for deferring the formulation of mitigation. *San Joaquin Raptor*, 149 Cal.App.4th at 670, 684. Absent such a reason, deferral is simply not acceptable. “[R]eliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA’s goals of full disclosure and informed decisionmaking; and[,] consequently, these mitigation plans have been overturned on judicial review as constituting improper deferral of environmental assessment.” *Comtys. for a Better Env’t v. City of Richmond* (2010) 184 Cal.App.4th 70, 92. The City has given no reason why it could not devise and commit to mitigation measures now. Deferral of mitigation without justification violates CEQA.

Deferral of mitigation is also impermissible if it removes the CEQA decision-making body from its decision-making role. The City may not delegate the formulation and approval of mitigation measures to address environmental impacts because an agency’s legislative body must ultimately review and vouch for all environmental analysis mandated by CEQA. *Sundstrom v County of Mendocino* (1988) 202 Cal.App.3d 296, 306-308. Thus, the IS/MND may not rely on programs to be developed and implemented later without approval by the City.

Here, the City as the lead agency has improperly delegated its legal responsibility of determining what constitutes adequate mitigation to the Project applicant and developer. MM-TRA-1 calls for the development of a TDM plan, but there is no requirement that such plan be reviewed or approved by the City. Thus it is the Project applicant itself that will determine whether or not its TDM is sufficient to mitigate the Project’s impacts. The IS/MND may not rely on a TDM plan to be developed, approved, and implemented later without any approval by the City, at some future time after the Project has been approved.

Second, there is no evidence that MM-TRA-1 will be effective at reducing vehicle trips



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by 27%. One of the three elements of the TDM plan is nothing more than a survey to determine if trips have been reduced, and does nothing to actual reduce vehicle trips. The second proposed element of the TDM plan would provide some discounted bus passes, but only for five years. After the five years are over, no mitigation is required, but the impact will continue for the life of the building. The only other measure required as part of the TDM is the unbundling of parking for residential uses, and there is no evidence that this alone with reduce vehicle trips by 27% or more. Without additional evidence or mandated mitigation requirements, there is no evidence tha that the Project's transportation impacts will be mitigated to a less-than-significant level.

Without valid mitigation, the Project's significant impact on transportation remains significant, and an EIR is required.

IV. CONCLUSION

In light of the above comments, the City must prepare an EIR for the Project and the draft EIR should be circulated for public review and comment in accordance with CEQA. Thank you for considering these comments.

Sincerely,

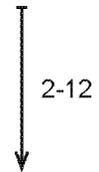


Rebecca L. Davis
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EXHIBIT A



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Date: January 13, 2021
To: Rebecca Davis
Lozeau | Drury LLP
1939 Harrison Street, Suite 150
Oakland, California 94612
From: Francis J. Offermann PE CIH
Subject: Indoor Air Quality: 740 E Green Street Project – Pasadena, CA
(IEE File Reference: P-4416)
Pages: 19

Indoor Air Quality Impacts

Indoor air quality (IAQ) directly impacts the comfort and health of building occupants, and the achievement of acceptable IAQ in newly constructed and renovated buildings is a well-recognized design objective. For example, IAQ is addressed by major high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014). Indoor air quality in homes is particularly important because occupants, on average, spend approximately ninety percent of their time indoors with the majority of this time spent at home (EPA, 2011). Some segments of the population that are most susceptible to the effects of poor IAQ, such as the very young and the elderly, occupy their homes almost continuously. Additionally, an increasing number of adults are working from home at least some of the time during the workweek. Indoor air quality also is a serious concern for workers in hotels, offices and other business establishments.

The concentrations of many air pollutants often are elevated in homes and other buildings relative to outdoor air because many of the materials and products used indoors contain and release a variety of pollutants to air (Hodgson et al., 2002; Offermann and Hodgson,



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2011). With respect to indoor air contaminants for which inhalation is the primary route of exposure, the critical design and construction parameters are the provision of adequate ventilation and the reduction of indoor sources of the contaminants.

Indoor Formaldehyde Concentrations Impact. In the California New Home Study (CNHS) of 108 new homes in California (Offermann, 2009), 25 air contaminants were measured, and formaldehyde was identified as the indoor air contaminant with the highest cancer risk as determined by the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), No Significant Risk Levels (NSRL) for carcinogens. The NSRL is the daily intake level calculated to result in one excess case of cancer in an exposed population of 100,000 (i.e., ten in one million cancer risk) and for formaldehyde is 40 µg/day. The NSRL concentration of formaldehyde that represents a daily dose of 40 µg is 2 µg/m³, assuming a continuous 24-hour exposure, a total daily inhaled air volume of 20 m³, and 100% absorption by the respiratory system. All of the CNHS homes exceeded this NSRL concentration of 2 µg/m³. The median indoor formaldehyde concentration was 36 µg/m³, and ranged from 4.8 to 136 µg/m³, which corresponds to a median exceedance of the 2 µg/m³ NSRL concentration of 18 and a range of 2.3 to 68.

Therefore, the cancer risk of a resident living in a California home with the median indoor formaldehyde concentration of 36 µg/m³, is 180 per million as a result of formaldehyde alone. The CEQA significance threshold for airborne cancer risk is 10 per million, as established by the South Coast Air Quality Management District (SCAQMD, 2015).

Besides being a human carcinogen, formaldehyde is also a potent eye and respiratory irritant. In the CNHS, many homes exceeded the non-cancer reference exposure levels (RELs) prescribed by California Office of Environmental Health Hazard Assessment (OEHHA, 2017b). The percentage of homes exceeding the RELs ranged from 98% for the Chronic REL of 9 µg/m³ to 28% for the Acute REL of 55 µg/m³.

The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and



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particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims.

In January 2009, the California Air Resources Board (CARB) adopted an airborne toxics control measure (ATCM) to reduce formaldehyde emissions from composite wood products, including hardwood plywood, particleboard, medium density fiberboard, and also furniture and other finished products made with these wood products (California Air Resources Board 2009). While this formaldehyde ATCM has resulted in reduced emissions from composite wood products sold in California, they do not preclude that homes built with composite wood products meeting the CARB ATCM will have indoor formaldehyde concentrations below cancer and non-cancer exposure guidelines.

A follow up study to the California New Home Study (CNHS) was conducted in 2016-2018 (Singer et. al., 2019), and found that the median indoor formaldehyde in new homes built after 2009 with CARB Phase 2 Formaldehyde ATCM materials had lower indoor formaldehyde concentrations, with a median indoor concentrations of $22.4 \mu\text{g}/\text{m}^3$ (18.2 ppb) as compared to a median of $36 \mu\text{g}/\text{m}^3$ found in the 2007 CNHS. Unlike in the CNHS study where formaldehyde concentrations were measured with pumped DNPH samplers, the formaldehyde concentrations in the HENGH study were measured with passive samplers, which were estimated to under-measure the true indoor formaldehyde concentrations by approximately 7.5%. Applying this correction to the HENGH indoor formaldehyde concentrations results in a median indoor concentration of $24.1 \mu\text{g}/\text{m}^3$, which is 33% lower than the $36 \mu\text{g}/\text{m}^3$ found in the 2007 CNHS.

Thus, while new homes built after the 2009 CARB formaldehyde ATCM have a 33% lower median indoor formaldehyde concentration and cancer risk, the median lifetime cancer risk is still 120 per million for homes built with CARB compliant composite wood products. This median lifetime cancer risk is more than 12 times the OEHHA 10 in a million cancer risk threshold (OEHHA, 2017a).

With respect to the 740-790 East Green Street, Mixed-Use Project – Pasadena, the buildings consists of residential and commercial spaces.



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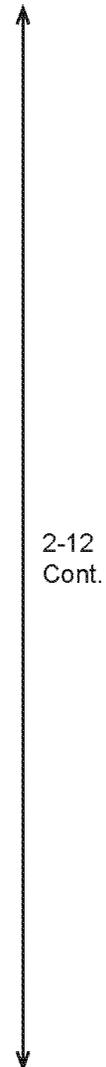
The residential occupants will potentially have continuous exposure (e.g. 24 hours per day, 52 weeks per year). These exposures are anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in residential construction.

Because these residences will be constructed with CARB Phase 2 Formaldehyde ATCM materials, and be ventilated with the minimum code required amount of outdoor air, the indoor residential formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 24.1 $\mu\text{g}/\text{m}^3$ (Singer et. al., 2020)

Assuming that the residential occupants inhale 20 m^3 of air per day, the average 70-year lifetime formaldehyde daily dose is 482 $\mu\text{g}/\text{day}$ for continuous exposure in the residences. This exposure represents a cancer risk of 120 per million, which is more than 12 times the CEQA cancer risk of 10 per million. For occupants that do not have continuous exposure, the cancer risk will be proportionally less but still substantially over the CEQA cancer risk of 10 per million (e.g. for 12/hour/day occupancy, more than 6 times the CEQA cancer risk of 10 per million).

The employees of the commercial spaces are expected to experience significant indoor exposures (e.g., 40 hours per week, 50 weeks per year). These exposures for employees are anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in offices, warehouses, residences and hotels.

Because the commercial spaces will be constructed with CARB Phase 2 Formaldehyde ATCM materials, and be ventilated with the minimum code required amount of outdoor air, the indoor formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 24.1 $\mu\text{g}/\text{m}^3$ (Singer et. al., 2020)



Assuming that the employees of commercial spaces work 8 hours per day and inhale 20 m³ of air per day, the formaldehyde dose per work-day at the offices is 161 µg/day.

Assuming that these employees work 5 days per week and 50 weeks per year for 45 years (start at age 20 and retire at age 65) the average 70-year lifetime formaldehyde daily dose is 70.9 µg/day.

This is 1.77 times the NSRL (OEHHA, 2017a) of 40 µg/day and represents a cancer risk of 17.7 per million, which exceeds the CEQA cancer risk of 10 per million. This impact should be analyzed in an environmental impact report (“EIR”), and the agency should impose all feasible mitigation measures to reduce this impact. Several feasible mitigation measures are discussed below and these and other measures should be analyzed in an EIR.

Appendix A, Indoor Formaldehyde Concentrations and the CARB Formaldehyde ATCM, provides analyses that show utilization of CARB Phase 2 Formaldehyde ATCM materials will not ensure acceptable cancer risks with respect to formaldehyde emissions from composite wood products.

Even composite wood products manufactured with CARB certified ultra low emitting formaldehyde (ULEF) resins do not insure that the indoor air will have concentrations of formaldehyde that meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

The following describes a method that should be used, prior to construction in the environmental review under CEQA, for determining whether the indoor concentrations resulting from the formaldehyde emissions of specific building materials/furnishings selected exceed cancer and non-cancer guidelines. Such a design analyses can be used to identify those materials/furnishings prior to the completion of the City’s CEQA review and project approval, that have formaldehyde emission rates that contribute to indoor



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concentrations that exceed cancer and non-cancer guidelines, so that alternative lower emitting materials/furnishings may be selected and/or higher minimum outdoor air ventilation rates can be increased to achieve acceptable indoor concentrations and incorporated as mitigation measures for this project.

Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment

This formaldehyde emissions assessment should be used in the environmental review under CEQA to assess the indoor formaldehyde concentrations from the proposed loading of building materials/furnishings, the area-specific formaldehyde emission rate data for building materials/furnishings, and the design minimum outdoor air ventilation rates. This assessment allows the applicant (and the City) to determine, before the conclusion of the environmental review process and the building materials/furnishings are specified, purchased, and installed, if the total chemical emissions will exceed cancer and non-cancer guidelines, and if so, allow for changes in the selection of specific material/furnishings and/or the design minimum outdoor air ventilations rates such that cancer and non-cancer guidelines are not exceeded.

1.) Define Indoor Air Quality Zones. Divide the building into separate indoor air quality zones, (IAQ Zones). IAQ Zones are defined as areas of well-mixed air. Thus, each ventilation system with recirculating air is considered a single zone, and each room or group of rooms where air is not recirculated (e.g. 100% outdoor air) is considered a separate zone. For IAQ Zones with the same construction material/furnishings and design minimum outdoor air ventilation rates. (e.g. hotel rooms, apartments, condominiums, etc.) the formaldehyde emission rates need only be assessed for a single IAQ Zone of that type.

2.) Calculate Material/Furnishing Loading. For each IAQ Zone, determine the building material and furnishing loadings (e.g., m² of material/m² floor area, units of furnishings/m² floor area) from an inventory of all potential indoor formaldehyde sources, including flooring, ceiling tiles, furnishings, finishes, insulation, sealants, adhesives, and any products constructed with composite wood products containing urea-formaldehyde resins (e.g., plywood, medium density fiberboard, particleboard).



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3.) Calculate the Formaldehyde Emission Rate. For each building material, calculate the formaldehyde emission rate ($\mu\text{g}/\text{h}$) from the product of the area-specific formaldehyde emission rate ($\mu\text{g}/\text{m}^2\text{-h}$) and the area (m^2) of material in the IAQ Zone, and from each furnishing (e.g. chairs, desks, etc.) from the unit-specific formaldehyde emission rate ($\mu\text{g}/\text{unit-h}$) and the number of units in the IAQ Zone.

NOTE: As a result of the high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014), most manufacturers of building materials furnishings sold in the United States conduct chemical emission rate tests using the California Department of Health “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers,” (CDPH, 2017), or other equivalent chemical emission rate testing methods. Most manufacturers of building furnishings sold in the United States conduct chemical emission rate tests using ANSI/BIFMA M7.1 Standard Test Method for Determining VOC Emissions (BIFMA, 2018), or other equivalent chemical emission rate testing methods.

CDPH, BIFMA, and other chemical emission rate testing programs, typically certify that a material or furnishing does not create indoor chemical concentrations in excess of the maximum concentrations permitted by their certification. For instance, the CDPH emission rate testing requires that the measured emission rates when input into an office, school, or residential model do not exceed one-half of the OEHHA Chronic Exposure Guidelines (OEHHA, 2017b) for the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017). These certifications themselves do not provide the actual area-specific formaldehyde emission rate (i.e., $\mu\text{g}/\text{m}^2\text{-h}$) of the product, but rather provide data that the formaldehyde emission rates do not exceed the maximum rate allowed for the certification. Thus, for example, the data for a certification of a specific type of flooring may be used to calculate that the area-specific emission rate of formaldehyde is less than $31 \mu\text{g}/\text{m}^2\text{-h}$, but not the actual measured specific emission rate, which may be 3, 18, or $30 \mu\text{g}/\text{m}^2\text{-h}$. These area-specific emission rates determined from the product certifications of CDPH, BIFA, and other certification programs can be used as an initial estimate of the formaldehyde emission rate.



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If the actual area-specific emission rates of a building material or furnishing is needed (i.e. the initial emission rates estimates from the product certifications are higher than desired), then that data can be acquired by requesting from the manufacturer the complete chemical emission rate test report. For instance if the complete CDPH emission test report is requested for a CDHP certified product, that report will provide the actual area-specific emission rates for not only the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017), but also all of the cancer and reproductive/developmental chemicals listed in the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), all of the toxic air contaminants (TACs) in the California Air Resources Board Toxic Air Contamination List (CARB, 2011), and the 10 chemicals with the greatest emission rates.

Alternatively, a sample of the building material or furnishing can be submitted to a chemical emission rate testing laboratory, such as Berkeley Analytical Laboratory (<https://berkeleyanalytical.com>), to measure the formaldehyde emission rate.

4.) Calculate the Total Formaldehyde Emission Rate. For each IAQ Zone, calculate the total formaldehyde emission rate (i.e. µg/h) from the individual formaldehyde emission rates from each of the building material/furnishings as determined in Step 3.

5.) Calculate the Indoor Formaldehyde Concentration. For each IAQ Zone, calculate the indoor formaldehyde concentration (µg/m³) from Equation 1 by dividing the total formaldehyde emission rates (i.e. µg/h) as determined in Step 4, by the design minimum outdoor air ventilation rate (m³/h) for the IAQ Zone.

$$C_{in} = \frac{E_{total}}{Q_{oa}} \text{ (Equation 1)}$$

where:

C_{in} = indoor formaldehyde concentration (µg/m³)

E_{total} = total formaldehyde emission rate (µg/h) into the IAQ Zone.

Q_{oa} = design minimum outdoor air ventilation rate to the IAQ Zone (m³/h)

The above Equation 1 is based upon mass balance theory, and is referenced in Section



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3.10.2 “Calculation of Estimated Building Concentrations” of the California Department of Health “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers”, (CDPH, 2017).

6.) Calculate the Indoor Exposure Cancer and Non-Cancer Health Risks. For each IAQ Zone, calculate the cancer and non-cancer health risks from the indoor formaldehyde concentrations determined in Step 5 and as described in the OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines; Guidance Manual for Preparation of Health Risk Assessments (OEHHA, 2015).

7.) Mitigate Indoor Formaldehyde Exposures of exceeding the CEQA Cancer and/or Non-Cancer Health Risks. In each IAQ Zone, provide mitigation for any formaldehyde exposure risk as determined in Step 6, that exceeds the CEQA cancer risk of 10 per million or the CEQA non-cancer Hazard Quotient of 1.0.

Provide the source and/or ventilation mitigation required in all IAQ Zones to reduce the health risks of the chemical exposures below the CEQA cancer and non-cancer health risks.

Source mitigation for formaldehyde may include:

- 1.) reducing the amount materials and/or furnishings that emit formaldehyde
- 2.) substituting a different material with a lower area-specific emission rate of formaldehyde

Ventilation mitigation for formaldehyde emitted from building materials and/or furnishings may include:

- 1.) increasing the design minimum outdoor air ventilation rate to the IAQ Zone.

NOTE: Mitigating the formaldehyde emissions through use of less material/furnishings, or use of lower emitting materials/furnishings, is the preferred mitigation option, as mitigation with increased outdoor air ventilation increases initial and operating costs associated with the heating/cooling systems.



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Further, we are not asking that the builder “speculate” on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers,” (CDPH, 2017), and use the procedure described earlier above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Outdoor Air Ventilation Impact. Another important finding of the CNHS, was that the outdoor air ventilation rates in the homes were very low. Outdoor air ventilation is a very important factor influencing the indoor concentrations of air contaminants, as it is the primary removal mechanism of all indoor air generated contaminants. Lower outdoor air exchange rates cause indoor generated air contaminants to accumulate to higher indoor air concentrations. Many homeowners rarely open their windows or doors for ventilation as a result of their concerns for security/safety, noise, dust, and odor concerns (Price, 2007). In the CNHS field study, 32% of the homes did not use their windows during the 24-hour Test Day, and 15% of the homes did not use their windows during the entire preceding week. Most of the homes with no window usage were homes in the winter field session. Thus, a substantial percentage of homeowners never open their windows, especially in the winter season. The median 24-hour measurement was 0.26 air changes per hour (ach), with a range of 0.09 ach to 5.3 ach. A total of 67% of the homes had outdoor air exchange rates below the minimum California Building Code (2001) requirement of 0.35 ach. Thus, the relatively tight envelope construction, combined with the fact that many people never open their windows for ventilation, results in homes with low outdoor air exchange rates and higher indoor air contaminant concentrations.

The 740-790 East Green Street, Mixed-Use Project - Pasadena is close to roads with moderate to high traffic (e.g., I-210, E Green Street, Hudson Street, Colorado Boulevard, S Lake Avenue, Oak Knoll Avenue). As a result of the outdoor vehicle traffic noise, the Project site is likely to be a sound impacted site.



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According to the Draft Initial Study/Mitigated Negative Declaration, 740-790 East Green Street, Mixed-Use Project (Dudek, 2020) the existing roadway noise level in Table 2.13-1, range from 65 to 71 dBA Leq at 4 locations on one day over a 1.5 hour period (9:49-11:06).

As a result of the high outdoor noise levels, the current project will require a mechanical supply of outdoor air ventilation to allow for a habitable interior environment with closed windows and doors. Such a ventilation system would allow windows and doors to be kept closed at the occupant's discretion to control exterior noise within building interiors.

PM_{2.5} Outdoor Concentrations Impact. An additional impact of the nearby motor vehicle traffic associated with this project, are the outdoor concentrations of PM_{2.5}. According to the Draft Initial Study/Mitigated Negative Declaration, 740-790 East Green Street (Dudak, 2020) the Project is located in South Coast Air Basin, which is a State and Federal non-attainment area for PM_{2.5}.

An air quality analyses should be conducted to be conducted to determine the concentrations of PM_{2.5} in the outdoor and indoor air that people inhale each day. This air quality analyses needs to consider the cumulative impacts of the project related emissions, existing and projected future emissions from local PM_{2.5} sources (e.g. stationary sources, motor vehicles, and airport traffic) upon the outdoor air concentrations at the Project site. If the outdoor concentrations are determined to exceed the California and National annual average PM_{2.5} exceedance concentration of 12 µg/m³, or the National 24-hour average exceedance concentration of 35 µg/m³, then the buildings need to have a mechanical supply of outdoor air that has air filtration with sufficient removal efficiency, such that the indoor concentrations of outdoor PM_{2.5} particles is less than the California and National PM_{2.5} annual and 24-hour standards.

It is my experience that based on the projected high traffic noise levels, the annual average concentration of PM_{2.5} will exceed the California and National PM_{2.5} annual and 24-hour standards and warrant installation of high efficiency air filters (i.e. MERV 13 or higher) in all mechanically supplied outdoor air ventilation systems.



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Indoor Air Quality Impact Mitigation Measures

The following are recommended mitigation measures to minimize the impacts upon indoor quality:

Indoor Formaldehyde Concentrations Mitigation. Use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins (CARB, 2009). CARB Phase 2 certified composite wood products, or ultra-low emitting formaldehyde (ULEF) resins, do not insure indoor formaldehyde concentrations that are below the CEQA cancer risk of 10 per million. Only composite wood products manufactured with CARB approved no-added formaldehyde (NAF) resins, such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

Alternatively, conduct the previously described Pre-Construction Building Material/Furnishing Chemical Emissions Assessment, to determine that the combination of formaldehyde emissions from building materials and furnishings do not create indoor formaldehyde concentrations that exceed the CEQA cancer and non-cancer health risks.

It is important to note that we are not asking that the builder “speculate” on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers”; (CDPH, 2017), and use the procedure described above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.



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Outdoor Air Ventilation Mitigation. Provide each habitable room with a continuous mechanical supply of outdoor air that meets or exceeds the California 2016 Building Energy Efficiency Standards (California Energy Commission, 2015) requirements of the greater of 15 cfm/occupant or 0.15 cfm/ft² of floor area. Following installation of the system conduct testing and balancing to insure that required amount of outdoor air is entering each habitable room and provide a written report documenting the outdoor airflow rates. Do not use exhaust only mechanical outdoor air systems, use only balanced outdoor air supply and exhaust systems or outdoor air supply only systems. Provide a manual for the occupants or maintenance personnel, that describes the purpose of the mechanical outdoor air system and the operation and maintenance requirements of the system.

PM_{2.5} Outdoor Air Concentration Mitigation. Install air filtration with sufficient PM_{2.5} removal efficiency (e.g. MERV 13 or higher) to filter the outdoor air entering the mechanical outdoor air supply systems, such that the indoor concentrations of outdoor PM_{2.5} particles are less than the California and National PM_{2.5} annual and 24-hour standards. Install the air filters in the system such that they are accessible for replacement by the occupants or maintenance personnel. Include in the mechanical outdoor air ventilation system manual instructions on how to replace the air filters and the estimated frequency of replacement.

References

BIFA. 2018. BIFMA Product Safety and Performance Standards and Guidelines.
www.bifma.org/page/standardsoverview

California Air Resources Board. 2009. Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products. California Environmental Protection Agency, Sacramento, CA.
<https://www.arb.ca.gov/regact/2007/compwood07/fro-final.pdf>



2-12
Cont.

California Air Resources Board. 2011. Toxic Air Contaminant Identification List. California Environmental Protection Agency, Sacramento, CA. <https://www.arb.ca.gov/toxics/id/taclist.htm>

California Building Code. 2001. California Code of Regulations, Title 24, Part 2 Volume 1, Appendix Chapter 12, Interior Environment, Division 1, Ventilation, Section 1207: 2001 California Building Code, California Building Standards Commission. Sacramento, CA.

California Building Standards Commission (2014). 2013 California Green Building Standards Code. California Code of Regulations, Title 24, Part 11. California Building Standards Commission, Sacramento, CA <http://www.bsc.ca.gov/Home/CALGreen.aspx>.

California Energy Commission, PIER Program. CEC-500-2007-033. Final Report, ARB Contract 03-326. Available at: www.arb.ca.gov/research/apr/past/03-326.pdf.

California Energy Commission, 2015. 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, California Code of Regulations, Title 24, Part 6. <http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf>

CDPH. 2017. Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers, Version 1.1. California Department of Public Health, Richmond, CA. <https://www.cdph.ca.gov/Programs/CCDCPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx>.

Dudek. 2020. Draft Initial Study/Mitigated Negative Declaration, 740-790 East Green Street, Mixed-Use Project.

EPA. 2011. Exposure Factors Handbook: 2011 Edition, Chapter 16 – Activity Factors. Report EPA/600/R-09/052F, September 2011. U.S. Environmental Protection Agency, Washington, D.C.



2-12
Cont.

Hodgson, A. T., D. Beal, J.E.R. McIlvaine. 2002. Sources of formaldehyde, other aldehydes and terpenes in a new manufactured house. *Indoor Air* 12: 235–242.

OEHHA (Office of Environmental Health Hazard Assessment). 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines; Guidance Manual for Preparation of Health Risk Assessments.

OEHHA (Office of Environmental Health Hazard Assessment). 2017a. Proposition 65 Safe Harbor Levels. No Significant Risk Levels for Carcinogens and Maximum Allowable Dose Levels for Chemicals Causing Reproductive Toxicity. Available at: <http://www.oehha.ca.gov/prop65/pdf/safeharbor081513.pdf>

OEHHA - Office of Environmental Health Hazard Assessment. 2017b. All OEHHA Acute, 8-hour and Chronic Reference Exposure Levels. Available at: <http://oehha.ca.gov/air/allrels.html>

Offermann, F. J. 2009. Ventilation and Indoor Air Quality in New Homes. California Air Resources Board and California Energy Commission, PIER Energy-Related Environmental Research Program. Collaborative Report. CEC-500-2009-085. <https://www.arb.ca.gov/research/apr/past/04-310.pdf>

Offermann, F. J. and A. T. Hodgson. 2011. Emission Rates of Volatile Organic Compounds in New Homes. Proceedings Indoor Air 2011 (12th International Conference on Indoor Air Quality and Climate 2011), June 5-10, 2011, Austin, TX.

Singer, B.C, Chan, W.R, Kim, Y., Offermann, F.J., and Walker I.S. 2020. Indoor Air Quality in California Homes with Code-Required Mechanical Ventilation. *Indoor Air*, Vol 30, Issue 5, 885-899.

South Coast Air Quality Management District (SCAQMD). 2015. California Environmental Quality Act Air Quality Handbook. South Coast Air Quality Management District,



2-12
Cont.

Diamond Bar, CA, <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>

USGBC. 2014. LEED BD+C Homes v4. U.S. Green Building Council, Washington, D.C. <http://www.usgbc.org/credits/homes/v4>

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APPENDIX A

INDOOR FORMALDEHYDE CONCENTRATIONS
AND THE
CARB FORMALDEHYDE ATCM

With respect to formaldehyde emissions from composite wood products, the CARB ATCM regulations of formaldehyde emissions from composite wood products, do not assure healthful indoor air quality. The following is the stated purpose of the CARB ATCM regulation - *The purpose of this airborne toxic control measure is to “reduce formaldehyde emissions from composite wood products, and finished goods that contain composite wood products, that are sold, offered for sale, supplied, used, or manufactured for sale in California”*. In other words, the CARB ATCM regulations do not “assure healthful indoor air quality”, but rather “reduce formaldehyde emissions from composite wood products”.

Just how much protection do the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products? Definitely some, but certainly the regulations do not “*assure healthful indoor air quality*” when CARB Phase 2 products are utilized. As shown in the Chan 2019 study of new California homes, the median indoor formaldehyde concentration was of 22.4 $\mu\text{g}/\text{m}^3$ (18.2 ppb), which corresponds to a cancer risk of 112 per million for occupants with continuous exposure, which is more than 11 times the CEQA cancer risk of 10 per million.

Another way of looking at how much protection the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products is to calculate the maximum number of square feet of composite wood product that can be in a residence without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy.

For this calculation I utilized the floor area (2,272 ft^2), the ceiling height (8.5 ft), and the number of bedrooms (4) as defined in Appendix B (New Single-Family Residence Scenario) of the Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers, Version 1.1, 2017, California Department of Public Health,



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Richmond, CA. <https://www.cdph.ca.gov/Programs/CCDC/DCDC/DCDC/Pages/VOC.aspx>.

For the outdoor air ventilation rate I used the 2019 Title 24 code required mechanical ventilation rate (ASHRAE 62.2) of 106 cfm (180 m³/h) calculated for this model residence. For the composite wood formaldehyde emission rates I used the CARB ATCM Phase 2 rates.

The calculated maximum number of square feet of composite wood product that can be in a residence, without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy are as follows for the different types of regulated composite wood products.

- Medium Density Fiberboard (MDF) – 15 ft² (0.7% of the floor area), or
- Particle Board – 30 ft² (1.3% of the floor area), or
- Hardwood Plywood – 54 ft² (2.4% of the floor area), or
- Thin MDF – 46 ft² (2.0 % of the floor area).

For offices and hotels the calculated maximum amount of composite wood product (% of floor area) that can be used without exceeding the CEQA cancer risk of 10 per million for occupants, assuming 8 hours/day occupancy, and the California Mechanical Code minimum outdoor air ventilation rates are as follows for the different types of regulated composite wood products.

- Medium Density Fiberboard (MDF) – 3.6 % (offices) and 4.6% (hotel rooms), or
- Particle Board – 7.2 % (offices) and 9.4% (hotel rooms), or
- Hardwood Plywood – 13 % (offices) and 17% (hotel rooms), or
- Thin MDF – 11 % (offices) and 14 % (hotel rooms)

Clearly the CARB ATCM does not regulate the formaldehyde emissions from composite wood products such that the potentially large areas of these products, such as for flooring, baseboards, interior doors, window and door trims, and kitchen and bathroom cabinetry, could be used without causing indoor formaldehyde concentrations that result in CEQA



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cancer risks that substantially exceed 10 per million for occupants with continuous occupancy.

Even composite wood products manufactured with CARB certified ultra low emitting formaldehyde (ULEF) resins do not insure that the indoor air will have concentrations of formaldehyde that meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

If CARB Phase 2 compliant or ULEF composite wood products are utilized in construction, then the resulting indoor formaldehyde concentrations should be determined in the design phase using the specific amounts of each type of composite wood product, the specific formaldehyde emission rates, and the volume and outdoor air ventilation rates of the indoor spaces, and all feasible mitigation measures employed to reduce this impact (e.g. use less formaldehyde containing composite wood products and/or incorporate mechanical systems capable of higher outdoor air ventilation rates). See the procedure described earlier (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Alternatively, and perhaps a simpler approach, is to use only composite wood products (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins.



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Education

M.S. Mechanical Engineering (1985)
Stanford University, Stanford, CA.

Graduate Studies in Air Pollution Monitoring and Control (1980)
University of California, Berkeley, CA.

B.S. in Mechanical Engineering (1976)
Rensselaer Polytechnic Institute, Troy, N. Y.

Professional Experience

President: Indoor Environmental Engineering, San Francisco, CA. December, 1981 - present.

Direct team of environmental scientists, chemists, and mechanical engineers in conducting State and Federal research regarding indoor air quality instrumentation development, building air quality field studies, ventilation and air cleaning performance measurements, and chemical emission rate testing.

Provide design side input to architects regarding selection of building materials and ventilation system components to ensure a high quality indoor environment.

Direct Indoor Air Quality Consulting Team for the winning design proposal for the new State of Washington Ecology Department building.

Develop a full-scale ventilation test facility for measuring the performance of air diffusers; ASHRAE 129, Air Change Effectiveness, and ASHRAE 113, Air Diffusion Performance Index.

Develop a chemical emission rate testing laboratory for measuring the chemical emissions from building materials, furnishings, and equipment.

Principle Investigator of the California New Homes Study (2005-2007). Measured ventilation and indoor air quality in 108 new single family detached homes in northern and southern California.

Develop and teach IAQ professional development workshops to building owners, managers, hygienists, and engineers.



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Air Pollution Engineer: Earth Metrics Inc., Burlingame, CA, October, 1985 to March, 1987.

Responsible for development of an air pollution laboratory including installation a forced choice olfactometer, tracer gas electron capture chromatograph, and associated calibration facilities. Field team leader for studies of fugitive odor emissions from sewage treatment plants, entrainment of fume hood exhausts into computer chip fabrication rooms, and indoor air quality investigations.

Staff Scientist: Building Ventilation and Indoor Air Quality Program, Energy and Environment Division, Lawrence Berkeley Laboratory, Berkeley, CA. January, 1980 to August, 1984.

Deputy project leader for the Control Techniques group; responsible for laboratory and field studies aimed at evaluating the performance of indoor air pollutant control strategies (i.e. ventilation, filtration, precipitation, absorption, adsorption, and source control).

Coordinated field and laboratory studies of air-to-air heat exchangers including evaluation of thermal performance, ventilation efficiency, cross-stream contaminant transfer, and the effects of freezing/defrosting.

Developed an *in situ* test protocol for evaluating the performance of air cleaning systems and introduced the concept of effective cleaning rate (ECR) also known as the Clean Air Delivery Rate (CADR).

Coordinated laboratory studies of portable and ducted air cleaning systems and their effect on indoor concentrations of respirable particles and radon progeny.

Co-designed an automated instrument system for measuring residential ventilation rates and radon concentrations.

Designed hardware and software for a multi-channel automated data acquisition system used to evaluate the performance of air-to-air heat transfer equipment.

Assistant Chief Engineer: Alta Bates Hospital, Berkeley, CA, October, 1979 to January, 1980.

Responsible for energy management projects involving installation of power factor correction capacitors on large inductive electrical devices and installation of steam meters on physical plant steam lines. Member of Local 39, International Union of Operating Engineers.

Manufacturing Engineer: American Precision Industries, Buffalo, NY, October, 1977 to October, 1979.



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Responsible for reorganizing the manufacturing procedures regarding production of shell and tube heat exchangers. Designed customized automatic assembly, welding, and testing equipment. Designed a large paint spray booth. Prepared economic studies justifying new equipment purchases. Safety Director.

Project Engineer: Arcata Graphics, Buffalo, N.Y. June, 1976 to October, 1977.

Responsible for the design and installation of a bulk ink storage and distribution system and high speed automatic counting and marking equipment. Also coordinated material handling studies which led to the purchase and installation of new equipment.

PROFESSIONAL ORGANIZATION MEMBERSHIP

American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)

- Chairman of SPC-145P, Standards Project Committee - Test Method for Assessing the Performance of Gas Phase Air Cleaning Equipment (1991-1992)
- Member SPC-129P, Standards Project Committee - Test Method for Ventilation Effectiveness (1986-97)
 - Member of Drafting Committee
- Member Environmental Health Committee (1992-1994, 1997-2001, 2007-2010)
 - Chairman of EHC Research Subcommittee
 - Member of Man Made Mineral Fiber Position Paper Subcommittee
 - Member of the IAQ Position Paper Committee
 - Member of the Legionella Position Paper Committee
 - Member of the Limiting Indoor Mold and Dampness in Buildings Position Paper Committee
- Member SSPC-62, Standing Standards Project Committee - Ventilation for Acceptable Indoor Air Quality (1992 to 2000)
 - Chairman of Source Control and Air Cleaning Subcommittee
- Chairman of TC-4.10, Indoor Environmental Modeling (1988-92)
 - Member of Research Subcommittee
- Chairman of TC-2.3, Gaseous Air Contaminants and Control Equipment (1989-92)
 - Member of Research Subcommittee

American Society for Testing and Materials (ASTM)

- D-22 Sampling and Analysis of Atmospheres
 - Member of Indoor Air Quality Subcommittee
- E-06 Performance of Building Constructions

American Board of Industrial Hygiene (ABIH)

American Conference of Governmental Industrial Hygienists (ACGIH)

- Bioaerosols Committee (2007-2013)



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American Industrial Hygiene Association (AIHA)
Cal-OSHA Indoor Air Quality Advisory Committee
International Society of Indoor Air Quality and Climate (ISIAQ)
• Co-Chairman of Task Force on HVAC Hygiene
U. S. Green Building Council (USGBC)
- Member of the IEQ Technical Advisory Group (2007-2009)
- Member of the IAQ Performance Testing Work Group (2010-2012)
Western Construction Consultants (WESTCON)

PROFESSIONAL CREDENTIALS

Licensed Professional Engineer - Mechanical Engineering
Certified Industrial Hygienist - American Board of Industrial Hygienists

SCIENTIFIC MEETINGS AND SYMPOSIA

Biological Contamination, Diagnosis, and Mitigation, Indoor Air'90, Toronto, Canada, August, 1990.
Models for Predicting Air Quality, Indoor Air'90, Toronto, Canada, August, 1990.
Microbes in Building Materials and Systems, Indoor Air '93, Helsinki, Finland, July, 1993.
Microorganisms in Indoor Air Assessment and Evaluation of Health Effects and Probable Causes, Walnut Creek, CA, February 27, 1997.
Controlling Microbial Moisture Problems in Buildings, Walnut Creek, CA, February 27, 1997.
Scientific Advisory Committee, Roomvent 98, 6th International Conference on Air Distribution in Rooms, KTH, Stockholm, Sweden, June 14-17, 1998.
Moisture and Mould, Indoor Air '99, Edinburgh, Scotland, August, 1999.
Ventilation Modeling and Simulation, Indoor Air '99, Edinburgh, Scotland, August, 1999.
Microbial Growth in Materials, Healthy Buildings 2000, Espoo, Finland, August, 2000.



2-12
Cont.

Co-Chair, Bioaerosols X- Exposures in Residences, Indoor Air 2002, Monterey, CA, July 2002.

Healthy Indoor Environments, Anaheim, CA, April 2003.

Chair, Environmental Tobacco Smoke in Multi-Family Homes, Indoor Air 2008, Copenhagen, Denmark, July 2008.

Co-Chair, ISIAQ Task Force Workshop; HVAC Hygiene, Indoor Air 2002, Monterey, CA, July 2002.

Chair, ETS in Multi-Family Housing: Exposures, Controls, and Legalities Forum, Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

Chair, Energy Conservation and IAQ in Residences Workshop, Indoor Air 2011, Austin, TX, June 6, 2011.

Chair, Electronic Cigarettes: Chemical Emissions and Exposures Colloquium, Indoor Air 2016, Ghent, Belgium, July 4, 2016.

SPECIAL CONSULTATION

Provide consultation to the American Home Appliance Manufacturers on the development of a standard for testing portable air cleaners, AHAM Standard AC-1.

Served as an expert witness and special consultant for the U.S. Federal Trade Commission regarding the performance claims found in advertisements of portable air cleaners and residential furnace filters.

Conducted a forensic investigation for a San Mateo, CA pro se defendant, regarding an alleged homicide where the victim was kidnapped in a steamer trunk. Determined the air exchange rate in the steamer trunk and how long the person could survive.

Conducted *in situ* measurement of human exposure to toluene fumes released during nailpolish application for a plaintiffs attorney pursuing a California Proposition 65 product labeling case. June, 1993.

Conducted a forensic *in situ* investigation for the Butte County, CA Sheriff's Department of the emissions of a portable heater used in the bedroom of two twin one year old girls who suffered simultaneous crib death.

Consult with OSHA on the 1995 proposed new regulation regarding indoor air quality and environmental tobacco smoke.



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Consult with EPA on the proposed Building Alliance program and with OSHA on the proposed new OSHA IAQ regulation.

Johnson Controls Audit/Certification Expert Review; Milwaukee, WI. May 28-29, 1997.

Winner of the nationally published 1999 Request for Proposals by the State of Washington to conduct a comprehensive indoor air quality investigation of the Washington State Department of Ecology building in Lacey, WA.

Selected by the State of California Attorney General's Office in August, 2000 to conduct a comprehensive indoor air quality investigation of the Tulare County Court House.

Lawrence Berkeley Laboratory IAQ Experts Workshop: "Cause and Prevention of Sick Building Problems in Offices: The Experience of Indoor Environmental Quality Investigators", Berkeley, California, May 26-27, 2004.

Provide consultation and chemical emission rate testing to the State of California Attorney General's Office in 2013-2015 regarding the chemical emissions from e-cigarettes.

PEER-REVIEWED PUBLICATIONS :

F.J. Offermann, C.D. Hollowell, and G.D. Roseme, "Low-Infiltration Housing in Rochester, New York: A Study of Air Exchange Rates and Indoor Air Quality," *Environment International*, 8, pp. 435-445, 1982.

W.W. Nazaroff, F.J. Offermann, and A.W. Robb, "Automated System for Measuring Air Exchange Rate and Radon Concentration in Houses," *Health Physics*, 45, pp. 525-537, 1983.

F.J. Offermann, W.J. Fisk, D.T. Grimsrud, B. Pedersen, and K.L. Revzan, "Ventilation Efficiencies of Wall- or Window-Mounted Residential Air-to-Air Heat Exchangers," *ASHRAE Annual Transactions*, 89-2B, pp 507-527, 1983.

W.J. Fisk, K.M. Archer, R.E. Chant, D. Hekmat, F.J. Offermann, and B. Pedersen, "Onset of Freezing in Residential Air-to-Air Heat Exchangers," *ASHRAE Annual Transactions*, 91-1B, 1984.

W.J. Fisk, K.M. Archer, R.E. Chant, D. Hekmat, F.J. Offermann, and B. Pedersen, "Performance of Residential Air-to-Air Heat Exchangers During Operation with Freezing and Periodic Defrosts," *ASHRAE Annual Transactions*, 91-1B, 1984.

F.J. Offermann, R.G. Sextro, W.J. Fisk, D.T. Grimsrud, W.W. Nazaroff, A.V. Nero, and K.L. Revzan, "Control of Respirable Particles with Portable Air Cleaners," *Atmospheric Environment*, Vol. 19, pp.1761-1771, 1985.



2-12
Cont.

R.G.Sextro, F.J.Offermann, W.W.Nazaroff, A.V.Nero, K.L.Revzan, and J.Yater, "Evaluation of Indoor Control Devices and Their Effects on Radon Progeny Concentrations," *Atmospheric Environment*, 12, pp. 429-438, 1986.

W.J. Fisk, R.K.Spencer, F.J.Offermann, R.K.Spencer, B.Pedersen, R.Sextro, "Indoor Air Quality Control Techniques," *Noyes Data Corporation*, Park Ridge, New Jersey, (1987).

F.J.Offermann, "Ventilation Effectiveness and ADPI Measurements of a Forced Air Heating System," *ASHRAE Transactions*, Volume 94, Part 1, pp 694-704, 1988.

F.J.Offermann and D. Int-Hout "Ventilation Effectiveness Measurements of Three Supply/Return Air Configurations," *Environment International*, Volume 15, pp 585-592 1989.

F.J. Offermann, S.A. Loiselle, M.C. Quinlan, and M.S. Rogers, "A Study of Diesel Fume Entrainment in an Office Building," *IAQ '89*, The Human Equation: Health and Comfort, pp 179-183, ASHRAE, Atlanta, GA, 1989.

R.G.Sextro and F.J.Offermann, "Reduction of Residential Indoor Particle and Radon Progeny Concentrations with Ducted Air Cleaning Systems," submitted to *Indoor Air*, 1990.

S.A.Loiselle, A.T.Hodgson, and F.J.Offermann, "Development of An Indoor Air Sampler for Polycyclic Aromatic Compounds", *Indoor Air*, Vol 2, pp 191-210, 1991.

F.J.Offermann, S.A.Loiselle, A.T.Hodgson, L.A. Gundel, and J.M. Daisey, "A Pilot Study to Measure Indoor Concentrations and Emission Rates of Polycyclic Aromatic Compounds", *Indoor Air*, Vol 4, pp 497-512, 1991.

F.J. Offermann, S. A. Loiselle, R.G. Sextro, "Performance Comparisons of Six Different Air Cleaners Installed in a Residential Forced Air Ventilation System," *IAQ'91*, Healthy Buildings, pp 342-350, ASHRAE, Atlanta, GA (1991).

F.J. Offermann, J. Daisey, A. Hodgson, L. Gundell, and S. Loiselle, "Indoor Concentrations and Emission Rates of Polycyclic Aromatic Compounds", *Indoor Air*, Vol 4, pp 497-512 (1992).

F.J. Offermann, S. A. Loiselle, R.G. Sextro, "Performance of Air Cleaners Installed in a Residential Forced Air System," *ASHRAE Journal*, pp 51-57, July, 1992.

F.J. Offermann and S. A. Loiselle, "Performance of an Air-Cleaning System in an Archival Book Storage Facility," *IAQ'92*, ASHRAE, Atlanta, GA, 1992.

S.B. Hayward, K.S. Liu, L.E. Alevantis, K. Shah, S. Loiselle, F.J. Offermann, Y.L. Chang, L. Webber, "Effectiveness of Ventilation and Other Controls in Reducing Exposure to ETS in Office Buildings," *Indoor Air '93*, Helsinki, Finland, July 4-8, 1993.



2-12
Cont.

F.J. Offermann, S. A. Loisel, G. Ander, H. Lau, "Indoor Contaminant Emission Rates Before and After a Building Bake-out," *LAQ'93*, Operating and Maintaining Buildings for Health, Comfort, and Productivity, pp 157-163, ASHRAE, Atlanta, GA, 1993.

L.E. Alevantis, Hayward, S.B., Shah, S.B., Loisel, S., and Offermann, F.J. "Tracer Gas Techniques for Determination of the Effectiveness of Pollutant Removal From Local Sources," *LAQ '93*, Operating and Maintaining Buildings for Health, Comfort, and Productivity, pp 119-129, ASHRAE, Atlanta, GA, 1993.

L.E. Alevantis, Liu, L.E., Hayward, S.B., Offermann, F.J., Shah, S.B., Leiserson, K. Tsao, E., and Huang, Y., "Effectiveness of Ventilation in 23 Designated Smoking Areas in California Buildings," *LAQ '94*, Engineering Indoor Environments, pp 167-181, ASHRAE, Atlanta, GA, 1994.

L.E. Alevantis, Offermann, F.J., Loisel, S., and Macher, J.M., "Pressure and Ventilation Requirements of Hospital Isolation Rooms for Tuberculosis (TB) Patients: Existing Guidelines in the United States and a Method for Measuring Room Leakage", Ventilation and Indoor air quality in Hospitals, M. Maroni, editor, Kluwer Academic publishers, Netherlands, 1996.

F.J. Offermann, M. A. Waz, A.T. Hodgson, and H.M. Ammann, "Chemical Emissions from a Hospital Operating Room Air Filter," *LAQ'96*, Paths to Better Building Environments, pp 95-99, ASHRAE, Atlanta, GA, 1996.

F.J. Offermann, "Professional Malpractice and the Sick Building Investigator," *LAQ'96*, Paths to Better Building Environments, pp 132-136, ASHRAE, Atlanta, GA, 1996.

F.J. Offermann, "Standard Method of Measuring Air Change Effectiveness," *Indoor Air*, Vol 1, pp.206-211, 1999.

F. J. Offermann, A. T. Hodgson, and J. P. Robertson, "Contaminant Emission Rates from PVC Backed Carpet Tiles on Damp Concrete", Healthy Buildings 2000, Espoo, Finland, August 2000.

K.S. Liu, L.E. Alevantis, and F.J. Offermann, "A Survey of Environmental Tobacco Smoke Controls in California Office Buildings", *Indoor Air*, Vol 11, pp. 26-34, 2001.

F.J. Offermann, R. Colfer, P. Radzinski, and J. Robertson, "Exposure to Environmental Tobacco Smoke in an Automobile", *Indoor Air* 2002, Monterey, California, July 2002.

F. J. Offermann, J.P. Robertson, and T. Webster, "The Impact of Tracer Gas Mixing on Airflow Rate Measurements in Large Commercial Fan Systems", *Indoor Air* 2002, Monterey, California, July 2002.

M. J. Mendell, T. Brennan, L. Hathon, J.D. Odom, F.J. Offermann, B.H. Turk, K.M. Wallingford, R.C. Diamond, W.J. Fisk, "Causes and prevention of Symptom Complaints



2-12
Cont.

in Office Buildings: Distilling the Experience of Indoor Environmental Investigators”, submitted to Indoor Air 2005, Beijing, China, September 4-9, 2005.

F.J. Offermann, “Ventilation and IAQ in New Homes With and Without Mechanical Outdoor Air Systems”, Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

F.J. Offermann, “ASHRAE 62.2 Intermittent Residential Ventilation: What’s It Good For, Intermittently Poor IAQ”, IAQVEC 2010, Syracuse, CA, April 21, 2010.

F.J. Offermann and A.T. Hodgson, “Emission Rates of Volatile Organic Compounds in New Homes”, Indoor Air 2011, Austin, TX, June, 2011.

P. Jenkins, R. Johnson, T. Phillips, and F. Offermann, “Chemical Concentrations in New California Homes and Garages”, Indoor Air 2011, Austin, TX, June, 2011.

W. J. Mills, B. J. Grigg, F. J. Offermann, B. E. Gustin, and N. E. Spingarm, “Toluene and Methyl Ethyl Ketone Exposure from a Commercially Available Contact Adhesive”, Journal of Occupational and Environmental Hygiene, 9:D95-D102 May, 2012.

F. J. Offermann, R. Maddalena, J. C. Offermann, B. C. Singer, and H. Wilhelm, “The Impact of Ventilation on the Emission Rates of Volatile Organic Compounds in Residences”, HB 2012, Brisbane, AU, July, 2012.

F. J. Offermann, A. T. Hodgson, P. L. Jenkins, R. D. Johnson, and T. J. Phillips, “Attached Garages as a Source of Volatile Organic Compounds in New Homes”, HB 2012, Brisbane, CA, July, 2012.

R. Maddalena, N. Li, F. Offermann, and B. Singer, “Maximizing Information from Residential Measurements of Volatile Organic Compounds”, HB 2012, Brisbane, AU, July, 2012.

W. Chen, A. Persily, A. Hodgson, F. Offermann, D. Poppendieck, and K. Kumagai, “Area-Specific Airflow Rates for Evaluating the Impacts of VOC emissions in U.S. Single-Family Homes”, Building and Environment, Vol. 71, 204-211, February, 2014.

F. J. Offermann, A. Eagan A. C. Offermann, and L. J. Radonovich, “Infectious Disease Aerosol Exposures With and Without Surge Control Ventilation System Modifications”, Indoor Air 2014, Hong Kong, July, 2014.

F. J. Offermann, “Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposures”, Building and Environment, Vol. 93, Part 1, 101-105, November, 2015.

F. J. Offermann, “Formaldehyde Emission Rates From Lumber Liquidators Laminate Flooring Manufactured in China”, Indoor Air 2016, Belgium, Ghent, July, 2016.

F. J. Offermann, “Formaldehyde and Acetaldehyde Emission Rates for E-Cigarettes”, Indoor Air 2016, Belgium, Ghent, July, 2016.



2-12
Cont.

OTHER REPORTS:

W.J.Fisk, P.G.Cleary, and F.J.Offermann, "Energy Saving Ventilation with Residential Heat Exchangers," a Lawrence Berkeley Laboratory brochure distributed by the Bonneville Power Administration, 1981.

F.J.Offermann, J.R.Girman, and C.D.Hollowell, "Midway House Tightening Project: A Study of Indoor Air Quality," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-12777, 1981.

F.J.Offermann, J.B.Dickinson, W.J.Fisk, D.T.Grimrud, C.D.Hollowell, D.L.Krinkle, and G.D.Roseme, "Residential Air-Leakage and Indoor Air Quality in Rochester, New York," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-13100, 1982.

F.J.Offermann, W.J.Fisk, B.Pedersen, and K.L.Revzan, Residential Air-to-Air Heat Exchangers: A Study of the Ventilation Efficiencies of Wall- or Window- Mounted Units," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-14358, 1982.

F.J.Offermann, W.J.Fisk, W.W.Nazaroff, and R.G.Sextro, "A Review of Portable Air Cleaners for Controlling Indoor Concentrations of Particulates and Radon Progeny," An interim report for the Bonneville Power Administration, 1983.

W.J.Fisk, K.M.Archer, R.E.Chant, D.Hekmat, F.J.Offermann, and B.S. Pedersen, "Freezing in Residential Air-to-Air Heat Exchangers: An Experimental Study," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-16783, 1983.

R.G.Sextro, W.W.Nazaroff, F.J.Offermann, and K.L.Revzan, "Measurements of Indoor Aerosol Properties and Their Effect on Radon Progeny," Proceedings of the American Association of Aerosol Research Annual Meeting, April, 1983.

F.J.Offermann, R.G.Sextro, W.J.Fisk, W.W. Nazaroff, A.V.Nero, K.L.Revzan, and J.Yater, "Control of Respirable Particles and Radon Progeny with Portable Air Cleaners," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-16659, 1984.

W.J.Fisk, R.K.Spencer, D.T.Grimrud, F.J.Offermann, B.Pedersen, and R.G.Sextro, "Indoor Air Quality Control Techniques: A Critical Review," Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-16493, 1984.

F.J.Offermann, J.R.Girman, and R.G.Sextro, "Controlling Indoor Air Pollution from Tobacco Smoke: Models and Measurements," Indoor Air, Proceedings of the 3rd International Conference on Indoor Air Quality and Climate, Vol 1, pp 257-264, Swedish Council for Building Research, Stockholm (1984), Lawrence Berkeley Laboratory, Berkeley, CA, Report LBL-17603, 1984.



2-12
Cont.

R.Otto, J.Girman, F.Offermann, and R.Sextro, "A New Method for the Collection and Comparison of Respirable Particles in the Indoor Environment," Lawrence Berkeley Laboratory, Berkeley, CA, Special Director Fund's Study, 1984.

A.T.Hodgson and F.J.Offermann, "Examination of a Sick Office Building," Lawrence Berkeley Laboratory, Berkeley, CA, an informal field study, 1984.

R.G.Sextro, F.J.Offermann, W.W.Nazaroff, and A.V.Nero, "Effects of Aerosol Concentrations on Radon Progeny," Aerosols, Science, & Technology, and Industrial Applications of Airborne Particles, editors B.Y.H.Liu, D.Y.H.Pui, and H.J.Fissan, p525, Elsevier, 1984.

K.Sexton, S.Hayward, F.Offermann, R.Sextro, and L.Weber, "Characterization of Particulate and Organic Emissions from Major Indoor Sources, Proceedings of the Third International Conference on Indoor Air Quality and Climate, Stockholm, Sweden, August 20-24, 1984.

F.J.Offermann, "Tracer Gas Measurements of Laboratory Fume Entrainment at a Semiconductor Manufacturing Plant," an Indoor Environmental Engineering R&D Report, 1986.

F.J.Offermann, "Tracer Gas Measurements of Ventilation Rates in a Large Office Building," an Indoor Environmental Engineering R&D Report, 1986.

F.J.Offermann, "Measurements of Volatile Organic Compounds in a New Large Office Building with Adhesive Fastened Carpeting," an Indoor Environmental Engineering R&D Report, 1986.

F.J.Offermann, "Designing and Operating Healthy Buildings", an Indoor Environmental Engineering R&D Report, 1986.

F.J.Offermann, "Measurements and Mitigation of Indoor Spray-Applied Pesticides", an Indoor Environmental Engineering R&D Report, 1988.

F.J.Offermann and S. Loisel, "Measurements and Mitigation of Indoor Mold Contamination in a Residence", an Indoor Environmental Engineering R&D Report, 1989.

F.J.Offermann and S. Loisel, "Performance Measurements of an Air Cleaning System in a Large Archival Library Storage Facility", an Indoor Environmental Engineering R&D Report, 1989.

F.J. Offermann, J.M. Daisey, L.A. Gundel, and A.T. Hodgson, S. A. Loisel, "Sampling, Analysis, and Data Validation of Indoor Concentrations of Polycyclic Aromatic Hydrocarbons", Final Report, Contract No. A732-106, California Air Resources Board, March, 1990.



2-12
Cont.

L.A. Gundel, J.M. Daisey, and F.J. Offermann, "A Sampling and Analytical Method for Gas Phase Polycyclic Aromatic Hydrocarbons", Proceedings of the 5th International Conference on Indoor Air Quality and Climate, Indoor Air '90, July 29-August 1990.

A.T. Hodgson, J.M. Daisey, and F.J. Offermann "Development of an Indoor Sampling and Analytical Method for Particulate Polycyclic Aromatic Hydrocarbons", Proceedings of the 5th International Conference on Indoor Air Quality and Climate, Indoor Air '90, July 29-August, 1990.

F.J. Offermann, J.O. Sateri, "Tracer Gas Measurements in Large Multi-Room Buildings", Indoor Air '93, Helsinki, Finland, July 4-8, 1993.

F.J. Offermann, M. T. O'Flaherty, and M. A. Waz "Validation of ASHRAE 129 - Standard Method of Measuring Air Change Effectiveness", Final Report of ASHRAE Research Project 891, December 8, 1997.

S.E. Guffey, F.J. Offermann et. al., "Proceedings of the Workshop on Ventilation Engineering Controls for Environmental Tobacco smoke in the Hospitality Industry", U.S. Department of Labor Occupational Safety and Health Administration and ACGIH, 1998.

F.J. Offermann, R.J. Fiskum, D. Kosar, and D. Mudaari, "A Practical Guide to Ventilation Practices & Systems for Existing Buildings", *Heating/Piping/Air Conditioning Engineering* supplement to April/May 1999 issue.

F.J. Offermann, P. Pasanen, "Workshop 18: Criteria for Cleaning of Air Handling Systems", Healthy Buildings 2000, Espoo, Finland, August 2000.

F.J. Offermann, Session Summaries: Building Investigations, and Design & Construction, Healthy Buildings 2000, Espoo, Finland, August 2000.

F.J. Offermann, "The IAQ Top 10", Engineered Systems, November, 2008.

L. Kincaid and F.J. Offermann, "Unintended Consequences: Formaldehyde Exposures in Green Homes, AIHA Synergist, February, 2010.

F.J. Offermann, "IAQ in Air Tight Homes", ASHRAE Journal, November, 2010.

F.J. Offermann, "The Hazards of E-Cigarettes", ASHRAE Journal, June, 2014.

PRESENTATIONS :

"Low-Infiltration Housing in Rochester, New York: A Study of Air Exchange Rates and Indoor Air Quality," Presented at the International Symposium on Indoor Air Pollution, Health and Energy Conservation, Amherst, MA, October 13-16, 1981.



2-12
Cont.

"Ventilation Efficiencies of Wall- or Window-Mounted Residential Air-to-Air Heat Exchangers," Presented at the American Society of Heating, Refrigeration, and Air Conditioning Engineers Summer Meeting, Washington, DC, June, 1983.

"Controlling Indoor Air Pollution from Tobacco Smoke: Models and Measurements," Presented at the Third International Conference on Indoor Air Quality and Climate, Stockholm, Sweden, August 20-24, 1984.

"Indoor Air Pollution: An Emerging Environmental Problem", Presented to the Association of Environmental Professionals, Bar Area/Coastal Region 1, Berkeley, CA, May 29, 1986.

"Ventilation Measurement Techniques," Presented at the Workshop on Sampling and Analytical Techniques, Georgia Institute of Technology, Atlanta, Georgia, September 26, 1986 and September 25, 1987.

"Buildings That Make You Sick: Indoor Air Pollution", Presented to the Sacramento Association of Professional Energy Managers, Sacramento, CA, November 18, 1986.

"Ventilation Effectiveness and Indoor Air Quality", Presented to the American Society of Heating, Refrigeration, and Air Conditioning Engineers Northern Nevada Chapter, Reno, NV, February 18, 1987, Golden Gate Chapter, San Francisco, CA, October 1, 1987, and the San Jose Chapter, San Jose, CA, June 9, 1987.

"Tracer Gas Techniques for Studying Ventilation," Presented at the Indoor Air Quality Symposium, Georgia Tech Research Institute, Atlanta, GA, September 22-24, 1987.

"Indoor Air Quality Control: What Works, What Doesn't," Presented to the Sacramento Association of Professional Energy Managers, Sacramento, CA, November 17, 1987.

"Ventilation Effectiveness and ADPI Measurements of a Forced Air Heating System," Presented at the American Society of Heating, Refrigeration, and Air Conditioning Engineers Winter Meeting, Dallas, Texas, January 31, 1988.

"Indoor Air Quality, Ventilation, and Energy in Commercial Buildings", Presented at the Building Owners & Managers Association of Sacramento, Sacramento, CA, July 21, 1988.

"Controlling Indoor Air Quality: The New ASHRAE Ventilation Standards and How to Evaluate Indoor Air Quality", Presented at a conference "Improving Energy Efficiency and Indoor Air Quality in Commercial Buildings," National Energy Management Institute, Reno, Nevada, November 4, 1988.

"A Study of Diesel Fume Entrainment Into an Office Building," Presented at Indoor Air '89: The Human Equation: Health and Comfort, American Society of Heating, Refrigeration, and Air Conditioning Engineers, San Diego, CA, April 17-20, 1989.



2-12
Cont.

"Indoor Air Quality in Commercial Office Buildings," Presented at the Renewable Energy Technologies Symposium and International Exposition, Santa Clara, CA June 20, 1989.

"Building Ventilation and Indoor Air Quality", Presented to the San Joaquin Chapter of the American Society of Heating, Refrigeration, and Air Conditioning Engineers, September 7, 1989.

"How to Meet New Ventilation Standards: Indoor Air Quality and Energy Efficiency," a workshop presented by the Association of Energy Engineers; Chicago, IL, March 20-21, 1989; Atlanta, GA, May 25-26, 1989; San Francisco, CA, October 19-20, 1989; Orlando, FL, December 11-12, 1989; Houston, TX, January 29-30, 1990; Washington D.C., February 26-27, 1990; Anchorage, Alaska, March 23, 1990; Las Vegas, NV, April 23-24, 1990; Atlantic City, NJ, September 27-28, 1991; Anaheim, CA, November 19-20, 1991; Orlando, FL, February 28 - March 1, 1991; Washington, DC, March 20-21, 1991; Chicago, IL, May 16-17, 1991; Lake Tahoe, NV, August 15-16, 1991; Atlantic City, NJ, November 18-19, 1991; San Jose, CA, March 23-24, 1992.

"Indoor Air Quality," a seminar presented by the Anchorage, Alaska Chapter of the American Society of Heating, Refrigeration, and Air Conditioning Engineers, March 23, 1990.

"Ventilation and Indoor Air Quality", Presented at the 1990 HVAC & Building Systems Congress, Santa Clara, CA, March 29, 1990.

"Ventilation Standards for Office Buildings", Presented to the South Bay Property Managers Association, Santa Clara, May 9, 1990.

"Indoor Air Quality", Presented at the Responsive Energy Technologies Symposium & International Exposition (RETSIE), Santa Clara, CA, June 20, 1990.

"Indoor Air Quality - Management and Control Strategies", Presented at the Association of Energy Engineers, San Francisco Bay Area Chapter Meeting, Berkeley, CA, September 25, 1990.

"Diagnosing Indoor Air Contaminant and Odor Problems", Presented at the ASHRAE Annual Meeting, New York City, NY, January 23, 1991.

"Diagnosing and Treating the Sick Building Syndrome", Presented at the Energy 2001, Oklahoma, OK, March 19, 1991.

"Diagnosing and Mitigating Indoor Air Quality Problems" a workshop presented by the Association of Energy Engineers, Chicago, IL, October 29-30, 1990; New York, NY, January 24-25, 1991; Anaheim, April 25-26, 1991; Boston, MA, June 10-11, 1991; Atlanta, GA, October 24-25, 1991; Chicago, IL, October 3-4, 1991; Las Vegas, NV, December 16-17, 1991; Anaheim, CA, January 30-31, 1992; Atlanta, GA, March 5-6, 1992; Washington, DC, May 7-8, 1992; Chicago, IL, August 19-20, 1992; Las Vegas,



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Cont.

NV, October 1-2, 1992; New York City, NY, October 26-27, 1992, Las Vegas, NV, March 18-19, 1993; Lake Tahoe, CA, July 14-15, 1994; Las Vegas, NV, April 3-4, 1995; Lake Tahoe, CA, July 11-12, 1996; Miami, FL, December 9-10, 1996.

"Sick Building Syndrome and the Ventilation Engineer", Presented to the San Jose Engineers Club, May, 21, 1991.

"Duct Cleaning: Who Needs It ? How Is It Done ? What Are The Costs ?" What Are the Risks ?, Moderator of Forum at the ASHRAE Annual Meeting, Indianapolis ID, June 23, 1991.

"Operating Healthy Buildings", Association of Plant Engineers, Oakland, CA, November 14, 1991.

"Duct Cleaning Perspectives", Moderator of Seminar at the ASHRAE Semi-Annual Meeting, Indianapolis, IN, June 24, 1991.

"Duct Cleaning: The Role of the Environmental Hygienist," ASHRAE Annual Meeting, Anaheim, CA, January 29, 1992.

"Emerging IAQ Issues", Fifth National Conference on Indoor Air Pollution, University of Tulsa, Tulsa, OK, April 13-14, 1992.

"International Symposium on Room Air Convection and Ventilation Effectiveness", Member of Scientific Advisory Board, University of Tokyo, July 22-24, 1992.

"Guidelines for Contaminant Control During Construction and Renovation Projects in Office Buildings," Seminar paper at the ASHRAE Annual Meeting, Chicago, IL, January 26, 1993.

"Outside Air Economizers: IAQ Friend or Foe", Moderator of Forum at the ASHRAE Annual Meeting, Chicago, IL, January 26, 1993.

"Orientation to Indoor Air Quality," an EPA two and one half day comprehensive indoor air quality introductory workshop for public officials and building property managers; Sacramento, September 28-30, 1992; San Francisco, February 23-24, 1993; Los Angeles, March 16-18, 1993; Burbank, June 23, 1993; Hawaii, August 24-25, 1993; Las Vegas, August 30, 1993; San Diego, September 13-14, 1993; Phoenix, October 18-19, 1993; Reno, November 14-16, 1995; Fullerton, December 3-4, 1996; Fresno, May 13-14, 1997.

"Building Air Quality: A Guide for Building Owners and Facility Managers," an EPA one half day indoor air quality introductory workshop for building owners and facility managers. Presented throughout Region IX 1993-1995.

"Techniques for Airborne Disease Control", EPRI Healthcare Initiative Symposium; San Francisco, CA; June 7, 1994.



2-12
Cont.

“Diagnosing and Mitigating Indoor Air Quality Problems”, CIHC Conference; San Francisco, September 29, 1994.

”Indoor Air Quality: Tools for Schools,” an EPA one day air quality management workshop for school officials, teachers, and maintenance personnel; San Francisco, October 18-20, 1994; Cerritos, December 5, 1996; Fresno, February 26, 1997; San Jose, March 27, 1997; Riverside, March 5, 1997; San Diego, March 6, 1997; Fullerton, November 13, 1997; Santa Rosa, February 1998; Cerritos, February 26, 1998; Santa Rosa, March 2, 1998.

ASHRAE 62 Standard “Ventilation for Acceptable IAQ”, ASCR Convention; San Francisco, CA, March 16, 1995.

“New Developments in Indoor Air Quality: Protocol for Diagnosing IAQ Problems”, AIHA-NC; March 25, 1995.

”Experimental Validation of ASHRAE SPC 129, Standard Method of Measuring Air Change Effectiveness”, 16th AIVC Conference, Palm Springs, USA, September 19-22, 1995.

“Diagnostic Protocols for Building IAQ Assessment”, American Society of Safety Engineers Seminar: ‘Indoor Air Quality – The Next Door’; San Jose Chapter, September 27, 1995; Oakland Chapter, 9, 1997.

“Diagnostic Protocols for Building IAQ Assessment”, Local 39; Oakland, CA, October 3, 1995.

“Diagnostic Protocols for Solving IAQ Problems”, CSU-PPD Conference; October 24, 1995.

“Demonstrating Compliance with ASHRAE 62-1989 Ventilation Requirements”, AIHA; October 25, 1995.

“IAQ Diagnostics: Hands on Assessment of Building Ventilation and Pollutant Transport”, EPA Region IX; Phoenix, AZ, March 12, 1996; San Francisco, CA, April 9, 1996; Burbank, CA, April 12, 1996.

“Experimental Validation of ASHRAE 129P: Standard Method of Measuring Air Change Effectiveness”, Room Vent ‘96 / International Symposium on Room Air Convection and Ventilation Effectiveness”; Yokohama, Japan, July 16-19, 1996.

“IAQ Diagnostic Methodologies and RFP Development”, CCEHSA 1996 Annual Conference, Humboldt State University, Arcata, CA, August 2, 1996.

“The Practical Side of Indoor Air Quality Assessments”, California Industrial Hygiene Conference ‘96, San Diego, CA, September 2, 1996.



2-12
Cont.

- “ASHRAE Standard 62: Improving Indoor Environments”, Pacific Gas and Electric Energy Center, San Francisco, CA, October 29, 1996.
- “Operating and Maintaining Healthy Buildings”, April 3-4, 1996, San Jose, CA; July 30, 1997, Monterey, CA.
- “IAQ Primer”, Local 39, April 16, 1997; Amdahl Corporation, June 9, 1997; State Compensation Insurance Fund’s Safety & Health Services Department, November 21, 1996.
- “Tracer Gas Techniques for Measuring Building Air Flow Rates”, ASHRAE, Philadelphia, PA, January 26, 1997.
- “How to Diagnose and Mitigate Indoor Air Quality Problems”, Women in Waste; March 19, 1997.
- “Environmental Engineer: What Is It?”, Monte Vista High School Career Day; April 10, 1997.
- “Indoor Environment Controls: What’s Hot and What’s Not”, Shaklee Corporation; San Francisco, CA, July 15, 1997.
- “Measurement of Ventilation System Performance Parameters in the US EPA BASE Study”, Healthy Buildings/IAQ’97, Washington, DC, September 29, 1997.
- “Operations and Maintenance for Healthy and Comfortable Indoor Environments”, PASMA; October 7, 1997.
- “Designing for Healthy and Comfortable Indoor Environments”, Construction Specification Institute, Santa Rosa, CA, November 6, 1997.
- “Ventilation System Design for Good IAQ”, University of Tulsa 10th Annual Conference, San Francisco, CA, February 25, 1998.
- “The Building Shell”, Tools For Building Green Conference and Trade Show, Alameda County Waste Management Authority and Recycling Board, Oakland, CA, February 28, 1998.
- “Identifying Fungal Contamination Problems In Buildings”, The City of Oakland Municipal Employees, Oakland, CA, March 26, 1998.
- “Managing Indoor Air Quality in Schools: Staying Out of Trouble”, CASBO, Sacramento, CA, April 20, 1998.
- “Indoor Air Quality”, CSOOC Spring Conference, Visalia, CA, April 30, 1998.
- “Particulate and Gas Phase Air Filtration”, ACGIH/OSHA, Ft. Mitchell, KY, June 1998.



2-12
Cont.

“Building Air Quality Facts and Myths”, The City of Oakland / Alameda County Safety Seminar, Oakland, CA, June 12, 1998.

“Building Engineering and Moisture”, Building Contamination Workshop, University of California Berkeley, Continuing Education in Engineering and Environmental Management, San Francisco, CA, October 21-22, 1999.

“Identifying and Mitigating Mold Contamination in Buildings”, Western Construction Consultants Association, Oakland, CA, March 15, 2000; AIG Construction Defect Seminar, Walnut Creek, CA, May 2, 2001; City of Oakland Public Works Agency, Oakland, CA, July 24, 2001; Executive Council of Homeowners, Alamo, CA, August 3, 2001.

“Using the EPA BASE Study for IAQ Investigation / Communication”, Joint Professional Symposium 2000, American Industrial Hygiene Association, Orange County & Southern California Sections, Long Beach, October 19, 2000.

“Ventilation,” Indoor Air Quality: Risk Reduction in the 21st Century Symposium, sponsored by the California Environmental Protection Agency/Air Resources Board, Sacramento, CA, May 3-4, 2000.

“Workshop 18: Criteria for Cleaning of Air Handling Systems”, Healthy Buildings 2000, Espoo, Finland, August 2000.

“Closing Session Summary: ‘Building Investigations’ and ‘Building Design & Construction’”, Healthy Buildings 2000, Espoo, Finland, August 2000.

“Managing Building Air Quality and Energy Efficiency, Meeting the Standard of Care”, BOMA, MidAtlantic Environmental Hygiene Resource Center, Seattle, WA, May 23rd, 2000; San Antonio, TX, September 26-27, 2000.

“Diagnostics & Mitigation in Sick Buildings: When Good Buildings Go Bad,” University of California Berkeley, September 18, 2001.

“Mold Contamination: Recognition and What To Do and Not Do”, Redwood Empire Remodelers Association; Santa Rosa, CA, April 16, 2002.

“Investigative Tools of the IAQ Trade”, Healthy Indoor Environments 2002; Austin, TX; April 22, 2002.

“Finding Hidden Mold: Case Studies in IAQ Investigations”, AIHA Northern California Professionals Symposium; Oakland, CA, May 8, 2002.

“Assessing and Mitigating Fungal Contamination in Buildings”, Cal/OSHA Training; Oakland, CA, February 14, 2003 and West Covina, CA, February 20-21, 2003.



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Cont.

“Use of External Containments During Fungal Mitigation”, Invited Speaker, ACGIH Mold Remediation Symposium, Orlando, FL, November 3-5, 2003.

Building Operator Certification (BOC), 106-IAQ Training Workshops, Northwest Energy Efficiency Council; Stockton, CA, December 3, 2003; San Francisco, CA, December 9, 2003; Irvine, CA, January 13, 2004; San Diego, January 14, 2004; Irwindale, CA, January 27, 2004; Downey, CA, January 28, 2004; Santa Monica, CA, March 16, 2004; Ontario, CA, March 17, 2004; Ontario, CA, November 9, 2004; San Diego, CA, November 10, 2004; San Francisco, CA, November 17, 2004; San Jose, CA, November 18, 2004; Sacramento, CA, March 15, 2005.

“Mold Remediation: The National QUEST for Uniformity Symposium”, Invited Speaker, Orlando, Florida, November 3-5, 2003.

“Mold and Moisture Control”, Indoor Air Quality workshop for The Collaborative for High Performance Schools (CHPS), San Francisco, December 11, 2003.

“Advanced Perspectives In Mold Prevention & Control Symposium”, Invited Speaker, Las Vegas, Nevada, November 7-9, 2004.

“Building Sciences: Understanding and Controlling Moisture in Buildings”, American Industrial Hygiene Association, San Francisco, CA, February 14-16, 2005.

“Indoor Air Quality Diagnostics and Healthy Building Design”, University of California Berkeley, Berkeley, CA, March 2, 2005.

“Improving IAQ = Reduced Tenant Complaints”, Northern California Facilities Exposition, Santa Clara, CA, September 27, 2007.

“Defining Safe Building Air”, Criteria for Safe Air and Water in Buildings, ASHRAE Winter Meeting, Chicago, IL, January 27, 2008.

“Update on USGBC LEED and Air Filtration”, Invited Speaker, NAFA 2008 Convention, San Francisco, CA, September 19, 2008.

“Ventilation and Indoor air Quality in New California Homes”, National Center of Healthy Housing, October 20, 2008.

“Indoor Air Quality in New Homes”, California Energy and Air Quality Conference, October 29, 2008.

“Mechanical Outdoor air Ventilation Systems and IAQ in New Homes”, ACI Home Performance Conference, Kansas City, MO, April 29, 2009.

“Ventilation and IAQ in New Homes with and without Mechanical Outdoor Air Systems”, Healthy Buildings 2009, Syracuse, CA, September 14, 2009.



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“Ten Ways to Improve Your Air Quality”, Northern California Facilities Exposition, Santa Clara, CA, September 30, 2009.

“New Developments in Ventilation and Indoor Air Quality in Residential Buildings”, Westcon meeting, Alameda, CA, March 17, 2010.

“Intermittent Residential Mechanical Outdoor Air Ventilation Systems and IAQ”, ASHRAE SSPC 62.2 Meeting, Austin, TX, April 19, 2010.

“Measured IAQ in Homes”, ACI Home Performance Conference, Austin, TX, April 21, 2010.

“Respiration: IEQ and Ventilation”, AIHce 2010, How IH Can LEED in Green buildings, Denver, CO, May 23, 2010.

“IAQ Considerations for Net Zero Energy Buildings (NZEB)”, Northern California Facilities Exposition, Santa Clara, CA, September 22, 2010.

“Energy Conservation and Health in Buildings”, Berkeley High School Green Career Week, Berkeley, CA, April 12, 2011.

“What Pollutants are Really There?”, ACI Home Performance Conference, San Francisco, CA, March 30, 2011.

“Energy Conservation and Health in Residences Workshop”, Indoor Air 2011, Austin, TX, June 6, 2011.

“Assessing IAQ and Improving Health in Residences”, US EPA Weatherization Plus Health, September 7, 2011.

“Ventilation: What a Long Strange Trip It’s Been”, Westcon, May 21, 2014.

“Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposures”, Indoor Air 2014, Hong Kong, July, 2014.

“Infectious Disease Aerosol Exposures With and Without Surge Control Ventilation System Modifications”, Indoor Air 2014, Hong Kong, July, 2014.

“Chemical Emissions from E-Cigarettes”, IMF Health and Welfare Fair, Washington, DC, February 18, 2015.

“Chemical Emissions and Health Hazards Associated with E-Cigarettes”, Roswell Park Cancer Institute, Buffalo, NY, August 15, 2014.

“Formaldehyde Indoor Concentrations, Material Emission Rates, and the CARB ATCM”, Harris Martin’s Lumber Liquidators Flooring Litigation Conference, WQ Minneapolis Hotel, May 27, 2015.



2-12
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“Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposure”, FDA Public Workshop: Electronic Cigarettes and the Public Health, Hyattsville, MD June 2, 2015.

“Creating Healthy Homes, Schools, and Workplaces”, Chautauqua Institution, Athenaeum Hotel, August 24, 2015.

“Diagnosing IAQ Problems and Designing Healthy Buildings”, University of California Berkeley, Berkeley, CA, October 6, 2015.

“Diagnosing Ventilation and IAQ Problems in Commercial Buildings”, BEST Center Annual Institute, Lawrence Berkeley National Laboratory, January 6, 2016.

“A Review of Studies of Ventilation and Indoor Air Quality in New Homes and Impacts of Environmental Factors on Formaldehyde Emission Rates From Composite Wood Products”, AIHce2016, May, 21-26, 2016.

“Admissibility of Scientific Testimony”, Science in the Court, Proposition 65 Clearinghouse Annual Conference, Oakland, CA, September 15, 2016.

“Indoor Air Quality and Ventilation”, ASHRAE Redwood Empire, Napa, CA, December 1, 2016.



2-12
Cont.

Response to Comment Letter No. 2
Supporters Alliance for Environmental Responsibility (“SAFER”)
Rebecca L. Davis, Lozeau Drury LLP
January 18, 2021

- 2-1** This comment requests an Environmental Impact Report (EIR) be prepared. Additionally, the comment notes further discussion by Francis “Bud” Offermann, PE, CIH with his curriculum vitae attached as Exhibit A of the letter (see Response to Comment 2-14, below). This portion of the comment letter does not express specific concerns with the adequacy of the IS/MND. Instead, this is a general statement that introduces subsequent comments that identify the commenter’s specific alleged inadequacies. Responses to such alleged inadequacies are provided below.
- 2-2** This comment correctly summarizes the project description of the previously proposed Project. This comment does not express any environmental comments or concerns; no further response is required.
- 2-3** This comment outlines certain instances of prior case law from the California Supreme Court defining certain legal standards for the California Environmental Quality Act (CEQA). For example, the comment notes an EIR shall be prepared if substantial evidence supports a fair argument that a project may result in significant adverse impacts. However, on page 3, the comment incorrectly summarizes CEQA Guidelines Section 15064(f)(1), which states “If the lead agency determines there is substantial evidence in the record that the project may have a **significant effect on the environment**...(emphasis added),” whereas the commenter stated “... that a project may have an **adverse environmental effect**... (emphasis added)”. An adverse environmental effect and a significant effect are not the same under CEQA. CEQA Section 21068 defines a “significant effect on the environment” as a “substantial, or potentially substantial, adverse change in the environment.” This comment does not express specific concerns with the adequacy of the IS/MND. As such, no further response is required.
- 2-4** This comment states that a fair argument can be made that the proposed Project would result in a significant impact related to indoor air quality. In summary, the comment states the Project’s emissions of formaldehyde into the air would result in significant cancer risks to future residents and, therefore, would result in a significant impact to air quality related to health risks impacts of toxic air contaminants.

Discussion of impacts on indoor air quality is not specified or required by the State CEQA Guidelines or California’s air district guidelines. California air districts base their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the state and federal ambient air quality standards (AAQS). The AAQS is based on maximum pollutant levels in outdoor air that would not harm the public’s health. Furthermore, building materials are required to reduce exposure to toxic substances through compliance with the U.S. Environmental Protection Agency and the California Air Resources Board (CARB) regulations, such as 40 CFR Part 770, Formaldehyde Emission Standards for Composite Wood Products. The regulations typically apply to manufacturers, distributors, importers, fabricators, and

retailers of the products. All building materials used for the Project would be required to comply with the applicable federal and state standards.

In any event, the assertion by the commenter of a fair argument is incorrect as the Project will need to comply with the 2019 CalGreen Code, which specifies that composite wood products (such as hardwood plywood and particleboard) meet the requirements for formaldehyde as specified in CARB's Air Toxic Control Measures. The 2019 CalGreen building code also does not allow added formaldehyde-based resins or ultra-low emitting formaldehyde resins, and requires documentation of compliance with CARB's Air Toxic Control Measures. (See Section 5.504.4.5, Chapter 5, Part 11, 2019 California Green Building Standards Code, January 1, 2020, incorporated herein by this reference.) Furthermore, the commenter is speculating in the assertion that composite wood materials would be used in the interior of the building. Indoor building materials will not be known until the building permit stage, and as stated above, these materials will be required to comply with the CARB and the 2019 CalGreen building code.

The commenter's conclusions were not based on the assumption that the Project would be built in accordance with CARB's Air Toxic Control Measures, 2019 CalGreen building code, and Leadership in Energy and Environmental Design (LEED) certification requirements. The commenter provides no evidence to substantiate a contrary conclusion that in spite of the Project using materials that comply with the standards of CARB's Air Toxic Control Measures, the Project would still expose occupants to toxic substances that results in exceeding the South Coast Air Quality Management District's CEQA significance threshold. Moreover, CEQA generally requires analysis of the effects of a project on the environment, as opposed to the effects of the environment on a project (CEQA Guidelines Section 15126.2)(*California Building Industry Association. v. Bay Area Air Quality Management District* [2015] [Case No. S213478]). Therefore, this comment does not provide evidence of any new impacts, there would be no new impacts that were not previously analyzed in the IS/MND, and no revisions to the IS/MND are required.

- 2-5** This comment suggests the presumed cancer risk associated with the proposed Project's indoor air emissions may be exacerbated by the vehicle emissions from nearby roadways. The comment cites the South Coast Air Basin is in non-attainment for particulate matter less than or equal to 2.5 microns in diameter (PM_{2.5}) and potential cumulative air quality impacts may occur related to toxic air contaminants.

The comment correctly notes the South Coast Air Basin is in non-attainment for PM_{2.5}; however, the IS/MND states implementation of the proposed Project would not generate emissions of PM_{2.5} that would exceed the South Coast Air Quality Management District's thresholds (as shown in IS/MND Table 2.3-4, Estimated Maximum Daily Operational Emissions). Accordingly, the proposed Project's PM_{2.5} emissions are not expected to cause any increase in related regional health effects for these pollutants. Furthermore, the IS/MND states the proposed Project would not result in a potentially significant contribution to regional concentrations of non-attainment pollutants and would not result in a significant contribution to the adverse health effects associated with those pollutants. As such, impacts were found

to be less than significant and no mitigation is required (see Attachment A, Revised IS/MND Section 2.3, Air Quality, page 38).³

As discussed above in Response to Comment 2-4, discussion of impacts on indoor air quality is not specified or required by the State CEQA Guidelines or California’s air district guidelines. California air districts base their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the state and federal AAQS. The AAQS is based on maximum pollutant levels in outdoor air that would not harm the public’s health. Furthermore, building materials are required to reduce exposure to toxic substances through compliance with the U.S. Environmental Protection Agency and the CARB regulations, such as 40 CFR Part 770, Formaldehyde Emission Standards for Composite Wood Products. The regulations typically apply to manufacturers, distributors, importers, fabricators, and retailers of the products. All building materials used for the Project would be required to comply with the applicable federal and state standards.

Further, the California Supreme Court issued its opinion in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) (Case No. S213478), stating in summary that “agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project’s future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project’s impact on the environment — and not the environment’s impact on the project — that compels an evaluation of how future residents or users could be affected by exacerbated conditions.” As summarized above, the proposed Project would not result in any significant impacts related to adverse health effects from PM2.5 and would therefore not exacerbate an existing condition related to adverse health effects.

The assertion by the commenter of a “fair argument” is incorrect as the IS/MND analyzed the proposed Project’s potential impacts related to toxic air contaminants, in accordance with the aforementioned State and local guidance. Therefore, this comment does not provide evidence of any new impacts there would be no new impacts that were not previously analyzed in the IS/MND, and no revisions to the IS/MND are required.

- 2-6** This comment suggests the Project site has the potential to be impacted with hazardous substances as a result of past land uses and cites the findings of a Phase I Environmental Site Assessment (ESA) and Vapor Intrusion Risk Assessment prepared for the IS/MND (included as Appendix E-3 of the IS/MND). The comment states the site investigation was insufficient related to potential vapor encroachment and soil contamination from the former gas station on the eastern portion of the Project site and the former gas station and auto repair operations north of the eastern portion of the Project site. Finally, the comment states the

³ As further described in Section 2.0, Overview of Changes to the Draft IS/MND, of this Final MND, changes to the proposed Project description since publication of the Draft IS/MND do not result in any new significant impacts or a substantial increase in the severity of any environmental impacts.

testing is out of date and that the potential presence of underground storage tanks at the former gas station on the Project site has not been evaluated.

The commenter's concerns are addressed through the required implementation of Mitigation Measure (MM) HAZ-1. The Hazardous Material Contingency Plan required by MM-HAZ-1 is designed to identify, delineate, report and address contaminated soils, for which the potential to encounter such soils was appropriately identified and described in the Desktop Environmental Review and Document Review and Phase I Environmental Site Assessment (ESA documents; Appendix E-1 and Appendix E-2) for the IS/MND. Furthermore, MM-HAZ-1 has been modified to also include assessment, characterization, and management of soil vapor in the area of the former gas station. For example, MM-HAZ-1 has been revised to include the following, "[s]hould soil vapor contamination be identified above applicable regulatory levels, as outlined in the HMCP, soil vapor intrusion methods will be outlined in the final report based on the findings on site and in accordance with February 2023 DTSC Final Draft Supplemental Guidance for Screening and Evaluating Vapor Intrusion. Proposed engineering methods for attenuation of vapor intrusion will be prepared and submitted with building plans and approved by the permitting agency prior to issuance of construction permits." These specific requirements would ensure that all site activities are conducted in conformance with applicable regulations. See Attachment A, Revised IS/MND, Section 2.9, Hazards and Hazardous Materials, page 74. Implementation of MM-HAZ-1 will adequately identify, characterize, and manage previously unremoved USTs and impacted soils, if any, on the Project site. Upon implementation of MM-HAZ-1 requirements, all potential site hazards identified in the Phase I ESA (Appendix E-2 of the IS/MND) would be reduced to levels less than significant. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND.

2-7 This comment asserts that construction workers and others may be exposed to hazardous materials and that more site investigation is required. As stated in Response 2-6 above, the commenter's concerns are thoroughly addressed through the required implementation of MM-HAZ-1. The Hazardous Material Contingency Plan (HMCP), required by MM-HAZ-1, is designed to identify, delineate, report and address contaminated soils and soil vapor (if found), for which the potential to encounter such soils and soil vapor was appropriately identified and described in the Desktop Environmental Review and Document Review, Phase I Environmental Site Assessment, and Vapor Intrusion Risk Assessment (Appendix E-1, Appendix E-2, and Appendix E-3) for the IS/MND. As required by MM-HAZ-1, the HMCP includes management and disposal of contaminated soils, if found, in accordance local and state regulations, and includes health and safety measures appropriate for the potential hazards. Air monitoring will be conducted in accordance with applicable health and safety requirements.

The HMCP also states the environmental monitor will be in charge of disposal and reporting requirements, which must be conducted in accordance with local and state regulations (e.g., City of Pasadena Best Management Practices for soil stockpiles, Draft Regional Water Board Fill Material Definitions, Department of Toxic Substances Control Voluntary Cleanup Program, and/or Regional Water Quality Control Board's Leaking Underground Storage Tank program, as applicable). As stated in the HMCP, the contractor must be properly licensed to manage contaminated soils, including a Hazardous Substance Removal Certification to their

contractor's license. Therefore, MM-HAZ-1 comprehensively addresses the safety of workers and others that may be nearby construction activities at the Project site in the event that soil contamination is encountered, and this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND.

2-8 This comment claims the greenhouse gas analysis in the IS/MND is based on unsupported assumptions. The comment raises concern for the CalEEMod default values and methodology.⁴ The information presented in the IS/MND has been revised to clarify minor facts. These revisions do not result in any new significant impacts or a substantial increase in the severity of any environmental impacts. See Attachment A to this Final MND for revisions to Section 2.8, Greenhouse Gas Emissions, pages 64 and 65.

Furthermore, the additional reference has now been cited in the IS/MND. Therefore, see Attachment A to this Final MND for revisions to Section 3.1, References Cited, page 133.

2-9 This comment claims the IS/MND does not have supporting evidence to determine the effectiveness of MM-TRA-1 to reduce transportation impacts to a less-than-significant level, and claims that MM-TRA-1 constitutes deferral of mitigation. This comment is incorrect, as MM-TRA-1 provided clearly delineated performance standards that ensure the Project would not create significant impacts related to transportation. As stated, MM-TRA-1 required three mandatory actions to occur, which must be met in order for the Project to proceed. The inclusion of a performance standard in a mitigation measure is supported by relevant case law. The rule for proper deferral of the specifics of mitigation was established in *Sacramento Old City Assoc. v. City Council of Sacramento (1991) 229 Cal. App. 3d 1011*. In summary, mitigation must meet one of the following conditions:

- The Lead Agency must commit itself to the mitigation by identifying and adopting one or more mitigation measures for the identified significant effect. The mitigation measure must also set out clear performance standards for what the future mitigation must achieve.
- Alternatively, the agency must provide a menu of feasible mitigation options from which the applicant or agency staffs can choose in order to achieve the stated performance standards.

MM-TRA-1 required development of the Transportation Demand Management Plan that must articulate achievement of a 27% reduction in vehicle trips per capita. This quantifiable performance standard is absolute and was determined by the City of Pasadena's Department of Transportation to adequately reduce transportation impacts. As such, contrary to the commenter's assertion, the City has not delegated its responsibility to the Applicant, but rather is the author of the methodology for analysis, thresholds for significance, and methods for mitigation.

⁴ As further described in Section 2.0, Overview of Changes to the Draft IS/MND, of this Final MND, changes to the proposed Project description since publication of the Draft IS/MND do not result in any new significant impacts or a substantial increase in the severity of any environmental impacts.

MM-TRA-1 allowed for this quantified performance standard to be manifested in different ways and did not arbitrarily limit the methods by which the Applicant could ensure compliance with the vehicle trip reductions. The City determined that the performance standard set forth in MM-TRA-1 is feasible and achievable. For instance, achievement of the 27% reduction could be accomplished by converting the commercial component to office or reducing some combination of the unit count and/or square footage of commercial use areas, and/or proscribing particular uses within the commercial use areas that achieve the vehicle reductions. Such options would have no impact on the analyses included in the IS/MND and could potentially reduce environmental impacts if reductions in units or square footage was required.

Subsequent to this analysis, the Applicant chose to revise the proposed Project by removing the Planned Development request and instead conform to the site's existing CD-4 zoning district and applicable development standards. The Project would continue to include 263 residential units (including 41 affordable housing units). The Project has been revised to include 14,346 square feet of office uses rather than the originally proposed 16,481 square feet of commercial uses. This change in the Project Description accomplishes the intent of MM-TRA-1, and no additional mitigation related to transportation is required. See revisions included in Section 2.17, Transportation of Attachment A as well as Attachment B, Transportation Impact Analysis. Such revisions do not result in any new significant impacts or a substantial increase in the severity of any environmental impacts. See Section 2.0 of this Final MND for more details. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND.

- 2-10** This comment states that MM-TRA-1 would not result in a reduction of vehicle trips. This comment is incorrect because the City, as Lead Agency under CEQA, has developed the methodology for assessing impacts to transportation and vehicle miles traveled and has determined the potential means by which such impacts could be mitigated in order to achieve less than significant impacts. This methodology is universally applied to Projects within the City and constitutes adequate substantial evidence to conclude that compliance with the City's General Plan Mobility Element objectives and policies. The Project analysis is based on the City's Transportation Impact Analysis Guidelines using the City's calibrated travel demand forecasting model built on Southern California Association of Government's regional model. Further, as discussed in Response 2-9 above, subsequent to the publication of the IS/MND for public review, the Applicant chose to revise the proposed Project, which has proven the feasibility of MM-TRA-1. Moreover, MM-TRA-1 has been revised to ensure the mix of land uses would accomplish the intent of the mitigation measure. See revisions included in Section 2.17, Transportation of Attachment A for more details and in Attachment B, Transportation Impact Analysis to this Final MND.
- 2-11** This comment concludes the letter and states the City must prepare an EIR for the proposed Project. All comments have been addressed and do not warrant the preparation of an EIR. Please see Responses to Comments 2-1 through 2-12.
- 2-12** This comment is identified as Exhibit A of Comment Letter 2, which is the Indoor Air Quality technical study by Francis J. Offermann, PE, CIH, of Indoor Environmental Engineering. This comment also references, an appendix, and Curriculum Vitae of Mr. Offermann. Please see Responses to Comments 2-4 through 2-6, above.



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December 16, 2020

ADVISORY BOARD

Pasadena Planning Commission
c/o Tim Molinar (tmolinar@cityofpasadena.net)
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Pasadena, CA 91101

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RE: Planned Development #37 (PLN2018-00408) 740-790 E. Green Street, 118 S. Oak Knoll Avenue and 111 S. Hudson Avenue

As a place-based organization dedicated to realizing a more sustainable, equitable, and livable San Gabriel Valley, ActiveSGV is pleased to submit this comment in support of the proposed all-electric, mixed-use, infill development in the heart of Pasadena's walkable, transit-friendly downtown.

In 2019 ActiveSGV supported UCLA and the Energy Coalition in conducting a study of indoor air quality within older homes and apartments in the San Gabriel Valley. Homes were outfitted with both indoor and outdoor air quality monitors, for a period of two weeks in Summer and Winter 2019 (4 weeks total). The study found that in homes with gas appliances air pollution (PM2.5 and NO2) inside homes was commonly worse than outdoors, particularly during the colder months of the year and within homes that used gas stoves and ovens for preparing food.

The health impacts of indoor air pollution are devastating. Gas stoves and furnaces produce a range of pollutants, including particulate matter (PM), nitrogen dioxide (NO2), carbon monoxide (CO), and formaldehyde. Over the past four decades public health researchers have compiled a growing body of evidence linking the use of such gas appliances, especially for cooking, with increased risk of negative health outcomes, including asthma and other respiratory illnesses, cognitive impairments, and some cancers.

A 2013 meta-analysis of 41 studies found that children living in homes with gas stoves had a 42 percent higher risk of experiencing asthma symptoms, and a 24 percent increase in the risk of being diagnosed with asthma over their lifetime. More recently, a 2018 study from the University of Queensland found that more than 12 percent of the total burden of childhood asthma in Australia was attributable to the use of gas stoves, which 38 percent of households rely on for cooking.

1 Healthy Home Study (2019), www.activesgv.org/healthy-home-study.html
2 International Journal of Epidemiology, Volume 42, Issue 6, December 2013, Pages 1724-1737, https://doi.org/10.1093/ije/dy1150
3 Knibbs, Luke D., Woldayohannes, Solomon, Marks, Guy B., and Cowie, Christine T. (2018). Damp housing, gas stoves, and the burden of childhood asthma in Australia. Medical Journal of Australia 208 (7) 299-302. https://doi.org/10.5694/mja17.00469

ActiveSGV's mission is to support a more sustainable, equitable, and livable San Gabriel Valley.
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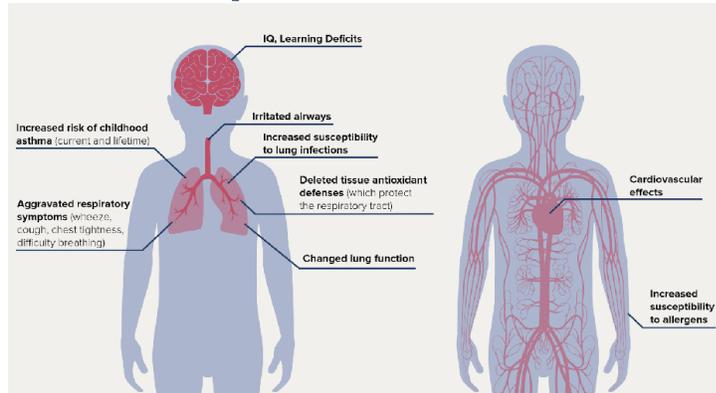
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In 2020 Harvard researchers also found that the risk of dying from COVID-19 goes up 8% for each increase of 1 µg/m³ of PM_{2.5}.⁴

Gas stoves can produce elevated levels of Nitrogen Dioxide (NO₂), a toxic gas.

Health Effects of NO₂ in Children May Include:



Source: Rocky Mountain Institute - <https://rmi.org/insight/gas-stoves-pollution-health>

The growing evidence of the dangers of gas stoves prompted the New England Journal of Medicine to publish an editorial recommending that "new gas appliances be **removed from the market.**"⁵

The impacts of poor indoor air quality are further compounded by declining outdoor air quality in the region. After decades of steady improvements, air quality in the South Coast Air Basin has been on the decline over the past decade; climate change is expected to further exacerbate air pollution. Currently, the San Gabriel Valley averages 32 days per year where daytime temperatures exceed 95°F. According to UCLA researchers, this number could skyrocket to an average of 74 days per year by 2050, and an average of 117 days annually -- *a full five months above 95°F* -- by 2100. A hotter future with less rain will make it harder to clean our air and protect public health inside and outside our homes.

The economic costs of long-term, chronic illnesses such as asthma associated with air pollution is billions in healthcare fees and diminished productivity to LA County.⁶ These costs directly impact working families who have to bear the associated burdens of juggling additional doctor's visits, medication, missed school and work days. Lower-income families who are more likely to reside in

⁴ Wu, X., Nethery, R. C., Sabath, M. B., Braun, D. and Dominici, F., 2020. Air pollution and COVID-19 mortality in the United States: Strengths and limitations of an ecological regression analysis. *Science advances*, 6(45), p.eabd4049. <https://projects.iq.harvard.edu/covid-pm>
⁵ Philip J. Landrigan, M.D., Howard Frumkin, M.D., Dr.P.H., and Brita E. Lundberg, M.D., The False Promise of Natural Gas, New England Journal of Medicine, www.nejm.org/doi/pdf/10.1056/NEJMp1913863?articleTools=true
⁶ Zhu, Yifang et al, Effects of Residential Gas Appliances on Indoor and Outdoor Air Quality and Public Health in California, UCLA Fielding School of Public Health, April 2020, <https://ucla.acp.box.com/s/xvztRlc1xnetiv0269qe704wu0lhif7>

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2

older units and homes with leaky gas appliances (and the inability to upgrade them) are at particular risk and least able to shoulder the associated costs. This impacts families and the agencies and public services they rely on, including local schools left to accommodate more asthmatic children.

Building Electrification

As of December 2020, 40 communities across California, including the cities of Ojai and Santa Monica, have adopted an all-electric building code for new construction, recognizing the benefits for the climate, air quality, public health, public safety, and housing affordability.

Electrification of new buildings is a cost-effective and socially equitable way cities around the world are reducing GHG emissions and protecting public health. In communities that have yet to adopt a "REACH" code, ActiveSGV applauds housing developers who are willing to do the right thing for public health and the environment by voluntarily making their buildings all-electric.

This is particularly important in the face of concerted industry obfuscation about the science and facts of gas in homes. Over the past decade plus Sempra / SoCalGas have invested significant resources to confuse the public and policymakers. These tactics have received increasing coverage by the press in recent years, highlighting industry misuse of ratepayer funds⁷ and efforts to convince local City Councils to formally support "balanced energy solutions"⁸. In 2021 Sempra / SoCalGas is expected to face a considerable fine from the California Energy Commission -- potentially on the order of \$380 million⁹ -- for charging ratepayers, rather than shareholders, for some of its contributions to gas industry advocacy groups that lobby to preserve and promote the use of methane gas, and forestall climate and energy efficiency policies.

SoCalGas shouldn't be using customer money to undermine state climate goals, critics say



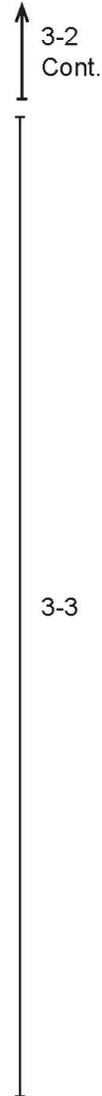
Top: Locust of Porter Ranch holds a protest sign during a hearing in Granada Hills over a methane leak at Southern California Gas Co's Aliso Canyon Storage Facility. (Oct 24, 2019) / Associated Press

⁷ Roth, Sammy, "SoCalGas shouldn't be using customer money to undermine state climate goals, critics say," *Los Angeles Times*, November 22, 2019, www.latimes.com/environment/story/2019-11-22/socalgas-climate-change-customer-funds

⁸ Roth, Sammy, "California ditched coal. The gas company is worried it's next," *Los Angeles Times*, October 22, 2019, www.latimes.com/environment/story/2019-10-22/southern-california-gas-climate-change

⁹ Chediak, Mark, "California Watchdog Wants SoCalGas to Pay Bigger Lobby Fine", *Bloomberg*, December 11, 2020, www.bloomberg.com/news/articles/2020-12-12/california-watchdog-wants-socalgas-to-pay-bigger-lobbying-fine

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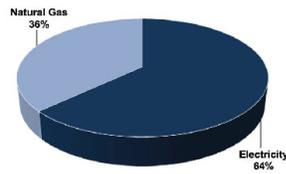


LA Times Coverage of SoCalGas Misuse of Ratepayer Funds - November 22, 2019

Pasadena Climate Action Plan (2018)

In March 2018 the City of Pasadena adopted a local Climate Action Plan, which outlined primary sources of GHG emissions in the community and strategies to reduce our reliance on gas and fossil fuels. As the City moves forward with "greening" its sources of electricity to 100% renewable energy, per the requirements of SB 100, it will become increasingly important that new construction be all-electric. Per the City's baseline data, gas accounts for a considerable 36% of emissions within Pasadena residences.¹⁰ Encouraging and supporting new projects to voluntarily reduce the use of gas in their design will support implementation of the City's adopted plan and provide healthier, more sustainable homes to future residents.

Figure 4.4 Residential Emissions by Source



Source: Pasadena GHG Inventory (2009)¹¹

3-4

Mass Timber - An Opportunity to Further Reduce Climate Impact

A further opportunity for the developer -- and the City of Pasadena -- to reduce the inherent impacts associated with the proposed and future projects would be to adopt mass timber construction techniques. Mass timber construction is a carbon-removal and sequestration technique that utilizes specialized wood products to construct new buildings, including high-rise buildings. Products such as cross-laminated timber (CLT), laminated veneer lumber (LVL), and glue laminated timber ("glulam") are generally utilized to create wood panels and beams that can replace concrete, steel, and masonry as building materials. Unlike steel and concrete -- the production of which produces a significant amount of hard to abate GHG emissions -- wood stores carbon dioxide (CO2) captured from the atmosphere. The key is procuring wood that has been sustainably farmed or harvested. Other benefits of this increasingly popular building technology include:

- **Cost** - generally a more cost-effective (or at least cost-neutral) form of construction for mid- and high-rise buildings due in part to schedule savings -- prefabricated panels are faster to install and produce less site waste.
- **Aesthetics and Value** - warmth of wood provides immediate benefits to the interior environment and design, especially for mixed-use / residential projects.
- **Safety** - fire-resistant and more earthquake safe than less resilient materials such as concrete.

3-5

¹⁰ City of Pasadena Greenhouse Gas Emissions Inventory, pg 27, www.cityofpasadena.net/wp-content/uploads/sites/30/2009-GHG-Emissions-Inventory.pdf?v=1608156978487
¹¹ Ibid, pg 27

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5-story, Mass Timber Building in Spokane, Washington - Image courtesy of New York Times: www.nytimes.com/2020/09/22/business/mass-timber-wood-buildings.html

As a community-based organization committed to improving the health and well-being of residents of San Gabriel Valley, ActiveSGV strongly supports sustainable infill development that utilizes evidence-based public health strategies and places new homes and buildings near transit, jobs, and essential services where people can easily accomplish short trips by foot or transit. As the project moves towards final design and construction, we encourage the project team and City to embrace new techniques and best practices to realize a project that will serve as a model for more sustainable development in the City of Pasadena and beyond.

3-6

If you have any questions regarding our support for healthier housing, please contact me at 626-602-5064 or via email at david@activeSGV.org.

Thank you for your time and consideration,

David Diaz, MPH
Executive Director

ActiveSGV's mission is to support a more sustainable, equitable, and livable San Gabriel Valley.
Jeff Seymour Center • 10900 Mulhall Street El Monte, CA 91731

CA Communities with REACH Codes¹²

As of December 2020, forty CA cities (listed with the most recent city first) have adopted building codes to reduce their reliance on gas.

- 40. [Oakland](#)- Requires all newly constructed buildings to be all-electric.
- 39. [Ojai](#)- Requires all-electric new construction for buildings with some exceptions.
- 38. [Sunnyvale](#)- Requires newly constructed residential and commercial buildings to be all-electric with an exemption for gas fuel cells. Restaurants may apply for an exemption.
- 37. [Millbrae](#)- Requires all-electric residential and commercial buildings with exemptions for laboratories, restaurants and gas cooking/fireplaces.
- 36. [Los Altos](#)- Requires all newly constructed buildings to be all-electric with exemptions for gas cooking/fireplaces in residential buildings with 9 units or less, laboratories and restaurants.
- 35. [East Palo Alto](#)- Requires that new residential and commercial buildings be all-electric, with exceptions for affordable housing, and commercial kitchens.
- 34. [Redwood City](#)- Adopted a reach code requiring all-electric new construction for commercial and residential buildings, with exceptions for multiple specific building types such as laboratories.
- 33. [Piedmont](#)- Promotes all-electric new construction for low-rise residential buildings and incentives electrification for renovations of low-rise residences.
- 32. [San Anselmo](#)- Promotes all electric housing by requiring higher energy efficiency requirements for mixed fuel projects and prewiring for all electric kitchens.
- 31. [Burlingame](#)- Requires all electric new construction for projects with exemptions for single-family and commercial projects for gas cooking and fireplaces.
- 30. [Santa Cruz](#)- Requires all electric new construction with exemptions for projects that are deemed to be in the public interest and for restaurant cooking.
- 29. [Hayward](#)- All new residential buildings are required to be all-electric and nonresidential and high-rise residential buildings are electric preferred. Mixed-fuel buildings must install solar panels, and the energy budget must be 10 percent better than code.
- 28. [Richmond](#)- Requires new residential buildings over three stories to have prewiring for electric readiness and to support all-electric clothes dryers and space and water heating. Allows gas to power stoves and fireplaces. Requires all buildings under three stories to build all-electric and install a minimum amount of on-site solar based on square footage.
- 27. [San Mateo County](#)- Requires that no gas or propane plumbing is installed in new buildings, and that electricity be used as the energy source for water and space heating and cooking and clothes drying appliances.
- 26. [Campbell](#)- Requires all-electric space and water heating in new residential buildings, accessory dwelling units, and major remodels.
- 25. [San Francisco](#) recently expanded on their building electrification ordinance, now requiring that all new construction be all electric starting June 1st 2021
- 24. [Los Altos Hills](#)- Requires electric space and water heating in new low-rise residential buildings.
- 23. [Cupertino](#)- Requires all buildings, including accessory dwelling units, to be all-electric. Also requires outdoor pools, spas, and barbeques to be included within the definition of an all-electric building.
- 22. [Los Gatos](#)- Requires all newly constructed single-family and low-rise multifamily buildings to be all-electric.
- 21. [Healdsburg](#)- Requires electrification for most appliances but grants an exemption for gas cooking and fireplaces.

3-7

¹² Sierra Club, "CA Cities Lead the Way to a Gas Free Future." Accessed on 12/10/2020: www.sierraclub.org/articles/2020/12/california-cities-lead-way-gas-free-future

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- 20. [Brisbane](#)- Requires all newly constructed single-family homes and low-rise multifamily buildings to be all-electric. Allows exemptions for cooking appliances but requires pre-wiring for electric readiness.
- 16. [Santa Rosa](#)- Requires all newly constructed low-rise residential buildings to be all-electric.
- 15. [Milpitas](#)- Limits gas infrastructure for newly constructed buildings on city-owned property.
- 14. [Alameda](#)- Limits gas infrastructure for new residential construction on city-owned property.
- 13. [Palo Alto](#)- Requires all newly constructed low-rise residential buildings to be all-electric, plus higher energy-efficiency standards and electrification readiness in mixed-fuel non-residential buildings. Will revisit all-electric requirement for non-residential new construction in 2021.
- 12. [Morgan Hill](#)- Phases out gas hookups in all newly constructed residential buildings and most nonresidential buildings.
- 11. [Mountain View](#)- Requires electrification for new residential and nonresidential buildings. Does not exempt gas stoves, fireplaces, or firepits in residential buildings.
- 10. [Marin County](#)- Offered three compliance pathways for newly constructed buildings in unincorporated buildings: one for all-electric construction, one for limited mixed-fuel construction that has fewer efficiency requirements because it uses less gas but allows gas stoves, and one for mixed-fuel construction that requires the most strict compliance with Cal Green Tier 1 and electrification-readiness requirements.
- 9. [Davis](#)- Requires higher energy-efficiency standards and electrification readiness in mixed-fuel buildings.
- 8. [San Jose](#)- San Jose passed a natural gas prohibition for all new building types, with limited temporary exemptions, becoming the largest city in the nation to do so.
- 7. [Menlo Park](#)- Requires all-electric new construction for residential buildings as well as new nonresidential buildings but allows an exemption for cooking appliances in low-rise residential buildings.
- 6. [Santa Monica](#)- Requires additional energy-efficiency measures for new residential and nonresidential buildings that use gas.
- 5. [San Mateo](#)- Requires new residential buildings and buildings with office-use to be all-electric. Adds additional requirements for rooftop solar and electric vehicle charging.
- 4. [San Luis Obispo](#)- Requires additional energy efficiency and electrification readiness for all newly constructed buildings and adds a small fee for new mixed-fuel buildings based on expected gas consumption.
- 3. [Windsor](#)- Mandates all-electric new construction for low-rise residential buildings, including single-family homes, multifamily homes with fewer than four stories, and detached accessory dwelling units (but attached ones are exempt).
- 2. [Berkeley](#)- Phases out gas hookups in all newly constructed residential buildings and most nonresidential buildings.
- 1. [Carlsbad](#)- Requires heat pump water heaters or solar thermal water heating in new residential buildings that have fewer than four stories.



3-7
Cont.

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Response to Comment Letter No. 3
ActiveSGV
David Diaz, MPH, Executive Director
December 16, 2020

- 3-1** This comment provides an introduction of the organization and its mission in support of all-electric, mixed-use, infill developments in Pasadena. The commenter cites a 2019 indoor air quality study which determined homes with gas appliances result in worse air pollution consisting of particulate matter less than or equal to 2.5 microns in diameter (PM_{2.5}) and nitrogen dioxide (NO₂) as compared to air quality from outdoor air quality conditions. Discussion of impacts on indoor air quality is not specified or required by the State CEQA Guidelines or California's air district guidelines. California air districts base their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the state and federal ambient air quality standards (AAQS). The AAQS are based on maximum pollutant levels in outdoor air that would not harm the public's health. Furthermore, building materials are required to reduce exposure to toxic substances through compliance with the U.S. Environmental Protection Agency and the California Air Resources Board (CARB) regulations, such as 40 CFR Part 770, Formaldehyde Emission Standards for Composite Wood Products. The regulations typically apply to manufacturers, distributors, importers, fabricators, and retailers of the products. All building materials used for the Project would be required to comply with the applicable federal and state standards. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the analysis within the IS/MND is required.
- 3-2** This comment further describes health concerns associated with indoor air quality. The comment cites studies which state gas stoves and furnaces produce a range of pollutants, including particulate matter, NO₂, carbon monoxide, and formaldehyde. The comment highlights a number of health-related concerns for indoor air pollution caused by changing environmental conditions and building conditions. As stated in Response to Comment 2-4, indoor building materials will not be known until the building permit stage; however, these materials will be required to comply with the CARB and the 2019 CalGreen building code. As such, building materials are required to reduce exposure to toxic substances through compliance with the U.S. Environmental Protection Agency and CARB regulations, such as 40 CFR Part 770, Formaldehyde Emission Standards for Composite Wood Products. The regulations typically apply to manufacturers, distributors, importers, fabricators, and retailers of the products. All building materials used for the Project would be required to comply with the applicable federal and state standards. Lastly, the Project would be built in accordance with CARB's Air Toxic Control Measures, 2019 CalGreen building code, and Leadership in Energy and Environmental Design (LEED) certification requirements. Discussion of impacts on indoor air quality is not specified or required by the City's Environmental Policy Guidelines, State CEQA Guidelines, or California's air district guidelines, as further addressed in Responses to Comments 2-4 and 2-5. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the analysis within the IS/MND is required.

- 3-3** This comment cites support for an all-electric building code for new construction to provide benefits to the climate, air quality, public health, public safety, and housing affordability. This commenter’s suggestion will be provided to the Project applicant and to City decision makers for their review and consideration as part of this Final MND. However, this comment does not contain any specific concerns related to the adequacy of the environmental analysis in the IS/MND. Furthermore, the Project would be built in accordance with the 2019 CalGreen building code and LEED certification requirements. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the analysis within the IS/MND is required.
- 3-4** This comment describes the City’s Climate Action Plan (adopted in March 2018) which identifies strategies to reduce reliance on gas and fossil fuels. The comment encourages the Project applicant to voluntarily reduce the use of gas in its design. This commenter’s suggestion will be provided to the Project applicant and to City decision makers for their review and consideration as part of this Final MND. However, this comment does not contain any specific concerns related to the adequacy of the environmental analysis in the IS/MND. Furthermore, the Project would be built in accordance with the 2019 CalGreen building code and LEED certification requirements. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the analysis within the IS/MND is required.
- 3-5** This comment provides a suggestion to the Project applicant to adopt mass timber construction techniques to reduce climate impacts. The comment describes mass timber construction as a carbon-removal and sequestration technique and cites potential cost, aesthetic, value, and safety benefits to utilizing these techniques. The commenter’s suggestion will be provided to the Project applicant and to City decision makers for their review and consideration as part of this Final MND. However, this comment does not contain any specific concerns related to the adequacy of the environmental analysis in the IS/MND. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the analysis within the IS/MND is required.
- 3-6** This comment provides a summary of the comment letter and encourages the Project team to embrace new techniques and best practices suggested for sustainable design. This commenter’s suggestion will be provided to the Project applicant and to City decision makers for their review and consideration as part of this Final MND. This comment does not contain any specific concerns related to the adequacy of the environmental analysis in the IS/MND. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the analysis within the IS/MND is required.
- 3-7** This comment outlines communities within the State of California that have adopted building codes to reduce reliance on gas, also known as “REACH Codes.” This comment supports the discussion outlined in Comment 3-3 for reference. Please see Response to Comment 3-3. No further response is required.

CARLSON & NICHOLAS, LLP
Attorneys at Law

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	www.carlsonnicholas.com	

December 10, 2020

Chairman Steven Olivas
Hon. Commissioners Barar, Coppess, Coher, Lyon, Miller, Nanney, and Wendler
City of Pasadena Planning Commission
City of Pasadena, City Hall
100 North Garfield Avenue
Pasadena, California 91109

Re: 770 E. Green Street Density Bonus and Planned Development Applications

Dear Chair Olivas and Honorable Planning Commissioners:

We represent Stanford Pasadena, LLC, the owner of 770 East Green Street who has filed a density bonus application and an application for a planned development. The Property is zoned C-4, and is located on the south side of Green Street between Oak Knoll Avenue and Hudson Avenue. The Property contains 2.33 acres and crosses two different zoning sub-districts to the south.

As explained in your staff report, the applicant proposes to build a new mixed – use building consisting of 16,234 sq. feet of ground floor commercial space along Green Street with 263 residential dwelling units, a 4,000 square foot pocket park and 37,666 square foot of amenities and open space (the “Project”).

As also explained in your staff report, the Project provides 41 affordable units on-site to comply with the City’s new 20% Inclusionary Housing Ordinance, complies with the City’s General Plan, all of the development standards set-forth in the Zoning Code, and is designed to be compatible with the existing neighborhood by using the City’s Concession Menu to design, scale, and organize the massing of the proposed buildings. As such, all of the findings required under Municipal Code can be made to approve the Project.

4-1

Letter to Planning Commission
City of Pasadena
December 10, 2020

We write, however, because we understand you will be conducting a study session on the Project at your December 17, 2020 meeting and want to explain the following points.

First, the density bonus application is based upon the State’s Density Bonus Law as promulgated in Government Code 65915 and incorporated in Section 17.43.055 of the City’s Zoning Code. Under these rules, an applicant can combine the use of the State’s Density Bonus Tables with the City’s Concessions Menu to create a by-right project provided it complies with the City’s 20% on-site affordable requirement set-forth in Section 17.42.040. Here, the applicant is providing 20% affordable on-site and using the City’s height and FAR concession in 17.43.055.B1 and B.2.

Under the State Density Bonus Law (“SDBL”), the “Maximum allowable residential density” means “the density allowed under the zoning ordinance and land use element of the general plan, or, if a range of density is permitted, means the maximum allowable density for the specific zoning range and land use element of the general plan applicable to the project. If the density allowed under the zoning ordinance is inconsistent with the density allowed under the land use element of the general plan, the general plan density shall prevail.” Further, the City’s Zoning Code states, “The residential density [of a Planned development] may also exceed that of the Land Use Diagram if the project is complying with the Density Bonus provisions of [Chapter 17.42](#) (Affordable Housing Incentives and Requirements)”, which we are. Here, the “maximum allowable residential density under the Land Use Element of its General Plan”, is 87 units per acre and that is what the applicant has used as its base density, which is combined with a 30% density bonus under the SDBL.

However, because the Property is split between two different sub-districts under the Zoning Code, the applicant also has applied for a Planned Development to create one set of development standards for the entire site. Under Sections 17.26.020 and 17.74.070.B of the Zoning Code, the finding for a Planned Development is that it “is in conformance with the goals, policies, and objectives of the General Plan.” Here, the Property is zoned Medium Mixed-Use under the General Plan, which also provides for 87 units per acre. Further, the Project is a by-right project that fulfills the goals and objectives of the City’s Housing Element in its General Plan, along with those in the Land-Use and Transportation Elements.

Second, because of the Project’s consistency with the City’s General Plan, and by-right nature under the Zoning Code, a Mitigated Negative declaration was prepared to address any significant environmental impacts. There, a number of mitigation measures are proposed. It also was determined that the Property does not possess sufficient historic or architectural significance to merit listing in the National Register, California Register, or for designation as a City Historical Landmark. Therefore, the Property is not considered to be a “historical resource” under the Municipal Code or as defined in Section 15064.5(a) of the CEQA Guidelines, and the proposed project would not result in a substantial adverse change to a historical resource, as defined in Section 15064.5(b) of the CEQA Guidelines.

4-2

4-3

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As such, any objection to the findings for the CEQA determination and the proposed project must be based upon substantial evidence, not mere conjecture. As the courts have explained, “[s]ubstantial evidence includes facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts. . . . **It does not** include ‘[a]rgument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly inaccurate or erroneous. . . . Complaints, fears, and suspicions about a project’s potential environmental impact likewise do not constitute substantial evidence. . . . Members of the public may . . . provide opinion evidence where special expertise is not required. . . . However, “[i]nterpretation of technical or scientific information requires an expert evaluation. Testimony by members of the public on such issues does not qualify as substantial evidence. . . . “[I]n the absence of a specific factual foundation in the record, dire predictions by nonexperts regarding the consequences of a project do not constitute substantial evidence.” *Joshua Tree Downtown Business Alliance v County of San Bernardino* (2016) 1 Cal. App. 5th 677 (Citations omitted; Emphasis added). Here, there is no substantial evidence to support not making the required findings to approve the Project.

4-3
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Third, there are two other relevant State statutes that apply to this Project.

The first is the Housing Accountability Act (“HAA”), codified in Government Code Section 65589.5, which applies to the Project and restricts the City’s ability to deny it because the HAA defines a “housing development project” to mean: “a use consisting of any of the following: (A) Residential units only. (B) Mixed-use developments consisting of residential and nonresidential uses with at least two-thirds of the square footage designated for residential use. (C) Transitional housing or supportive housing.” Gov. Code § 65589.5(h)(2). The Project application is for mixed-use where “at least two-thirds of the square footage [is] designated for residential use.” The Project thus falls under the foregoing definitions and, therefore, the HAA applies to the Project application.

The applicability of the HAA means that the City cannot deny the Project unless it makes certain written findings under Government Code Section 65589.5, as follows:

4-4

(j) (1) When a proposed housing development project complies with applicable, objective general plan, zoning, and subdivision standards and criteria, including design review standards, in effect at the time that the application was deemed complete, but the local agency proposes to disapprove the project or to impose a condition that the project be developed at a lower density, the local agency shall base its decision regarding the proposed housing development project upon written findings supported by a preponderance of the evidence on the record that both of the following conditions exist:

(A) The housing development project would have a specific, adverse impact upon the public health or safety unless the project is disapproved or approved upon the condition that the project be developed at a lower density. As used in this paragraph, a “specific, adverse impact” means a significant, quantifiable, direct, and unavoidable

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impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.

(B) There is no feasible method to satisfactorily mitigate or avoid the adverse impact identified pursuant to paragraph (1), other than the disapproval of the housing development project or the approval of the project upon the condition that it be developed at a lower density.

As there is no evidence that the Project would have "a specific, adverse impact upon the public health or safety" as defined above, there is no basis to make either of these findings and/or deny the Project under the HAA.

Similarly, the application for the Project is subject to the newly enacted provisions of SB330 that went into effect on January 1, 2020. Under SB330, a "housing development project" is defined the same as under the HAA, and the City is required to process the applications for it under the General Plan and Zoning Ordinance in effect at the time the application is deemed complete.

Further, SB330 prohibits the City from holding more than five public hearings on a project, as well as prohibits the City from limiting the density of the Project to less than that authorized by the General Plan land-use designation and zoning ordinance in effect before January 1, 2018.

Specifically, when an application for a conditional use permit, zoning variance, or any other discretionary permit for a housing development project is submitted to the City, the City is barred from (1) enforcing or requiring the applicant for a housing development project to comply with any zoning ordinance adopted, an amendment to an existing zoning ordinance or general plan, or any other standard adopted or amendment to an existing standard after the date on which the application is deemed complete; and, (2) charging any fee to the applicant in excess of the amount of fees or other exactions that applied to the proposed project at the time the application is deemed complete. The City also is required to determine if the site of the proposed project is a historic site at the time the application is deemed complete, and its determination is valid throughout the processing of the applications for the Project.

With regard to design review, any applicable standards must be objective, and the City cannot impose or enforce any design standards that are established on or after January 1, 2020, that are not objective.

More specifically, a city may not impose or enforce design standards "established on or after January 1, 2020 that are not objective design standards." Government Code Section 66300(b)(1)(C). An objective design standard is defined to mean a standard "that involves no personal or subjective judgment by a public official and is uniformly verifiable by reference to an external and uniform benchmark or criterion available and knowable by both the development applicant or proponent and the public official before submittal of an application." *Id.*, Section 66300(a)(7).



4-4
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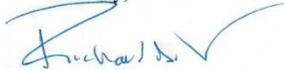
Further, to the extent a City wishes to enforce non-objective standards established before January 1, 2020, the HAA does not allow a project to be turned down or reduced in density for non-objective reasons. *Id.*, Section. 65589.5(j)(1)). The City, therefore, can regulate design with only established objective design standards. Anything else violates both the HAA and SB330.

As mentioned above and explained in your staff report, the Project fully complies with all of the objective development and design standard set-forth in the City's Zoning Code.

Finally, if the City does violate the HAA and SB330 by disapproving a housing development project that complies with applicable, objective general plan and zoning standards and criteria, or imposes a condition that the Project be developed at a lower density, without making the required findings supported by a preponderance of the evidence, both statutes provide private a right of action, including the right to recover attorneys' fees and costs and seek monetary damages under certain conditions.

We hope this background and explanation of the legally applicable statutes and codes is of help. We will be attending the December 17 study session and can answer any questions then as well. Thank you for your attention and consideration.

Sincerely,



Richard A. McDonald, Esq.

4-4
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**Response to Comment Letter No. 4
Carlson & Nicholas, LLP
Richard A. McDonald, Esq.
December 10, 2020**

- 4-1** This comment identifies the commenter as the legal representation for Stanford Pasadena, LLC, the owner of 770 East Green Street (the Project Applicant). The comment provides a summary of the previous project description. The comment incorrectly states the Project's proposed ground floor would consist of 16,234 square feet of commercial space, where the proposed ground floor commercial space totals 16,232 square feet. As shown in Figure 4, Level One Floor Plan, of the IS/MND, the proposed Project includes the commercial uses on the ground floor. However, subsequent to the publication of the IS/MND for public review, the Project Applicant changed select components of the proposed Project. For example, the Project would continue to include 263 residential units (including 41 affordable housing units). In addition, the Project has been revised to include 14,346 square feet of office uses rather than the originally proposed 16,232 square feet of commercial uses. Such revisions do not result in any new significant impacts or a substantial increase in the severity of any environmental impacts. See Section 2.0 of this Final MND for more details. This comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the analysis within the IS/MND is required.
- 4-2** This comment states the intent of the letter is to explain the Project's application ahead of the City Planning Commission's study session on the proposed Project. The comment states the proposed Project is utilizing both the State's Density Bonus Law and the City's Concessions Menu and explains the applicability to the Project's proposal.
- The comment notes the Project site is located on two different sub-districts under the City's Zoning Code. As such, the proposed Project requested a Planned Development zone change. The comment correctly identifies components of the proposed Project and requested approvals. However, subsequent to the publication of the IS/MND for public review, the Project Applicant has withdrawn the Planned Development application and continues to include a Density Bonus component. See changes to the project description and other applicable sections in Section 2.0 of this Final MND. This comment does not contain any specific concerns related to the adequacy of the environmental analysis in the IS/MND. However, the comment will be provided to the City's decision makers for their review and consideration as part of this Final MND. This comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the analysis within the IS/MND is required.
- 4-3** This comment notes an MND was prepared to address any potential significant environmental impacts as a result of the proposed Project and mitigation was incorporated to reduce impacts. The comment further states the Project site does not contain resources with historical significance and the Project would not result in a substantial adverse impact. The comment correctly states the IS/MND's less-than-significant determination for the Project's impact on historical resources. Additionally, where the IS/MND has identified potentially significant impacts, mitigation was incorporated to reduce potential impacts to a less-than-significant effect. Mitigation reduced potentially significant impacts to a less-than-significant level for topic

areas under Section 2.5, Cultural Resources (archaeological resources); Section 2.7, Geology and Soils; Section 2.9, Hazards and Hazardous Materials; Section 2.13, Noise; Section 2.16, Recreation; Section 2.17, Transportation; Section 2.18, Tribal Cultural Resources; and Section 2.21, Mandatory Findings of Significance. Additionally, the commenter notes any objection to the findings for the CEQA determination must be based upon substantial evidence. This comment does not contain any specific concerns related to the adequacy of the environmental analysis in the IS/MND. However, the comment will be provided to the City's decision makers for their review and consideration as part of this Final MND. This comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the analysis within the IS/MND is required.

4-4 This comment states the proposed Project meets the definitions outlined in the Housing Accountability Act (Government Code Section 65589.5; also known as Senate Bill 330). The comment also cites provisions from the Housing Accountability Act in which a city cannot deny a "housing development project" or reduce the proposed density if it complies with planning and land use regulations in effect at the time of a project application is deemed complete unless the proposed project would have a "specific, adverse impact upon the public health or safety."

The comment continues to state the Project's applicability to the provisions of Senate Bill 330, including limits to the City from holding more than five hearings and imposing any new zoning, fees, and a determination of the Project site as a historic site. Furthermore, the comment states Senate Bill 330 limits the imposition or enforcement of non-objective design standards established after January 1, 2020. This comment does not contain any specific concerns related to the adequacy of the environmental analysis in the IS/MND. However, the comment will be provided to the City's decision makers for their review and consideration as part of this Final MND. This comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the analysis within the IS/MND is required.

Comment Letter 5

From: Takeda, Michi
Sent: Thursday, December 17, 2020 1:45 PM
To: Molinar, Tess
Subject: FW: Planning Commission - 740-770 E Green St
Attachments: 740 E Green St - Design Commission - PH - with attachment.pdf

From: Andrew Salimian <asalimian@pasadenaheritage.org>
Sent: Thursday, December 17, 2020 12:38 PM
To: Takeda, Michi <mtakeda@cityofpasadena.net>
Cc: Sue Mossman <smossman@pasadenaheritage.org>; Richard McDonald <rmcdonald@carlsonnicholas.com>
Subject: Planning Commission - 740-770 E Green St

Hello Michi,

I understand the project at 740 E Green Street is going to Planning Commission this evening for a study session. I would like to resubmit Pasadena Heritage's comments from the Design Commission for their reference. I also wanted to support the Design Commission's recommendations and briefly address the environmental report. Could you pass along this brief email to the Commission as well?

Pasadena Heritage supports the recommendations made by the Design Commission. The massing and site organization has improved, but what is missing now is a compelling design treatment. We support Commissioner Rao's recommendation to reintroduce some "charm" into the facades. We also would like the pocket park more properly engaged with the building, either by enlarging it or by finding a way to connect it to the main courtyard. We also support the suggestion to allow for mid-block access along Green Street into the interior courtyard. The central lobby area could be reconfigured to allow direct access into the courtyard.

Finally, Pasadena Heritage has a brief question regarding the traffic study that we hope can be addressed. The report shows that VT/capita exceeds the threshold of significance and therefore mitigations are needed. However, the metric included in the report used the outdated threshold. The City Council voted in December to adopt lower thresholds. Would this project need to comply with the new metrics? Any reduction in traffic would be an improvement, but we are glad to see that impacts will at least need to be mitigated.

5-1
5-2

Andrew Salimian
Preservation Director
O: (626) 441-6333 x19
C: (516) 662-6425
asalimian@pasadenaheritage.org

CORONAVIRUS POLICY: Out of an abundance of caution, Pasadena Heritage staff may be working from home. I still have access to email, but you can additionally be reached on my personal cell.





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December 7, 2020

City of Pasadena Design Commission
Attn: Michi Takeda
Hale Building
175 N. Garfield Ave., 2nd Floor
Pasadena, CA 91101

Re: 740-790 E. Green St.

Dear Members of the Design Commission:

Pasadena Heritage acknowledges this project has improved in several key ways since it was last presented, and we appreciate the improvements. We were pleased to have the developers early on in the design process attend our Advocacy Committee meeting on May 2, 2019. We provided some feedback at the time and are glad to see that our comments have been taken to heart. Those suggestions from 2019 are attached to this letter for your reference.

The main change from the previous version that we are pleased to see is a reduction and reorientation of the height. Limiting the frontage along Green Street to three stories is appropriate, and the step-backs help protect both the ficus trees as well as the Lutheran church south of the property. We also ask that there be subterranean setbacks/stepbacks so that the underground parking structure does not undermine the critical root zones of the ficus trees. The Planning Department has been crafting these root protection setbacks as part of the Specific Plan updates, and their guidelines should be adopted now for this project.

We are interested in seeing what will be proposed for the pocket park and courtyard spaces, and hope that meaningful landscapes can be created. We believe that high-quality materials should be used on this building, and windows are recessed enough to create interesting relief. We look forward to see how this project is further refined as the design process continues.

Sincerely,

Susan N. Mossman
Executive Director

Andrew Salimian
Preservation Director

Attachment A: Advocacy Committee Meeting - Feedback to Development Proposal at
740-770 E. Green St.

5-3

PRESERVATION | ADVOCACY | EDUCATION



**PASADENA
HERITAGE**
PRESERVATION | ADVOCACY | EDUCATION

651 SOUTH ST. JOHN AVENUE
PASADENA, CALIFORNIA 91105-2913

P 626.441.6333 F 626.441.2917
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Advocacy Committee Meeting
Feedback to Development Proposal at 740-770 E. Green St.
Thursday May 2nd, 2019

The project is BIG... especially compared to the adjacent context, which is very concerning. With a maximum height of 85' in the middle of the project, we find the project to be overscaled. We recommend trying to reduce the overall height, and making sure the highest points are set back enough so as to not impose on the surrounding neighborhood. Is the parking fully subterranean? Can it be pushed further down to lessen height?

Break up the massing. Much of Green Street in Pasadena is very walkable with a neighborhood feel. This effect is aided by the collection of small to mid-sized buildings along the street. Larger buildings, and especially those that take up a whole block, run the risk of becoming too monumental, and break up this pleasant "rhythm of the street" for pedestrians. More can be done to make sections of the building seem independent of each other along Green Street, so as to make the building seem less monolithic from the street level.

More sight line studies from the street. While two renderings from approximate street level were presented, a rendering from each corner at the pedestrian level is really needed to make sure the additional height of the building is adequately set back.

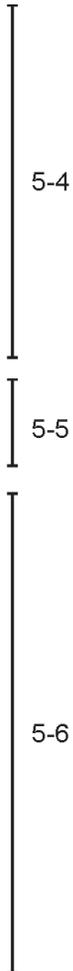
Protect existing trees... including the trees on Oak Knoll, and make sure the building envelope does not pose risks to the Ficus trees on Green Street. A 5' setback from the building line will not accommodate the root system nor canopies of these protected street trees, so pulling back around the trees is important.

Choose high quality materials. The exterior "wood-like material" and the boxy white façade finish on the commercial base were discussed. Faux wood is not recommended as an exterior finish. On the commercial base, we suggest exploring the use of stone or cast-stone, which are appropriate, durable materials and would further differentiate the commercial exterior from that of the residential.

Window depth creates more elegant shadow lines. We recommend a depth of at least 6".

Reorient the single loaded corridor on the upper floor. As it is currently planned, the open-air corridor faces northward, and the apartments have a southern exposure to the courtyard. This arrangement could be flipped, with the apartments getting northern views of the mountains and downtown Pasadena, while the corridor opens up to the interior courtyard. This has a positive benefit on energy efficiency and provides apartments with preferred north-facing natural light and mountain views.

Increase overhangs... in keeping with a Pasadenan tradition. Overhanging roofs are common on historic buildings in Pasadena. Overhangs can additionally be sized so that they provide shade in the summer while allowing sunlight in the winter, reducing energy costs. In conjunction with this, further lighten the top floor apartment units, providing larger windows to differentiate the top of the building.



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**Response to Comment Letter No. 5
Pasadena Heritage
Andrew Salimian, Preservation Director
December 17, 2020**

5-1 This comment provides a letter which was previously submitted to the City's Design Commission and expresses support for the Design Commission's recommendations for the proposed Project. The commenter requests design changes to the Project. The comment does not contain any specific concerns related to the adequacy of the environmental analysis in the IS/MND. However, this comment will be provided to the City's decision makers for their review and consideration as part of this Final MND. This comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the analysis within the IS/MND is required.

5-2 This comment asks about the traffic study prepared for the IS/MND. Specifically, the comment asks whether that the vehicle trips/capita threshold of significance is outdated since the Pasadena City Council took action to adopt lower thresholds in December 2020.

City Council Resolution No. 9820 states that the new CEQA thresholds shall apply to any new project applications deemed complete 90 days after November 16, 2020, the date of adoption of the resolution. Significant time and resources were spent by City staff on the project prior to adoption. Since this Project application was deemed complete prior to adoption of the resolution, the amendment does not apply. Furthermore, the revised project description (as demonstrated in Attachment B of this Final MND) does not exceed any CEQA thresholds related to Transportation and no mitigation is required. See Attachment A to this Final MND for revisions to Section 2.17, Transportation.

5-3 This comment is an attached letter addressed to the City's Design Commission and dated December 7, 2020. The comment cites support for the changes to the Project that were included in the latest design. Additionally, the comment includes another attachment, which are included as Responses to Comments 5-4 through 5-6 below.

The commenter requests a design change to include a subterranean setback for the underground parking structure in order to reduce a potential impact to the root system of the ficus trees. As stated in the IS/MND and as shown in Figure 12, Tree Inventory, the proposed Project would be constructed such that the mature trees along East Green Street would be preserved in place. It is anticipated that tree-trimming would be required to accommodate the demolition and/or construction equipment to the trees lining East Green Street. Any tree trimming would be carried out according to City standards to protect the health of the trees. Moreover, the City conducted a Protected Tree Report prepared by a certified arborist on February 4, 2022 (included as Attachment C to this Final MND) which confirmed Project implementation would not significantly impact the existing ficus trees on East Green Street and made recommendations in compliance with the City's Municipal Code. The commenter's request for using the Planning Department's previously implemented root protection setback will be provided to the Project applicant and the City's decision makers for their review and consideration as part of this Final MND.

Lastly, the comment asks to see a design concept for the proposed pocket park and courtyard spaces. Please see Figure 10c, Interior Courtyard Elevations and Figure 11, Open Space Areas of Attachment A to this Final MND. The proposed Project is subject to review and approval by the City's Design Commission through the City's Design Review Process.

- 5-4** This comment is composed of feedback from a Pasadena Heritage Advocacy Committee Meeting, which occurred on Thursday, May 2, 2019. The feedback addressed concern for the Project's size, height, and scale. The comment raises concern for a maximum height of 85 feet. As described in the IS/MND, the Project's design proposes a maximum height of 47 feet for the 4-story building fronting Green Street, a maximum of 31 feet on Green Street at Oak Knoll Avenue, a maximum of 35 feet on Green Street at Hudson Avenue, and a maximum height of 62 feet, located in the interior of the Project site. See Figures 10A through 10C of Attachment A to this Final MND for more details of the Project's elevation. Furthermore, the comment asks if parking would be fully subterranean. The IS/MND states the Project's proposed parking would consist of two levels of subterranean parking. As such, the proposed Project would not have a maximum height of 85 feet. However, the comment's request to lower the subterranean parking to reduce building height will be provided to the Project applicant and the City's decision makers for their review and consideration as part of this Final MND.

The comment also requests the Project's massing to be reduced and for the applicant to provide street renderings from each corner at the pedestrian level. As noted above, this portion of the comment letter was addressed in Response to Comment 5-3. See IS/MND Figures 10A through 10C of Attachment A to this Final MND for more details of the Project's elevation and renderings.

- 5-5** This comment requests the existing trees along the Project site be protected through an increased setback greater than 5 feet as proposed to not risk the ficus trees along Oak Knoll Avenue and Green Street. Please refer to Response to Comment 5-3 above.

- 5-6** This comment requests the incorporation of high-quality materials for the proposed Project. Additionally, the comment requests a window depth of 6 inches, a reorientation of the upper floors, as well as the incorporation of overhanging roofs. These requests are aimed to enhance shadow lines, redesign the Project for mountain views, and increase energy efficiency. As discussed in the IS/MND the proposed Project is contemporary in style; however, the buildings incorporate some design elements of historic Spanish Revival buildings in Pasadena, including a base-middle-top visual order, roof articulation, upper floor step backs, and a paired windows pattern. As shown in the elevations illustrated in Figures 10a through 10c of Attachment A to this Final MND, architectural materials contemplated to be incorporated into Project design include white and accent plaster, accent ceramic tile, metal railing, vinyl window frames and door frames, and glass guard railing. Materials and colors are subject to review and approval by the City's Design Commission through the City's Design Review Process. The commenter's suggestions do not contain any specific concerns related to the adequacy of the environmental analysis in the IS/MND. However, this comment will be provided to the Project applicant and the City's decision makers for their review and consideration as part of this Final MND.

Comment Letter 6

From: City Web
Sent: Thursday, December 17, 2020 4:50 PM
To: Reyes, David; Garzon, Julia; Paige, Jennifer
Subject: Public Comment for Planning Commission on December 17, 2020 about Agenda Item 4A

Public Comment for Planning Commission on December 17, 2020 about Agenda Item 4A

Commission, Committee or Legislative Body	Planning Commission
Meeting Date	December 17, 2020
Agenda Item Number	4A
Name	Pasadena Heritage - Andrew Salimian
Email	asalimian@pasadenaheritage.org
Phone	(626) 441-6333
Address	651 S St. John Ave.
City	Pasadena
State	CA
Zip Code	91105
Comments	Pasadena Heritage submitted detailed comments via email, but we had one main question for Planning Staff tonight: Would this project need to comply with the new CEQA VMT/VT thresholds amended by the City Council? The posted traffic study uses the 2013 baseline metrics. Thank you for your expertise on this project
I consent to have my comment read out loud during the meeting.	Yes

6-1

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**Response to Comment Letter No. 6-PC
Pasadena Heritage
Andrew Salimian, Preservation Director
December 17, 2020**

6-1 This comment is from the City’s Planning Commission meeting on December 17, 2020. The comment notes a letter was submitted via email as well (see Response to Comment Letter 5). The comment asks if the Project needs to comply with new CEQA vehicle miles traveled/vehicle trips thresholds as amended by the City Council. The comment notes the Transportation Impact Analysis prepared for the IS/MND used 2013 baseline metrics.

City Council Resolution No. 9820 states that the new CEQA thresholds shall apply to any new project applications deemed complete 90 days after November 16, 2020, the date of adoption of the resolution. Significant time and resources were spent by City staff on the Project prior to adoption of the resolution. Since this Project application was deemed complete prior to adoption, the amendment does not apply. Therefore, the transportation methodologies and analyses used to support the IS/MND are appropriate as presented.

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From: Barry Brenner <statesidebarry@gmail.com>
Sent: Monday, January 04, 2021 11:17 AM
To: Sinclair, David
Subject: Planned Development # 37

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...](#)

Good morning David,

Thanks for sharing with me the next deadline for getting my feedback to the Planning Commission. I also appreciate learning that the deadline was extended by 2 weeks to January 18, 2021. That was helpful.

Please see the comments I wish to submit to the Planning Commission, for inclusion with other environment related documents to project consultants, etc for subject development. This is revised from the one which I submitted on Dec 8, which as it turned out was a meeting for architectural matters - not environmental.

If there is anything I may have missed, or need to do, please let me know. And as always, I would appreciate any progress / next steps forward.

Sincerely,

Barry Brenner

840 East Green Street

Pasadena, CA 91101

7-1

To: Planning Commission

I reside at 840 E Green, approximately 50 feet from the project.

I note that the demolition / construction hours are for a 2 1/2 year period, from June 2023 – December 2025, 6 days per week; M-F 7 AM-7PM, Saturday 8AM – 5 PM. That amounts to 783 days, (9,640 hours) of extremely disruptive noise.

As I understand it, the sound study assessing existing noise was done at four locations, for approximately 15 minutes each, mid morning of Sept 17, 2019.

That seemingly tiny snapshot of time is clearly inadequate to determine that noise imposed on me and other surrounding and impacted residents and owners for 2 1/2 years, 9,640 hours, 6 days / week, will be "...less than significant impact..." per initial review. Nor does it reflect a common sense understanding of what will be happening during these time periods.

In fact, on any construction project I have been within earshot of, whether smaller or of this magnitude, show that construction workers, equipment, trucks, supplies, turn up as much as 1-2 hours before the allowed starting time and park and / or wait on or near the project. This already creates significant noise before the demolition and construction hours formally begin, and end after. And that is in addition to the already unacceptable noise of the formal project hours.

Large construction vehicles, trucks, worker's cars, food trucks, and more, arrive early to be prepared for the start time. They are inherently noisy, have idling engines left on for warmth and power, safety back up devices beeping – *designed* to be loud and piercing for safety - workers unloading, shouting. Equipment was listed as tractors, loaders, backhoes, earth movers, welders, pavers, rollers, compressors, etc. Unloading of beams, other lumber, and other material, normal conversations amongst the workers, trucks coming to and from the site with concrete, excavation materials, debris, and other related items.

Please know that I do not object to construction in general – it is part of a growing and improving Pasadena. But I propose that days of construction should be Monday – Friday, leaving weekends for a short respite of peace and quiet.

And I propose the hours of construction should be 9AM - 5 PM, which are more in line with life's daily routines for work and rest. Additionally, this is what impacted tax paying citizens might be understanding of for the growth of the city, without causing major noise, life, sleep disruption, and major stress and anxiety caused by the proposed hours of construction.

Thank you kindly for your consideration of my thoughts and proposals.



Barry Brenner
840 East Green Street
Pasadena, CA 91101

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Response to Comment Letter No. 7
Barry Brenner
January 4, 2021

7-1 This comment represents an email response to the City of Pasadena (City) regarding clarification on the public review period. The commenter requests the following comments (included as Responses to Comments 7-2 through 7-5) be submitted to the Planning Commission for consideration. This comment will be provided to the City's decision makers for their review and consideration as part of this Final MND.

7-2 This commenter notes the potential timeframe that construction and demolition activities could occur per the City's Noise Ordinance (Section 9.36.070 of the Municipal Code). However, the commenter's estimation for the Project's construction duration does not accurately reflect the anticipated number of hours for construction and demolition activities. Although the City's Noise Ordinance allows for construction activities to occur during the specified hours on specified days, the IS/MND does not anticipate the proposed Project's construction activities to occur throughout the entire duration of the allowable timeframe. IS/MND Table 1-3, Estimated Construction Activities, details the potential number of hours, the type and quantity of equipment needed, and each construction phase's schedule. The number of hours anticipated within Table 1-3 is significantly less than the commenter's calculation. Furthermore, IS/MND Table 2.13-2 estimates the maximum noise level generated at 50 feet for each construction equipment and Table 2.13-4 estimates the construction noise level at noise-sensitive uses (i.e., multi-family residences to the east of the Project site). As stated in the IS/MND, although construction noise may be annoying because levels would be generally well above typical existing ambient noise levels, construction noise would be temporary, and restricting construction activities to the daytime period would avoid disruption of evening relaxation and overnight sleep periods (per the City's Noise Ordinance). Moreover, the IS/MND states construction noise levels would be below the standards established in the City's Noise Ordinance; thus, construction noise impacts would be less than significant (see Attachment A, Revised IS/MND, Section 2.13, Noise, pages 90–94).

Additionally, the commenter raises concern about the methodology for taking the noise measurements. The four locations of noise measurements, the durations, the choice of locations, and the procedures used to assess the baseline conditions in the IS/MND represent the standard of the practice for community noise studies. Because construction activities would be conducted during daytime hours, these measurements represent typical daytime noise levels in the Project area and appropriately represent the baseline condition from which to assess the Project's noise impacts. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND.

7-3 This comment expresses concern for construction noise and the potential for construction workers and equipment to arrive at within the vicinity of the Project site prior to the designated construction hours. The IS/MND analyzed potential noise impacts to off-site sensitive receptors, including multi-family residences east of the Project site (including the commenter's home). Although the commenter's concern for noise prior to designated construction hours may be annoying, construction noise would be temporary and Project activities would be

required to comply with the City's Noise Ordinance. Furthermore, construction noise levels would be below the standards established by the City and less than significant as shown in IS/MND Table 2.13-4, Construction Noise Levels at Noise-Sensitive Uses. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND. For additional information related to nuisance noise, the City's Code Compliance Division includes a complaint tracking system for all complaints filed with the Planning and Community Development Department. Each complaint is forwarded to the proper City Department for investigation and resolution. The Pasadena Citizen Service Center allows for online submittal of a request for investigation, including Code compliance concerns (call 626-744-7311 or see <https://www.cityofpasadena.net/citizen-service-center/submit-a-request/>).

- 7-4** This comment requests the construction schedule be revised to only Monday through Friday, 9 a.m. to 5 p.m. in order to reduce general concern for construction noise impacts. As previously discussed above in Response to Comment 7-3, proposed Project would comply with the City's Noise Ordinance and construction noise levels would be below the standards established by the City and less than significant as shown in IS/MND Table 2.13-4. This comment does not contain any specific concerns related to the adequacy of the environmental analysis in the IS/MND. However, this comment will be provided to the City's decision makers for their review and consideration as part of this Final MND.

Comment Letter 8

NINA CHOMSKY
1500 Lancashire St.
Pasadena, CA 91103

January 17, 2021

David Sinclair, Senior Planner
City of Pasadena
Via Email: dsinclair@cityofpasadena.net

Re: Draft Initial Study/Mitigated Negative Declaration (MND) – 740-790 East Green Street
Proposed Mixed Use Project – Proposed Planned Development 37 (PD 37)

Dear Mr. Sinclair:

I am submitting comments, in my individual capacity, on the above-referenced Draft MND for the proposed Project and proposed PD 37.

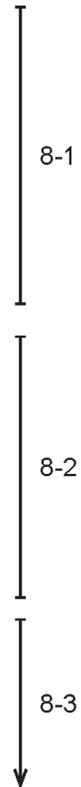
As a general matter, the Draft MND is inadequate under CEQA. As discussed below, the Draft MND is in error in several respects and fails to identify and mitigate potentially significant environmental impacts.

1. Project Description. The Project Description is in error. The assertion on Page 2 and elsewhere in the Draft MND that the Project includes a total of 39,483 square feet of “community open space” is not correct. The total of 11,703 square feet of balconies should be removed from the community open space total number. Balconies are not “private open space” – they are private design features appurtenant to private units and are not publicly accessible. They do not constitute “community” open spaces.

The Project Description, as a general matter, is not accurate because the Project recently was redesigned to some extent. The Project Description should be updated, along with the Draft MND.

2. Environmental Setting; Aesthetics. The proposed Project, which is in an urbanized area, will have significant Aesthetic environmental impacts because the Project conflicts with applicable zoning and other regulations governing scenic quality.

The Environmental Setting analysis in the Draft MND is in error in that it fails to capture the existing setting along Green Street.



The existing setting, particularly along Green Street, is characterized by “background” buildings from a visual or scenic perspective with minimum height and density impacts on the pedestrian and mature Ficus tree canopy environment. The mature Ficus trees are a major component of the existing setting.

8-3
Cont.

On the other hand, the proposed Project covers an enormous land area, an entire block totaling 2.33 acres, and will significantly transform a major portion of Green Street, one of the most iconic, unique, distinctive, recognizable, and appreciated areas of Pasadena’s urban fabric. The current character and scale of this entire Green Street block will be destroyed through demolition on a massive scale, and on a scale rejected in the past by Pasadena’s residents during Redevelopment days. The proposed new buildings will be visually perceivable as massive and looming over Green Street, destroying the character and scale of Green Street by introducing an entirely different and inconsistent visual and scenic character to the street and, possibly, damaging the Ficus trees that are so prominent.

8-4

These Aesthetic impacts are significant and require mitigation. At a minimum, the MND should require: (1) “deconstruction” of these proposed massive new buildings into a smaller number of new buildings that have a minimum presence along Green Street and then terrace back into the block to reduce the visual impacts of such massive development; and (2) detailed and enforceable mitigations to protect the irreplaceable public Ficus trees on Green Street – see section 4. Below.

The proposed MND should also include an Aesthetics mitigation removing the proposed three elevated exterior pedestrian walkways between the proposed buildings at Floors two, three and four. Pasadena, for years and as a policy matter, has discouraged and rejected elevated pedestrian walkways between buildings. Such elevated walkways add to the massing, are visually intrusive, and introduce a “commercial” element to the project architecture. Further, such elevated walkways, which appear to be visible from Green Street, are not in character or scale with Green Street’s urban design character.

8-5

As to the recitation beginning on Page 18 of the Draft MND, of various Pasadena General Plan, Specific Plan and Municipal Code provisions asserting that the proposed Project is consistent with all of them, the assertions are entirely in error except for references to required Design review. The proposed Project will significantly alter the aesthetic character and quality of development on Green Street, in the areas adjacent to Green Street, and in Pasadena in general. In particular, the proposed Project is inconsistent with General Plan Policies 4.10, 4.11, 4.12, 6.1, 7.3, and 28.2. See also Section 3 below.

8-6

3. Land Use and Planning. The proposed Project will cause a significant environmental impact due to a conflict with a land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Specifically, the applicant's election to seek entitlement approval utilizing the City's Affordable Housing Concession choice of the Concessions Menu path precludes the applicant's ability to benefit from the State's Density Bonus Law by adding units to the proposed Project, thereby increasing both density and massing potentially significant environmental impacts.

As indicated in various Staff Reports and the Draft MND, the proposed Project would require a zone change from CD-4 to Planned Development No. 37 (PD-37). The Project proposes to use the State Density Bonus legislated by the California Government Code Section 65915 to develop 263 for-rent apartment units (30 percent above the 87 dwelling units per acre proposed in the Planned Development). Because the proposed Project would include 20 percent on-site affordable housing units, the Project would comply with the City's Inclusionary Housing Ordinance, which would allow the Project to utilize the City's concession menu to increase the Project's floor area ratio (FAR) from 2.0 to 2.5 and to increase the building height 12 feet above (allowed so long as the area of the increase is no more than 60 percent of the proposed footprint of the building) the allowed height limit of 35 feet along Green Street in the northern portion and 50 feet along Hudson Avenue and Oak Knoll Avenue in the southern portion for no more than 60 percent of the building footprint. With incorporation of the City's Affordable Housing Concession Menu, the proposed 4-story building would be built to a maximum height of 47 feet and the proposed 5-story building would be built to a maximum height of 62 feet.

The extensive Pasadena legislative history supporting the adoption of the Affordable Housing Concession Menu is unequivocally clear: the Menu was proposed and adopted in response to extensive public criticism of dense, massive "affordable" housing projects consisting mainly of market rate units; the Planning staff stated many times that the Menu would provide an elective parallel entitlement track for "affordable" housing projects by avoiding the State Density Bonus Law and the City's Affordable Housing Concession Permit process which includes a noticed public hearing followed in a number of controversial cases by appeals and development delays, and possible litigation; and, the Menu is intended to supersede the State Density Bonus and Affordable Housing Concession Permit substantive and procedural processes, thereby reducing the time and costs needed to produce affordable housing and reduce public controversy by reducing the density and massing of new housing, including "affordable" housing, projects. Further, the Menu Ordinance adopted by the Pasadena City Council does not allow concurrent use of the State Density Bonus Law to increase the number of units included in the proposed Project. If the applicant prefers the State Density Bonus Law provisions, then the applicant should withdraw use of the Concession Menu

8-7

for entitlement purposed and, instead, proceed with the City's Affordable Housing Concession Permit process.

The Draft MND should include mitigations that clarify that the applicant must elect either use of the Affordable Housing concession Permit process or the Menu process for entitlement purposes and clarify what the entitlement implications would be for each entitlement path.

The applicant is not assisted in this effort to "double dip" by either Pasadena's Planned Development rules, or Pasadena's Inclusionary Housing Ordinance. Both appear silent on this "conflicts" issue.

- 4. Biological Resources. The proposed Project will conflict with local Pasadena policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Any consideration of the public mature Ficus trees on Green Street adjacent to this proposed Project should begin with a review of the Green Street Ficus tree canopy as shown on Figure 2, Existing Site Conditions, attached to the Draft MND. Recent development in Pasadena's Central District and particularly along Green Street has resulted in the significant damage, and destruction, of highly valued public trees which contribute to the character of Pasadena and, in the case of mature Ficus trees on Green Street, are irreplaceable contributors to the character and scale of the area. Pasadena's Tree "Protection" Ordinance and poor administrative policies have provided little or no protection to such public trees, and any assertion that reliance on the Ordinance to avoid potential significant environmental impact is in error. The best recent example of such significant environmental impact is the appalling situation in connection with the Kaiser Medical School on Green Street which resulted in the destruction of Green Street mature Ficus trees.

The Draft MND should recognize potential significant environmental impacts on the Green Street mature Ficus trees from the proposed Project including construction activities and Project design and include detailed and enforceable mitigations to preserve the Ficus trees to the maximum extent possible. These mitigations should include, but not be limited to requiring analysis and review of all development and construction activities by an independent Arborist including presence onsite during construction; maximum protection requirements for the Ficus trees during construction; changes in design to protect root systems; changes in design to eliminate all trimming for construction purposes; changes in design to preserve the tree canopy after construction is complete; specific ongoing maintenance requirements of the project



owner to preserve the Ficus trees, including watering requirements and regular “health” checks by an independent Arborist.

Thank you for considering my comments on the Draft MND for the proposed Project (PD 37).

Sincerely,

/s/ Nina Chomsky

NINA CHOMSKY

↑
8-8
Cont.

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Response to Comment Letter No. 8
Nina Chomsky
January 17, 2021

8-1 This comment claims the analysis within the IS/MND is inadequate and fails to identify and mitigate potentially significant environmental impacts. The particular comment is not specific in the reasons for the IS/MND's alleged inadequacy. Please see Responses to Comments 8-2 through 8-9, below.

8-2 This comment raises concern for the definition of "community open space" used in the IS/MND. The comment further states the proposed balconies should be removed from the total community open space square footage and asserts balconies are not "private open space."

As stated in the IS/MND, the Project includes 27,180 square feet of outdoor community open space (i.e. 4,110 square feet of publicly available pocket park, breezeways, swimming pool courtyard, roof terraces), 600 square feet of indoor community open space, and 11,703 square feet of private open space (i.e. balconies), for a total of 39,483 square feet of community open space. The comment correctly identifies the total square footage of community open space. However, subsequent to the publication of the IS/MND for public review, the Project Applicant changed select components of the proposed Project. See Section 2.0 of this Final MND and Attachment A, Revised IS/MND for details. Additionally, per the City's Municipal Code (Section 17.50.160), "community open space" is a defined term which includes all open space provided as part of mixed-use projects such as the proposed Project. "Private open space" is another term defined by the City's Municipal Code, which identifies balconies as an example of such use.

Section 17.50.160(H)(1) of the City's Municipal Code determines "community space requirements", which include both indoor/interior space and outdoor open space. Community space can be in the form of private open space (e.g., balconies) or common open space (e.g., pool or side or rear setback areas). Further, an indoor recreational room of up to 600 square feet may be credited toward fulfilling this community space requirement.

Section 17.50.160(H)(4) of the City's Municipal Code defines "private open space" as not exceeding 30 percent of the total requirement for community space. Section 17.50.160(H)(5) of the City's Municipal Code states "community open space" shall have at least one minimum dimension of 15 feet and the other dimensions shall be at least six feet, except for private open space (e.g., balconies or patios).

The comment suggests the Project Description in the IS/MND requires revisions to reflect the latest site plan. The Project Description included within Section 1.0, Project Information, of the IS/MND accurately reflected the Project as proposed at the time of the public review of the IS/MND. Subsequent to the public review of the IS/MND, the Applicant chose to revise the proposed Project by removing the Planned Development request and instead conform to the site's existing CD-4 zoning district and applicable development standards. The Project would continue to include 263 residential units (including 41 affordable housing units). The Project has been revised to include 14,346 square feet of office uses rather than the originally proposed 16,481 square feet of commercial uses. Such revisions do not result in any new

significant impacts or a substantial increase in the severity of any environmental impacts. See Section 2.0 of this Final MND for more details. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND.

8-3

This comment states the Project would result in a significant aesthetic impact by conflicting with applicable zoning and other regulations governing scenic quality. The Project site is located within an urbanized area as defined by California Public Resources Code Section 21071, which states an “urbanized area” is “(a) an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons, or (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons.” The City of Pasadena has a population of 138,699 residents.⁵ As such, the Project site is located within an urbanized area with a population over 100,000 persons. Therefore, as detailed in IS/MND Section 2.1, Aesthetics, Threshold c), analysis was prepared to determine the proposed Project’s consistency with applicable zoning and other regulations governing scenic quality. The analysis includes a description of the Project site and surrounding area, discussion on the proposed Project’s components, citations to figures prepared for the IS/MND, and a consistency table (Table 2.1-1) analyzing the Project’s consistency with the City’s General Plan and Municipal Code. As shown in Table 2.1-1, General Plan Policy/Programs, Specific Plan, and Municipal Code Consistency Analysis, the proposed Project would be consistent with the City’s General Plan policies, Municipal Code sections, and Specific Plan concepts that pertain to the preservation of the scenic quality of the City (see Attachment A, Revised IS/MND, Section 2.1, Aesthetics, page 26). Given the consistency outlined in Table 2.1-1, conflict with applicable zoning and other regulations governing scenic quality would not occur.

The comment also states the Environmental Setting fails to describe the existing setting of Green Street, including the mature ficus trees along Green Street. As described under the IS/MND’s Environmental Setting (Section 1, Project Information), off-site Project components, including the mature ficus trees on Green Street, were adequately identified. IS/MND Figure 12, Tree Inventory, was prepared to illustrate that the mature ficus trees along East Green Street would be preserved in place, whereas those existing street trees along South Hudson Avenue and South Oak Knoll Avenue that are in poor condition would be removed and replaced with new trees. All street/public trees proposed for removal would be removed per the City’s Municipal Code Section 8.52.010. It is anticipated that tree-trimming would be required to accommodate the demolition and/or construction equipment to the trees lining East Green Street. Any tree trimming would be carried out according to City standards to protect the health of the trees. Moreover, the City conducted a Protected Tree Report prepared by a certified arborist on February 4, 2022 (included as Attachment C to this Final MND) which confirmed Project implementation would not significantly impact the existing ficus trees on East Green Street and made recommendations in compliance with the City’s Municipal Code.

The commenter’s concern with the existing tree canopy along Green Street is addressed through the Project’s compliance with the City’s Municipal Code on setbacks (i.e., 5 feet on

⁵ United States Census Bureau. 2022. QuickFacts: Pasadena city, California. Accessed August 2022. <https://www.census.gov/quickfacts/pasadenacitycalifornia>.

Green Street, see IS/MND Table 1-2, Project Development Standards), as well as the City's Municipal Code requirements related to trees (see Chapter 8.52, City Trees and Tree Protection Ordinance). The City's tree ordinance sets forth robust and detailed requirements for activities related to public trees and prohibits any injury or removal of a mature tree without a permit. As stated in Section 8.52.085(J), "To do or commit any unpermitted act that is injurious to a protected tree, including, but not limited to, causing root damage, damage to the trunk, scarring, or any other unpermitted alteration of a protected tree" is prohibited. As noted in the IS/MND, the proposed Project would preserve the mature ficus trees along Green Street and would be prohibited from causing any injury to the tree. Furthermore, as shown in Figure 10b, North and South Elevations, of Attachment A to this Final MND, the massing of the buildings would be setback from Green Street and the existing mature ficus trees along Green Street would be preserved (see Attachment A, Revised IS/MND, Section 2.1, Aesthetics, page 18).

In conclusion, the IS/MND determined the Project's potential impacts would be less than significant and no mitigation would be required. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the IS/MND are required.

8-4 This comment states the proposed Project would significantly transform a major portion of Green Street and thereby impact the existing character and scale of the surrounding area.

As detailed in IS/MND Section 2.1, Aesthetics, Threshold c), "the Project site and surrounding area are generally characterized by disparate commercial and multi-family residential land uses that are inconsistent in size, style, and, as such, lack visual cohesion and uniformity. Vegetation on the Project site is limited to 12 on-site trees and two sparse planter beds, which would be removed under the proposed Project. The only distinct visual element on the project site and/or in the vicinity are the mature ficus trees along Green Street" (Attachment A, Section 2.1, Aesthetics, page 18). Moreover, as described in Response to Comment 8-3, the IS/MND determined impacts related to consistency with applicable zoning and other regulations governing scenic quality would be less than significant.

Regarding the proposed buildings' mass and scale, the Project originally proposed a zone change that would be accompanied by the adoption of development standards for allowed and conditionally allowed uses (i.e., a Planned Development [PD] Plan). The Project previously requested a zone change from CD-4 to the establishment of Planned Development No. 37 (PD 37). However, subsequent to the publication of the IS/MND for public review, the Project Applicant has withdrawn the Planned Development application. Furthermore, the Project would be utilizing the City's Affordable Housing Concession Menu and the State's Density Bonus Law, which would allow for an increase in the maximum allowable density, height, and floor-to-area ratio (FAR). As described in Section 2.0 of this Final MND, the withdrawal of the Planned Development application would not change the significance determination related to land use and planning. Instead, the proposed Project would conform to the site's existing CD-4 zoning district and comply with all applicable development standards for implementation. Overall, the proposed Project would still be subject to Design Review approval. These changes to discretionary actions would not result in new, avoidable significant effects on the environment.

Moreover, the Project has accounted for design considerations to reduce potential aesthetic impacts. As described under Threshold 2.1(c) and in Table 2.1-1 of the IS/MND, the Project would include height and setback variations to allow for visual dispersal of the Project's density by utilizing step-down massing between floors and by increasing the setback at Oak Knoll Avenue from 5 feet to 10 feet. In addition, the aesthetic design goal of the proposed Project is to provide a form, proportion, and articulation that relates to similar architectural approaches throughout the urban areas of Pasadena and maintains a clean and streamlined composition conveyed in a contemporary manner. Thus, the Project's deviation from such general property and design standards would not result in significant impacts to visual quality. The Project would comply with all of the City's development standards, including but not limited to, the City's outdoor lighting ordinance, walls and fences guidelines, and public art requirements (as set forth in Chapter 17.40 of the Municipal Code). Furthermore, the proposed Project would be subject to the City's design review and approval process with the City's Design Commission. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the IS/MND are required.

Lastly, the commenter requests detailed and enforceable mitigation to protect the ficus trees on Green Street. The comment cites further discussion in the comment letter, below, and included as Comment 8-7. Please see Response to Comment 8-7 for more discussion.

8-5 This comment requests the proposed Project be redesigned without the proposed elevated pedestrian walkways along Floors 2, 3, and 4 because the commenter states the design feature would not be consistent with the character or scale of Green Street's surrounding uses. The IS/MND analyzed Project consistency with applicable zoning and other regulations governing scenic quality in Section 2.1, Aesthetics. In Table 2.1-1, General Plan Policy 28.4, Design Integration, states that the City "[r]equires residential and nonresidential portions of mixed-use buildings and sites to be integrated through architectural design, development of pedestrian walkways and landscaping". As such, the IS/MND determined the Project was consistent with the City's General Plan relative to pedestrian walkways as it "includes 39,980 sf of pedestrian amenities and open space, including a 4,033 sf pocket park, pool lounge and private outdoor space, all of which would provide landscaped pedestrian amenities and enhance walkability. Additionally, the proposed Project is located 500 feet south of Colorado Boulevard and the downtown Pasadena amenities, which would further encourage walkability" (Attachment A, Section 2.1, Aesthetics, page 23).

However, since the publication of the IS/MND, the Project Applicant has changed select components of the proposed Project, including the removal of the aforementioned pedestrian walkways. See Section 2.0 of this Final MND for more details.

8-6 This comment states the proposed Project would not be consistent with the City's General Plan policy/programs and Municipal Code provisions. The comment suggests the Project is not consistent with General Plan Policies 4.10, 4.11, 4.12, 6.1, 7.3, and 28.2. The comment

is not specific on the reasons why there is inadequacy in the IS/MND's analysis. The policies mentioned are listed, below:

- **General Plan Policy 4.10: Architecture that Enhances.** Locate and design buildings to relate to and frame major public streets, open spaces, and cityscape. New development at intersections should consider any number of corner treatments, and should balance safety and accessibility concerns with the vision of the area and the need for buildings to engage the street and create a distinct urban edge.
- **General Plan Policy 4.11: Development that is Compatible.** Require that development demonstrates a contextual relationship with neighboring structures and sites addressing such elements as building scale, massing, orientation, setbacks, buffering, the arrangement of shared and private open spaces, visibility, privacy, automobile and truck access, impacts of noise and lighting, landscape quality, infrastructure, and aesthetics.
- **General Plan Policy 4.12: Transitions in Scale.** Require that the scale and massing of new development in higher density centers and corridors provide appropriate transitions in building height and bulk and are sensitive to the physical and visual character of adjoining lower-density neighborhoods.
- **General Plan Policy 6.1: Sense of Place and History.** Require new development and changes to existing development to be located and designed to respect the defining elements of Pasadena's character and history such as its grid street pattern, block scale, public realm, neighborhoods and districts, building massing and heights, significant architecture, and relationship to the mountains and Arroyo Seco.
- **General Plan Policy 7.3: Compatibility.** Require that new and adaptively re-used buildings are designed to respect and complement the defining built form, massing, scale, modulation, and architectural detailing of their contextual setting.
- **General Plan Policy 28.2: Development Scale.** Establish standards to assure that an adequate scale and footprint of any single use is achieved in mixed-use areas to establish a cohesive environment that minimizes impacts attributable to the adjacency of different uses. This may define minimum parcel and building size, number of housing units, and/or nonresidential square footage, as well as relationships and setbacks.

Each policy mentioned is related to Citywide design goals that would be reviewed for consistency during the design review process and are not policies adopted for the purposes of avoiding or mitigating an environmental effect. The analysis prepared within Table 2.1-1 of the IS/MND is adequate and has determined the proposed Project would be consistent with these policies.

The commenter asserts that the Project will significantly alter the aesthetic character of Green Street related to the introduction of "massive new buildings" on Green Street. However, as described on page 10 of the IS/MND, the Project area currently contains numerous tall buildings within the immediate viewshed of the proposed Project, including the 5- to 6-story

mixed-use/parking garage structures on the north corner of Green Street and Hudson Avenue, which are adjacent to two 9-story towers on Hudson Avenue and Colorado Boulevard. Additionally, Hudson Avenue contains two 4-story mixed use buildings in proximity to the Project site. As such, the introduction of a 4- to 5-story mixed-use development would be consistent with existing nearby developments. Additionally, the proposed Project would not require a General Plan Amendment. Furthermore, with the approval of the Project, including Design Review, the proposed Project would comply with the City's zoning designations and would have a less than significant impact on any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No mitigation is required (see Attachment A, Revised IS/MND, Section 2.11, Land Use and Planning, page 86). However, subsequent to the publication of the IS/MND for public review, the Project Applicant has withdrawn the Planned Development application. See changes to the project description and other applicable sections in Attachment A, Revised IS/MND. As described, the withdrawal of the Planned Development application would not change the significance determination related to land use and planning. Instead, the proposed Project would conform to the site's existing CD-4 zoning district and comply with all applicable development standards for implementation. In addition, the proposed Project would still be subject to Design Review approval. These changes to discretionary actions would not result in new, avoidable significant effects on the environment. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the IS/MND are required.

Moreover, the comment notes more discussion is outlined further in the comment letter, included as Comment 8-7. Please see Response to Comment 8-7, below.

8-7 This comment suggests the proposed Project would result in a significant impact related to land use and planning based on the Project applicant's request to use both the City's Inclusionary Housing Ordinance and the State's Density Bonus law.

Section 2.11, Land Use and Planning, of the IS/MND determined that the proposed Project would have a less than significant impact related to consistency with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The comment correctly outlines the IS/MND's discussion related to the requested zone change and the utilization of both the State's Density Bonus law as well as the City's Inclusionary Housing Ordinance, which would increase the Project's density, height, and FAR. The comment further states the City's intent for the creation of the Inclusionary Housing Concessions Menu was to avoid the State's Density Bonus law, respond to public criticism of proposed projects' density and scale, and provide a process to reduce time and cost for the production of affordable housing. As such, the commenter concludes the proposed Project cannot utilize both the State's Density Bonus and the City's Inclusionary Housing Ordinance. Moreover, the commenter suggests mitigation should be incorporated to clarify which entitlement request.

The Project's proposed State Density Bonus component would allow for a 30% density bonus from the 87 dwelling units per acre currently allowed in the CD-4 zone. In addition, the Project would utilize two On-Menu concessions (0.5 FAR increase and a 12-foot height increase) from

the City's Inclusionary Housing Ordinance. No Affordable Housing Concession Permit is required, and no Off-Menu concessions are requested. The Project is permitted to use the same affordable units for the City's Inclusionary Housing Ordinance as for State Density Bonus law. As such, the Project's requested approvals are not over and above what is permitted and allowed.

It should be noted that since publication of the IS/MND, the Project Applicant has withdrawn the Planned Development application. As described, the withdrawal of the Planned Development application would not change the significance determination related to land use and planning.

- 8-8** This comment suggests the proposed Project would conflict with the City's tree preservation policy and could result in impacts to the mature ficus trees along Green Street. Please refer to Response to Comment 8-3. Further, Section 2.4, Biological Resources, evaluated the Project's potential to conflict with local policies or ordinances such as Municipal Code Section 8.52.010, which is designed to protect and maintain mature and healthy trees and requires all street/public trees proposed for removal to be replaced. As such, the proposed Project would be constructed such that the mature trees along East Green Street would be preserved in place, whereas some existing street trees along South Hudson Avenue and South Oak Knoll Avenue that are in poor health would be removed and replaced with new trees. Please see Figure 12, Tree Inventory, for more details. As stated in the IS/MND, with adherence to the City's Municipal Code, the proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Moreover, the City conducted a Protected Tree Report prepared by a certified arborist on February 4, 2022 (included as Attachment C to this Final MND) which confirmed Project implementation would not significantly impact the existing ficus trees on East Green Street and made recommendations in compliance with the City's Municipal Code. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the IS/MND are required.

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Comment Letter 9

From: City Web
Sent: Thursday, December 17, 2020 4:41 PM
To: Reyes, David; Garzon, Julia; Paige, Jennifer
Subject: Public Comment for Planning Commission on December 17, 2020 about Agenda Item 4.A. PD 37, Green St. etc.

Public Comment for Planning Commission on December 17, 2020 about Agenda Item 4.A. PD 37, Green St. etc.

Commission, Committee or Legislative Body	Planning Commission
Meeting Date	December 17, 2020
Agenda Item Number	4.A. PD 37, Green St. etc.
Name	Nina Chomsky
Email	nrchomsky@aol.com
Phone	(626) 795-1967
Address	1500 Lancashire St.
City	Pasadena
State	CA
Zip Code	91103
Comments	Commissioners and Staff,

The proposed (Draft) Mitigated Negative Declaration for this project raises significant CEQA issues. The legal minimum public comment period is a major problem for two reasons: the reference on the Planning website and even today to this project as Planned Development 37 confused me and others when I tried to determine the status of environmental review after learning about the project at the Design Commission; and, the use of a Holiday timeline, pandemic or no pandemic, during which members of the public who usually would be very interested in CEQA matters instead are tied up and distracted with Holiday and family matters. If the final date to comment is missed, then, among other issues, the consultant and staff are not required to reply to public comments. I request an extension of time for public comments for at least two weeks to facilitate adequate time for public review and comment, particularly since it

9-1

appears that a Final MND will be issued prior to the Commissions public hearing at this Commission to determine recommendations to Council, and, also considering the enormous scope of this proposed project.

Thank you for your consideration.

I consent to have my comment read out loud during the meeting. Yes

↑
9-1
Cont.

**Response to Comment Letter No. 9-PC
Nina Chomsky
December 17, 2020**

- 9-1** This comment is from the City of Pasadena’s Planning Commission meeting on December 17, 2020. The comment raises concern for the public review period provided for the IS/MND during the end of the year holiday season. The comment requests an extension to the comment period by 2 weeks. The IS/MND was circulated for public review from December 3, 2020 through January 4, 2021, and in accordance with the statutory requirements of CEQA. Of note, all comment letters received by the City have been included in this document. This comment will be provided to the City’s decision makers for their review and consideration as part of this Final MND.

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Comment Letter 10

January 18, 2021

City of Pasadena
David Sinclair, Senior Planner
Jennifer Driver, Planner
175 North Garfield Avenue
Pasadena, CA 91101

Re: Planned Development #37 740-790 E Green Street, 118 S. Oak Knoll Avenue, and 111 S. Hudson Avenue Mitigated Negative Declaration

Dear Mr. Sinclair and Ms. Driver:

The Mitigated Negative Declaration (MND) completed in December 2020 for Planned Development #37 is not adequate for a number of reasons, outlined in the following paragraphs. As such, a full Environmental Impact Report is necessary for this project.

10-1

**General Plan Policy/Programs, Specific Plan, and Municipal Code Consistency Analysis:
Policy 4.2: A Diversity of Places. Maintain and enhance the City’s urban form with distinct, compact and walkable areas with a diversity of uses, densities, and characters.**

The Initial Study/Draft MND analysis states the proposed project would provide residential, commercial and public open spaces. This is not true. The project is nearly 100% residential, given that 0.065% of the space is allocated for non-residential use. And of that space, only a small portion is allocated for legitimate public commercial use (“e.g., retail, café”). The remaining “commercial use” space “is merely for operational aspects of the apartment building – leasing office, resident business center, etc. This allocation of uses removes all of the existing commercial uses and adds only a negligible amount of true commercial use, creating a net deficit of commercial space. As such, the diversity of uses decreases, rather than enhancing diversity.

10-2

With respect to the City’s open space element, the 27,180 sf of space identified as outdoor community space, is questionable, as to both its sufficiency and even legitimate classification as “outdoor community open space.” Of the 27,180 sf, the only publicly-accessible space appears to be a 4,110-sf pocket park. Classifying breezeways connecting apartments, roof terraces, etc., as open space is not appropriate or supportable. In fact, connector breezeways take people *off the city streets* – a practice that has been banned in Pasadena, and is not part of current best practices for urban design.

10-3

Given the lack of diversity of uses and open space, the project is not consistent with Policy 4.2, and there are no sufficient mitigation measures, there is potential significant adverse impact that should be study in an EIR.

Policy 6.1. Sense of Place and History:

One of the most important and distinct elements of this block defining its sense of place and history, is the mature tree canopy along Green Street. The proposed project requires "tree trimming," the extent of which is not defined, and also poses potential threat to the long-term health of the trees given the need for underground parking and massiveness of the building. As such, the project is not consistent with Policy 6.1 nor have sufficient mitigation measures been identified, requiring further analysis in an EIR.

10-4

The City's Inclusionary Menu and State Bonus Density.

It appears that the project is layering these two subsidies, when the City's Inclusionary Menu is meant to be used as an alternative option, not in addition to, the State Bonus Density. This, and the calculations, of FAR and units need to be clarified. Also, the predominance of studio and one-bedrooms, is not consistent with the State of California's stated priorities for affordable housing, i.e., larger 2 and 3 bedroom units suitable for families.

10-5

Traffic and Mobility:

There are a number of questions regarding the traffic analysis that indicate a full EIR should be required, including the Vehicle Trip metric that indicated significant impact. The proposed mitigation of metro passes is not supported by any documented third-party studies in markets comparable to Pasadena CD. As such, the mitigation is at best a "hope," which is not an adequate mitigation, triggering the need for an EIR.

10-6

Thank you,

Christine Fedukowski
601 E. Del Mar Blvd #408
Pasadena, CA 91101

Cc: Vice-Mayor Andy Wilson, Pam Thyret, David Reyes

**Response to Comment Letter No. 10
Christine Fedukowski
January 18, 2021**

10-1 This comment states the IS/MND is not adequate and an Environmental Impact Report should be prepared for the proposed Project. This particular comment does not indicate reasons why the IS/MND is inadequate. The comment letter further details concerns, below. Please see Responses to Comments 10-2 through 10-6 for more discussion.

10-2 This comment asserts that the proposed Project is inconsistent with General Plan Policy 4.2 and that the commercial uses proposed on site are for the “operational aspects of the apartment building” (e.g., leasing office and resident business center) and should not be considered as commercial uses. As such, the comment believes Project implementation would result in a net loss of commercial uses.

The comment incorrectly states the Project would include 0.065% of nonresidential uses. As shown in Figure 4, Level One Floor Plan, of the public review draft IS/MND, the proposed Project included the following commercial uses: 2,031 square feet of restaurant/café uses, a 5,222-square-foot commercial/retail space, and 5,483 square feet of commercial/retail space on the western half of the first floor and a second 3,496-square-foot café space on the eastern half. As such, the total square footage of commercial uses proposed on the first floor would be 16,232 square feet. This represents approximately 6.4% of the Project’s total square footage and excludes the proposed leasing office and resident business center. Furthermore, IS/MND Table 2.1-1, General Plan Policy/Programs, Specific Plan, and Municipal Code Consistency Analysis, describes the Project as consistent with General Plan Policy 4.2.

Moreover, subsequent to the publication of the IS/MND for public review, the Project Applicant changed select components of the proposed Project, including conversion of commercial uses to office uses and the removal of project design features like the pedestrian walkways. Such revisions do not result in any new significant impacts or a substantial increase in the severity of any environmental impacts. See Section 2.0 of this Final MND for more details.

Therefore, the IS/MND’s consistency determination is valid. This comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the IS/MND are required.

10-3 This comment questions the IS/MND’s definition of outdoor community space and states only the pocket park is publicly accessible open space. In addition, the commenter raises concern for the proposed breezeways and asserts this design feature is not allowed within the City. The public review draft IS/MND stated the proposed Project would include 27,180 square feet of outdoor community open space (i.e., 4,110-square-foot publicly available pocket park, breezeways, swimming pool courtyard, roof terraces), 600 square feet of indoor community open space, and 11,703 square feet of private open space (i.e., balconies), for a total of 39,483 square feet of community open space. However, subsequent to the publication of the IS/MND for public review, the Project Applicant changed select components of the proposed Project, including changes to open space square footage and the removal of project design

features like the pedestrian walkways. For determining compliance with the required community open space, per Zoning Code Section 17.50.160(H), rooftop terraces and common area courtyards are permitted so long as they meet the minimum dimensions (6 feet by 15 feet) and provide some form of recreational function. Breezeways/hallways connecting units aren't included in this calculation unless they truly are providing an amenity, and again meet the minimum dimensions. Furthermore, the Zoning Code Section 17.80.020(O) defines Useable Open Space as "[o]utdoor space that serves a recreational function or provides visual relief from the building mass, the minimum dimension of which shall be six feet excluding required front yards not used for balconies or patios. For more details, see Figure 11, Open Space Areas, of Attachment A to this Final MND.

The IS/MND states the City's Master Plan identifies the Central District (i.e. where the proposed Project is located) as a unique urban core that is denser than other parts of the City and where large, traditional parks are more difficult to establish due to high land costs, intense existing urban development, and a general lack of available land for conversion to parkland and recreational open space (City of Pasadena 2007). Furthermore, the Master Plan states that, "Given the built-out condition of the City, it is very unlikely that even a fraction of this amount of acreage could be converted to parkland. A more likely scenario is that small urban open space areas might be created that could provide some of the desired amenities" (City of Pasadena 2007). As stated in Attachment A, Revised IS/MND, the proposed Project would include a 4,033-square-foot publicly accessible pocket park, which would, in part, provide public parkland and recreational open space near downtown Pasadena, including within the Specific Plan area. Thus, the proposed Project would provide a pocket park in an area in the City where traditional parks are more difficult to establish. Additionally, given the pocket park would be located in a unique urban core that is denser than other parts of the City, the pocket park provided by the Project would increase access for residents in this portion of the City to access park spaces.

Lastly, the comment asserts the Project is not consistent with General Plan Policy 4.2 due to a lack of diversity of uses and open space. As described above, the Project is consistent with open space requirements. Moreover, the comment incorrectly assumes individual project consistency is measured by a diversity of uses on each site. Instead, the overarching goal for this particular policy, Goal 4, states a diversity of uses and forms is intended city-wide. As such, the Project's components would be consistent with Policy 4.2 as proposed.

Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the IS/MND are required.

- 10-4** This comment expresses the importance of the mature tree canopy along Green Street and states the Project is not consistent with General Plan Policy 6.1. The comment states that the proposed Project poses a threat to the trees where underground parking is proposed and building mass may conflict.

The IS/MND concludes the Project is consistent with General Plan Policy 6.1 with the following analysis (see Attachment A, Revised IS/MND, Section 2.1, Aesthetics, page 19):

The height and setback variations proposed for the mixed-use buildings would allow for the visual dispersal of the Project's density by utilizing step-down massing between floors. The proposed mixed-use Project would be contemporary in style; however, the building would incorporate design elements found in many of the historic Spanish Revival buildings that contribute to Pasadena's architecture. The aesthetic design goal of the proposed Project is to provide a form, proportion, and articulation that relates to similar architectural approaches throughout the urban areas of Pasadena and maintains a clean and streamlined composition conveyed in a contemporary manner. The proposed Project would include a pocket park on Oak Knoll Avenue, which would serve to compliment the proposed Project's step-down architectural design and integrate the Project density into the neighborhood.

The commenter's concern with the existing tree canopy along Green Street is addressed through the Project's compliance with the City's Municipal Code on setbacks (i.e., 5 feet on Green Street, see IS/MND Table 1-2, Project Development Standards), as well as the City's Municipal Code requirements related to trees (see Chapter 8.52, City Trees and Tree Protection Ordinance). The City's tree ordinance sets forth robust and detailed requirements for activities related to public trees and prohibits any injury or removal of a mature tree without a permit. As stated in Section 8.52.085(J), "To do or commit any unpermitted act that is injurious to a protected tree, including, but not limited to, causing root damage, damage to the trunk, scarring, or any other unpermitted alteration of a protected tree" is prohibited. As noted in the IS/MND, the proposed Project would preserve the mature ficus trees along Green Street and would be prohibited from causing any injury to the tree. Furthermore, as shown in Figure 10b, North and South Elevations, the massing of the buildings would be setback from Green Street and the existing mature ficus trees along Green Street would be preserved (see Attachment A, Revised IS/MND Section 2.1, Aesthetics, page 18). Moreover, the City conducted a Protected Tree Report prepared by a certified arborist on February 4, 2022 (included as Attachment C to this Final MND) which confirmed Project implementation would not significantly impact the existing ficus trees on East Green Street and made recommendations in compliance with the City's Municipal Code. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the IS/MND are required.

10-5 This comment asserts that the Project applicant cannot use the City's Inclusionary Housing Ordinance Concessions as well as the State Density Bonus regulations to support the proposed Project. In addition, the comment questions the calculations for the floor-to-area ratio (FAR) and number of units. Furthermore, the comment notes the Project proposes more studios than one-bedrooms, which is inconsistent with the State's affordable housing priorities suitable for families (i.e. 2- to 3-bedroom units).

The Project's proposed State Density Bonus component would allow for a 30% density bonus from the 87 dwelling units per acre currently allowed in the CD-4 zone. In addition, the Project would utilize two On-Menu concessions (0.5 FAR increase and a 12-foot height increase) from

the City's Inclusionary Housing Ordinance. The Project site's General Plan designation of Medium Mixed-Use allows for a FAR of 0 to 2.25. The site's existing zoning of CD-4 requires an FAR standard of 2. Per the City's Zoning Code Section 17.43.055, On-Menu Density Bonus, a 0.5 increase in FAR is permitted by designating 41 units as affordable housing on-site. As such, compliance with the City's Inclusionary Housing Ordinance would allow the Project to utilize the City's concessions to increase the Project's floor area ratio from 2.0 to 2.5. In addition, no Affordable Housing Concession Permit is required and no Off-Menu concessions are requested. The Project is permitted to utilize the same affordable units for the City's Inclusionary Housing Ordinance as for State Density Bonus law. As such, the Project's requested approvals are not over and above what is permitted and allowed.

Lastly, the proposed Project would result in 263 for-rent units (including 41 units designated as affordable housing). This would consist of 86 studio units, 126 one-bedroom units, and 51 two-bedroom units. The commenter was not specific on the referenced State affordable housing priority. State and regional housing goals (i.e., the Southern California Association of Government's Regional Housing Needs Assessment) are based on unit count and not unit type. The Project would contribute to the City's regional housing goals (i.e., Regional Housing Needs Assessment). Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the IS/MND are required.

10-6 This comment claims the IS/MND does not have supporting evidence to determine the effectiveness of MM-TRA-1 to reduce transportation impacts to a less-than-significant level, and states that the Metro passes are not proved to be adequate mitigation. This comment is incorrect, as the City has determined that the performance standard to achieve a 27% reduction in vehicle trips set forth in MM-TRA-1 is feasible and achievable. As set forth in MM-TRA-1, the Metro passes were only one of the requirements in order to achieve the performance standard.

The City of Pasadena, as Lead Agency under CEQA, has developed the methodology for assessing impacts to transportation and vehicle miles traveled and has determined the potential means by which such impacts could be mitigated in order to achieve less-than-significant impacts. This methodology is universally applied to Projects within the City and constitutes adequate substantial evidence to conclude that compliance with the City's General Plan Mobility Element objectives and policies. The Project analysis is based on the City's Transportation Impact Analysis Guidelines using the City's calibrated travel demand forecasting model built on Southern California Association of Government's regional model. The City's use of Metro passes as a condition is to encourage the use of transit and reduce car dependence to and from the Project site. Reduction of vehicular trips can be accomplished by providing individuals with efficient alternative modes of travel and incentivizing use of alternative modes. Providing transit passes provides an alternative mode choice for people to reduce vehicular trips and eliminates one obstacle or disincentive to using transit by addressing the financial cost.

Nevertheless, subsequent to the publication of the IS/MND for public review, the Applicant revised the Project to conform to the requirements of the CD-4 zone and the proposed revisions to the project description (as shown in Section 2.0 of this Final MND), which results

in a condition that would not exceed any CEQA significance thresholds related to Transportation, as demonstrated in Attachment B of this Final MND. Therefore, the changes in the Project Description accomplish the intent of MM-TRA-1, and no additional mitigation related to transportation is required. See Attachment A, Revised IS/MND for revisions to Section 2.17, Transportation, page 112. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND.

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January 15, 2021

City of Pasadena
 David Sinclair, Senior Planner
 Jennifer Driver, Planner
 175 North Garfield Avenue
 Pasadena, CA 91109

RE: PLANNED DEVELOPMENT #37 740-790 E. GREEN STREET, 118 S. OAK KNOLL AVENUE, AND 111 S. HUDSON AVENUE MITIGATED NEGATIVE DECLARATION COMMENTS

The Mitigated Negative Declaration (MND) recently completed for Planned Development #37 (proposed for the 2.33 acre site on the south side of E. Green Street between S. Oak Knoll Avenue and S. Hudson Avenue) is insufficient and inadequate because the traffic and mobility considerations are incomplete and the mitigations unfounded. It is obvious that an EIR is necessary for the following reasons:

- 1) The project's net capita is not clearly defined. The TDF model calculation has determined the net capita (population + employment) is 310 yet, the building's occupancy is 537. The MND does not explain why the occupant count was reduced by 227 even though the calculated results for VMT/Cap and VT/Cap were based on the lower number.

INCREMENTAL SCENARIO RESULTS					
Pop	Emp	VMT	VT	VMT/Cap	VT/Cap
537	-227	5,711	1,187	18.5	3.8
				PASS	FAIL

- 2) Even with the reduced occupancy of 310, the vehicle trip (VT) metric showed *significant impact* that should automatically require an EIR.
- 3) The mitigations suggested for the tripped VT threshold are *not guaranteed* to reduce the project's VT, especially when we consider the 227 people that have not been accounted for.
- 4) Metro passes are offered for people who are "interested," but what happens if/when these 537 people are not interested? The fact is that transit ridership was [down 20%](#) even before the pandemic, so with COVID-19 cases being what they are, how appealing will Metro passes actually be?
- 5) A full EIR is needed to assure local residents that a reduction in VT is possible with the suggested mitigations. Questions to consider: Have other projects in the area been successful with these mitigations? Have other residents of similar buildings been interested in Metro passes?

11-1

- 6) The Outside CEQA analysis prepared by The City of Pasadena Department of Transportation (DOT) shows the current project has a total daily trip generation of 579, with 116 of those trips being accounted for transit. Since many of the properties at this location have been vacant for some time, a full EIR would evaluate if this assumption is correct. The current net total trips could be higher (meaning there would be a larger negative impact on our streets) if a full EIR was conducted to evaluate the actual daily number. 11-2
- 7) Would the Vehicle Miles Traveled (VMT) be triggered if the occupancy had been calculated at 537 instead of 310? 11-3
- 8) DOT conducted an analysis to review potential transportation impacts related to the construction of 263 residential units in early/mid April 2020, when our city was initially shut down due to COVID-19. We have seen no evidence to suggest they have corrected their survey to reflect a typical daily scenario for our city or this project. 11-4
- 9) On November 16th, 2020, Pasadena City Council amended the California Environmental Quality Act (CEQA) transportation performance thresholds of significance to change the 15% baseline thresholds to 16.8% and to direct staff to organize a January workshop to consider thresholds that were even more strict. This amendment did not include a "pipeline" or "grandfather" exception, and all projects in process should be analyzed in reference to the new rules. In fact, *a project of this size should not be able to move forward until our city finalizes the update.* 11-5

PRISM ENGINEERING TRAFFIC STUDY

Pasadena residents have been troubled by the amount of backed-up traffic surrounding our city for years. Before COVID, it had reached an absolute breaking point on many of our main arteries including Lake Street and South Los Robles. When local residents learned about the incredible number of unmitigated projects coming in along South Los Robles, we knew we had to do something drastic to get the attention we needed since our efforts to raise the alarm with city planners seemed to be falling on deaf ears.

We organized, raised the appropriate funds, and hired PRISM Engineering to help us understand traffic reports similar to 740-790 East Green Street and to give voice to our deep concerns regarding the need for proper mitigation. In fact, PRISM Engineering found many faults within DOT's traffic reports and it was decided we needed to perform a more technical and investigative follow-up. A local group of residents raised funds for our own [traffic study](#), which was performed in January of 2020. 11-6

PRISM Engineering physically observed and reported on local traffic operations and driver behavior using detailed traffic data such as Saturation Flow Rate (SFR)* and Peak Hour Factor (PHF)**. The in-depth field study not only confirmed significant errors with DOT's evaluation but also that SFR and PHF are not being evaluated correctly. In all cases, the city is using the default values of 1900 for SFR and .92 for PHF, paired with a significantly outdated version of

Synchro's software. A full EIR for PD-37 would employ an independent consultant without any sort of conflict of interest and could clarify the following issues:

- 1) In the Outside CEQA report prepared for PD-37, the Peak Hour Factor used was 0.92 for all turning movements. This is incorrect. Each PHF value should be taken directly as a calculation from the traffic counts and there should be a *unique and individual* PHF for *each movement at each intersection*. PRISM Engineering found that our city had PHF values that were much much lower than 0.92, which has the effect of making the LOS worse than what has been presented.
- 2) Calculations for the Outside CEQA study used the generic default IDEAL FLOW of 1900. When PRISM Engineering measured SFR in the field it varied from intersection to intersection and was closer to 1700. This also makes the LOS worse than has been presented.
- 3) Residents assume DOT is using the most sophisticated software to evaluate traffic impacts, but this is not the case. DOT's current software system, Synchro 6, is based on the original Highway Capacity Manual (HCM), which comes out every 10 years. In other words, the metrics DOT relies upon to measure traffic issues on our streets are nearly 20 years old. Synchro's latest iteration of this software, v.11, is based on HCM2010 and would significantly enhance how engineers and planners assess the traffic and environmental effects of projects like PD-37.
- 4) The LOS calculations which DOT is publishing cannot be trusted in these reports due to generic use of PHF, SFR, the use of old software, and timing of the conducted study.

11-7

It is obvious that the traffic reports provided by DOT need serious evaluation to ensure the outcomes are showing us the full picture. Before COVID, current residents were experiencing failed intersections and frustrated drivers speeding through previously quiet neighborhoods full of single-family homes. Many residents are rightly concerned about the impacts of PD-37 as proposed and worry what the potentially inadequate mitigation of 1,187 vehicle trips will do to our already jammed streets.

Will we see more backup on Lake Street and South Los Robles, resulting in traffic being pushed into neighborhoods? While city staff has proposed that the triggered VT threshold of 3.8 can be mitigated by unbundling parking and offering discounted METRO passes, ***more studies beyond these mitigations need to be conducted through a full EIR with traffic studies conducted by an outside resource.***

The current discussion surrounding traffic and new development needs perfect transparency, public engagement, and engineering discipline so that we can grow our city without creating a hopeless mess of congestion. PD-37 is a massive project with serious impacts on our city, and we should be using current technology as we plan our growth. An issue as important as this should have the benefit of unique solutions that only proper traffic engineering can provide, so that a project of this size can be developed while still maintaining a high quality of life and safe streets for current residents.

11-8

Thank you,

Erika Foy

CC: Mayor Victor Gordo, Vice-Mayor Andy Wilson, David Reyes, Jennifer Paige, Pam Thyret, Laura Cornejo

*Saturation Flow Rate (SFR) is a measurement of how closely spaced vehicles are as they progress through a signal when it turns green. If the driver's space is close, then the SFR is high. In Pasadena, the SFR is much lower than the default 1900 used by the City. This means they are assuming more cars get through the signal, but PRISM Engineering proved they do not.

**Peak Hour Factor (PHF) is how the software adjusts the LOS based on the worst 15 minutes of the hour. The city is using a default factor that does not take into consideration the specific traffic operations, just the count number, and not how traffic behaves in the peak times. It is these peak times that need accounting for and the software must adjust and reflect for the worst case scenario.

Response to Comment Letter No. 11
Erika Foy
January 15, 2021

11-1 This comment states the IS/MND is inadequate related to projected vehicle trip metrics and states that the proposed mitigation would not guarantee a reduction in the proposed Project's vehicle trips. This commenter's statement regarding the effectiveness of MM-TRA-1 is incorrect, as the City has determined that the performance standard to achieve a 27% reduction in vehicle trips set forth in MM-TRA-1 is feasible and achievable, and the Applicant must determine the means of compliance via the preparation of the Transportation Demand Management Plan, while conforming with the City's Trip Reduction Ordinance. The Metro passes are but one requirement in order to achieve the performance standard. For instance, achievement of the 27% reduction could be accomplished by converting the commercial component to office (as shown in Attachment B of this Final MND) or reducing some combination of the unit count and/or square footage of commercial use areas, and/or prescribing particular uses within the commercial use areas that achieve the vehicle reductions. Such options would have no impact on the analysis included in the IS/MND and could potentially reduce environmental impacts if reductions in units or square footage was required.

The City, as Lead Agency under CEQA, has developed the methodology for assessing impacts to transportation and vehicle miles traveled (VMT) and has determined the potential means by which such impacts could be mitigated in order to achieve less than significant impacts. This methodology is universally applied to Projects within the City and constitutes adequate substantial evidence to conclude that compliance with the City's General Plan Mobility Element objectives and policies. The Project analysis is based on the City's Transportation Impact Analysis Guidelines using the City's calibrated Travel Demand Forecasting (TDF) model built on Southern California Association of Government's regional model. Since the publication of the IS/MND, the City drafted a Transportation Impact Analysis, included as Attachment B to this Final MND on February 24, 2022, for a revised scenario assuming 263 residential units and 16,229 square feet of office. As demonstrated in Attachment A to this Final MND, the Project's impacts related to CEQA Guidelines section 15064.3 would be less than significant. Therefore, the inclusion of MM-TRA-1 has been proven feasible and no additional mitigation is related to transportation is required. See revisions included in Section 2.17 of Attachment A for more details. In addition, since the publication of the IS/MND, the Project Applicant has changed components of the proposed Project. For example, the Project would continue to include 263 residential units (including 41 affordable housing units). However, the Project has been revised to include 14,346 square feet of office instead of 16,481 square feet of commercial. Such revisions do not result in any new significant impacts or a substantial increase in the severity of any environmental impacts. See Section 2.0 of this Final MND for more details. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND.

11-2 This comment questions the Project's proposed daily trip generation, notes the existing vacancy in surrounding properties, and questions the assumption made in the analysis. If the Project site's existing uses were not accounted for and operating at the time the City began the transportation analysis, the Project-related impacts would be overstated. If this and other credits

were not taken into consideration, the Project's associated trips would be added to background intersection and segment traffic conditions that would be eliminated by the new development. Moreover, the comment's concern for the Outside CEQA analysis is not relevant to the adequacy of this IS/MND given that the City's CEQA significance thresholds related to transportation are based on VMT and not level of service (LOS) (i.e., a methodology derived from vehicle trip generation and distribution).

- 11-3** This comment questions the VMT threshold for the City and if the Project's population generated were calculated at 537 (based on the commenter's calculations) or 310 (from the IS/MND).

The commenter is conflating the incremental population increase of 537 to be from the Project only. The 537 value is not specific to the occupancy of the Project alone. The City of Pasadena's TDF model uses information from the Southern California Association of Government's Planning Model, the National Household Travel Survey, Census data, street network information, travel characteristics, traffic counts, parcel level land use data, and other data sources to develop over 300 traffic analysis zones in the 2013 TDF model to forecast parcel interactions, travel patterns, and demand. The incremental scenario results population calculation of 537 reflects the Citywide incremental change. The calculated incremental 537 population increase does not trigger a VMT/cap impact. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND.

- 11-4** This comment questions the City's methodology due to COVID in early/mid-April 2020 during stay-at-home orders within the City. An Outside CEQA analysis was completed on April 6, 2022 and determined none of the study intersections exceeded the LOS cap. Similar to Comment 11-2, above, the comment's concern for the Outside CEQA analysis is not relevant to the adequacy of this IS/MND given that the City's CEQA significance thresholds related to transportation are based on VMT and not level of service (LOS) (i.e., a methodology derived from vehicle trip generation and distribution).

- 11-5** This comment notes previous action by the Pasadena City Council on November 16, 2020, which changed the thresholds of significance for transportation impacts. The comment notes the amendment did not include a "grandfather" exception.

City Council Resolution No. 9820 states that the new CEQA thresholds shall apply to any new project applications deemed complete 90 days after November 16, 2020, the date of adoption of the resolution. Significant time and resources were spent by City staff on the project prior to adoption. Since this project application was deemed complete prior to adoption, the amendment does not apply. This comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the analysis within the IS/MND is required.

- 11-6** This comment states a group of residents hired PRISM Engineering to assist the group in understanding traffic reports within the City. The comment notes a traffic study was prepared in January 2020 to provide more analysis on existing conditions.

An Outside CEQA analysis was completed on April 6, 2022. Traffic count data was collected in 2022. The latest Synchro 11 software was used in the updated analysis. Furthermore, default values were not used for saturation flow rates and peak-hour factors in the calculations. This comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND, and no revisions to the analysis within the IS/MND is required.

- 11-7** This comment raises concern for the City’s use of outdated Synchro software to determine the methodology and evaluation of transportation impacts. The comment notes concern for the “Peak Hour Factor” and the “Ideal Flow” calculated by the City’s Department of Transportation. As such, the comment believes the LOS calculations are inadequate. The comment also asks if the proposed Project would result in significant traffic impacts to Lake Street and South Los Robles. Similar to Comment 11-2, above, the comment’s concern for the Outside CEQA analysis is not relevant to the adequacy of this IS/MND given that the City’s CEQA significance thresholds related to transportation are based on VMT and not level of service (LOS) (i.e., a methodology derived from vehicle trip generation and distribution).
- 11-8** This comment summarizes the letter by asking for transparency and for the City to use current technology. The comment expresses the opinions of the commenter and does not raise any issues regarding the adequacy of the environmental analysis in the IS/MND. No response is required. However, the comment will be forwarded to the decision makers for consideration as part of the Project record.

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December 17, 2020

Planning Commission
City of Pasadena
175 North Garfield Avenue
Pasadena, CA 91109

RE: PLANNED DEVELOPMENT #37 740-790 E. GREEN STREET, 118 S. OAK KNOLL AVENUE, AND 111 S. HUDSON AVENUE

Pasadena residents have been troubled by the amount of backed-up traffic surrounding our city for years. Before COVID, it had reached an absolute breaking point on many of our main arteries like Lake Street and South Los Robles. When local residents learned about the incredible number of unmitigated projects coming in along South Los Robles, we knew we had to do something more drastic to get the attention we needed since our efforts to raise the alarm with city planners seemed to be falling on deaf ears. We organized, raised the appropriate funds, and hired PRISM Engineering to help us understand traffic reports like 253 South Los Robles and to give voice to our deep concerns regarding the need for mitigation.

12-1

It became apparent these traffic reports produced by DOT needed serious studying and evaluating to ensure the outcomes were really telling the full story of what current residents were experiencing which was failed intersections, and frustrated drivers going through single family neighborhoods. Many residents are now concerned about the Planned Development proposed for a 2.33 acre site on the south side of E. Green Street between S. Oak Knoll Avenue and S. Hudson Avenue. What will the expected 1,187 vehicle trips do to our already jammed streets? Will we see more backup on Lake Street and South Los Robles which will result in traffic being pushed into single family neighborhoods? While city staff has proposed that the triggered VT threshold of 3.8 can be mitigated by unbundling parking and offering discounted METRO passes, **more studies beyond these mitigations need to be conducted through a full EIR**. In particular, should the project actually have less parking offered or reduced in population size? Residents want to know.

12-2

The current discussion surrounding traffic and new development needs perfect transparency, public engagement, and engineering discipline so that we can grow our city without creating a hopeless mess of congestion. An issue as important as this should have full transparency so that our community can really understand what a project of this size will do to our city streets. We need more time to have substantial conversations in order to respond to the mitigated negative declaration. Having staff away for the holiday and inaccessible during times when we should have full access is unacceptable. We are also dealing with a surge in COVID and it is unfair to assume our community is able to even focus on such a huge project when family

12-3

members can be sick. I ask you to please consider an extension so we have more time to evaluate the impacts this 263 unit project will have in an already congested community. I have seen many questionable aspects to the report that need investigating in order to properly respond to the draft.

Thank you for your consideration,

Erika Foy

↑
12-3
Cont.

Response to Comment Letter No. 12
Erika Foy
December 17, 2020

12-1 This comment describes existing concern for the City of Pasadena’s traffic conditions and cites potential impacts from related projects onto Lake Street and South Los Robles Avenue. This comment does not express specific environmental comments or concerns with the adequacy of the IS/MND. However, as detailed in Section 2.17, Transportation, of the IS/MND, all transportation impacts were determined to be less than significant. In addition, since the publication of the IS/MND, the City drafted a Transportation Impact Analysis, included as Attachment B to this Final MND on February 24, 2022, for a revised scenario assuming 263 residential units and 16,229 square feet of office. As demonstrated in Attachment A to this Final MND, the Project’s impacts related to CEQA Guidelines section 15064.3 would be less than significant. Therefore, MM-TRA-1 has been proven feasible and has been revised to ensure the mix of land uses would accomplish the intent of the mitigation measure. See revisions included in Section 2.17, Transportation of Attachment A, Revised IS/MND for more details.

12-2 This comment states concern for traffic under existing conditions and the Project’s potential impacts on Lake Street and South Los Robles Avenue as well as surrounding residential neighborhoods, and states the mitigation is not sufficient.

As previously mentioned, IS/MND Section 2.17, Transportation, concludes all transportation impacts would be less than significant or less than significant with mitigation incorporated. This commenter’s statement regarding the effectiveness of MM-TRA-1 is incorrect, as the City has determined that the performance standard to achieve a 27% reduction in vehicle trips set forth in MM-TRA-1 is feasible and achievable. The Metro passes are but one requirement in order to achieve the performance standard. For instance, achievement of the 27% reduction could be accomplished by converting the commercial component to office (as shown in Attachment B to this Final MND) or reducing some combination of the unit count and/or square footage of commercial use areas, and/or proscribing particular uses within the commercial use areas that achieve the vehicle reductions. Such options would have no impact on the analysis included in the IS/MND and could potentially reduce environmental impacts if reductions in units or square footage was required.

The City, as Lead Agency under CEQA, has developed the methodology for assessing impacts to transportation and vehicle miles traveled and has determined the potential means by which such impacts could be mitigated in order to achieve less than significant impacts. This methodology is universally applied to projects within the City and constitutes adequate substantial evidence to conclude that compliance with the City’s General Plan Mobility Element objectives and policies. The Project analysis is based on the City’s Transportation Impact Analysis Guidelines using the City’s calibrated Travel Demand Forecasting model built on Southern California Association of Government’s regional model. Since the publication of the IS/MND, the City drafted a Transportation Impact Analysis, included as Attachment B to this Final MND on February 24, 2022, for a revised scenario assuming 263 residential units and 16,229 square feet of office. As demonstrated in Attachment A to this Final MND, the Project’s impacts related to CEQA Guidelines Section 15064.3 would be less than significant.

As such, MM-TRA-1 has been proven feasible and revised to ensure the mix of land uses would accomplish the intent of the mitigation measure. In addition, subsequent to the publication of the IS/MND, the Project Applicant has changed select components of the proposed Project. For example, the Project would continue to include 263 residential units (including 41 affordable housing units). However, the Project has been revised to include 14,346 square feet of office rather than the originally proposed 16,481 square feet of commercial. Such revisions do not result in any new significant impacts or a substantial increase in the severity of any environmental impacts. See Section 2.0 of this Final MND for more details. Therefore, this comment does not provide evidence of any new impacts that were not previously analyzed in the IS/MND.

- 12-3** This comment states the importance of transparency when the City considers analysis related to traffic and new development. In addition, the comment requests for more time to respond to the IS/MND's analysis. The commenter cites the end of the year holiday break and the on-going pandemic as reasons for delay. The IS/MND was circulated for public review from December 3, 2020 to January 4, 2021, and in accordance with the statutory requirements of CEQA. This comment will be provided to the City's decision makers for their review and consideration as part of this Final MND.

Comment Letter 13

From: City Web
Sent: Thursday, December 17, 2020 4:51 PM
To: Reyes, David; Garzon, Julia; Paige, Jennifer
Subject: Public Comment for Planning Commission on December 17, 2020 about Agenda Item 4A

Public Comment for Planning Commission on December 17, 2020 about Agenda Item 4A

Commission, Committee or Legislative Body	Planning Commission
Meeting Date	December 17, 2020
Agenda Item Number	4A
Name	Mic Hansen
Email	mic.hansen.ca@gmail.com
City	Pasadena
State	CA
Zip Code	91105
Comments	<p>Good afternoon Commissioners and Staff,</p> <p>It is indicated that the public comment period for this project ends January 4. I respectfully request that the public comment period to be extended 15-30 days to give the community an opportunity to be able to respond fully. With the current COVID restrictions as well as the holidays, as well as the complexity of the project, most responders will be unable to meet such compact time requirements.</p> <p>This is a very large project in the heart of our city, affecting a great slice of the community. A short extension as asked would be appropriate in the current difficult environment.</p> <p>Thank you.</p>
I consent to have my comment read out loud during the meeting.	Yes

13-1

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**Response to Comment Letter No. 13-PC
Mic Hansen
December 17, 2020**

- 13-1** This comment is from the City of Pasadena’s Planning Commission meeting on December 17, 2020. This comment requests for the public comment period for the IS/MND be extended 15 to 30 days to allow the community to respond due to the ongoing pandemic and end of the year holiday season. The IS/MND was circulated for public review from December 3, 2020 to January 4, 2021, and in accordance with the statutory requirements of CEQA. This comment will be provided to the City’s decision makers for their review and consideration as part of this Final MND.

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Comment Letter 14

From: Sinclair, David
Sent: Thursday, December 10, 2020 10:01 AM
To: Molinar, Tess
Subject: FW: 770 E Green St. Pasadena CA

Follow Up Flag: Follow up
Flag Status: Flagged

-----Original Message-----
From: Joseph Paggi <joepaggi@me.com>
Sent: Wednesday, December 9, 2020 6:27 PM
To: rmcDonald@carlsonnicholas.com
Cc: Tleel Gina <slba@southlakeavenue.org>
Subject: 770 E Green St. Pasadena CA

This will evidence my support for the subject mixed use project.
I am very impressed with the diligence and accommodations of the developer in responding to the community's concerns regarding design & massing of the project.
We are 50+ years homeowners in Madison Heights.
I am a director of the South Lake Business Association.
I am most impressed by the commitment of its developers who have demonstrated that they are dedicated to the long term continuing success of this project.

141

Joseph F Paggi Jr
747 S Madison Ave
Pasadena CA 91106
(310) 977-1289

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Response to Comment Letter No. 14

Joseph F. Paggi, Jr.

December 9, 2020

- 14-1** This comment expresses support for the proposed Project and cites design changes and accommodations made by the Project applicant to address community concern. This comment will be provided to the decision makers for their review and consideration as part of this Final MND. Additionally, this comment does not express any environmental comments or concerns; no further response is required.

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Comment Letter 15

----- Forwarded message -----

From: Gail Price <gail@bronwenprice.com>
Date: Tue, Dec 22, 2020 at 9:05 PM
Subject: Re: Notice of Intent and Public Meeting - PD #37 - Council District #7
To: Tim Wendler <timwendler89@gmail.com>

Hi Tim,

For the record, I am against removing the ficus trees on Green Street. They provide more than shade; they provide character and beauty. I would ask that any and reports of arborists be made part of the public record and available for review. And I would further want replacement trees planted. And overall I am not in favor of removing the parkway trees just so we can have an ugly building. Having said this, I know we need housing but I don't understand this project to contain that much low and low to middle income housing - I could be wrong - feel free to correct me. Green Street is the most charming street in the city and deserves some extra protection which I don't feel it's getting.

Thank you, Tim, for the information and response.

Kind Regards,
Gail B. Price, Esq.
Broker CALBRE 00780998
BRONWEN PRICE, a Professional Corporation
2800 Mission Street, Suite 206, San Marino, CA 911081
Tel: 626-799-7800; Fax: 626-799-7990
gail@bronwenprice.com

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15-1
15-2

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Response to Comment Letter No. 15
Gail B. Price, Esq.
December 22, 2020

15-1 This comment expresses opposition to the removal of ficus trees on Green Street and cites shade and community character and requests reports prepared by an arborist for the proposed Project be provided for public review. As described in Section 2.4, Biological Resources, of the IS/MND, the proposed Project would be constructed such that the mature trees along East Green Street would be preserved in place, whereas some existing street trees along South Hudson Avenue and South Oak Knoll Avenue that are in poor health would be removed and replaced with new trees. All street/public trees proposed for removal would be removed per the City’s Municipal Code Section 8.52.010.

The commenter’s concern with preserving the existing tree canopy for shade and character/beauty along Green Street is addressed through the Project’s compliance with the City of Pasadena’s Municipal Code on setbacks (i.e., 5 feet on Green Street, see IS/MND Table 1-2, Project Development Standards), as well as the City’s Municipal Code requirements related to trees (see Chapter 8.52, City Trees and Tree Protection Ordinance). The City’s tree ordinance sets forth robust and detailed requirements for activities related to public trees and prohibits any injury or removal of a mature tree without a permit. As stated in Section 8.52.085(J), “To do or commit any unpermitted act that is injurious to a protected tree, including, but not limited to, causing root damage, damage to the trunk, scarring, or any other unpermitted alteration of a protected tree” is prohibited. As noted in the IS/MND, the proposed Project would preserve the mature ficus trees along Green Street and would be prohibited from causing any injury to the tree. Furthermore, as shown in Figure 10b, North and South Elevations, the massing of the buildings would be setback from Green Street and the existing mature ficus trees along Green Street would be preserved (Attachment A, Revised IS/MND, Section 2.1, Aesthetics, page 18). Moreover, the City conducted a Protected Tree Report prepared by a certified arborist on February 4, 2022 (included as Attachment C to this Final MND) which confirmed Project implementation would not significantly impact the existing ficus trees on East Green Street and made recommendations in compliance with the City’s Municipal Code.

15-2 This comment asks if the proposed Project would include low- to middle-income housing. As described in the IS/MND, the Project includes 263 for-rent units, which includes 41 affordable housing units. Based on the latest submittal, the Project Applicant proposes six very-low-income units, six low-income units, and 29 moderate-income units.

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2 OVERVIEW OF CHANGES TO THE IS/MND

The comments received by the City during the public review period for the IS/MND included information that has resulted in minor revisions to the text of the IS/MND. Text has been added is shown as bold underlined (i.e., **underline**). Text that has been removed is shown in strikeout (i.e., ~~strikeout~~).

In addition, the Project Applicant has since changed components of the proposed Project, including, but not limited to the following:

- **Change in Discretionary Actions:** The Project Applicant is no longer requesting the establishment of a Planned Development No. 37 (PD 37) zoning district via a Zone Change for the Project site. As such, the site's existing CD-4 Zoning District development standards apply to the proposed Project. The Project Applicant proposes the use of the State Density Bonus through California Government Code Section 65915 as well as the City's Affordable Housing Concession Menu. Therefore, the proposed Project would be subject to Design Review approval.
- **Change in Land Use and Square Footage:** The proposed Project would result in a ~~253,917~~**254,152**-sf mixed-use structure including 263 residential units (including 41 affordable housing units) and ~~16,481~~**14,346** sf of ~~commercial~~**office** uses. In addition, the proposed Project includes ~~27,180~~**27,795** sf of outdoor community open space (i.e. ~~4,110~~**4,033**-sf publicly available pocket park, ~~breezeways~~, swimming pool courtyard, roof terraces), 600 sf of indoor community open space, and ~~11,703~~**11,585** sf of private open space (i.e. balconies), for a total of ~~39,483~~**39,980** sf of community open space.

Given the changes outlined above, this Final MND includes a copy of the public review draft IS/MND with text additions and text removed, as Attachment A. These errata do not create an issue with regard to a stable and finite project description, nor do they constitute "substantial revisions" requiring recirculation of the IS/MND, as set forth in State CEQA Guidelines Section 15073.5. The CEQA process does not have to freeze the ultimate project proposal, especially where the changes could reduce impacts and provided that the description is stable enough to allow for intelligent public participation, as is the case here. A substantial revision is identified as follows: (1) a new avoidable significant effect is identified and mitigation measures or project revisions must be added in order to reduce the effect to insignificance or (2) the lead agency determines that the proposed mitigation measures or project revisions will not reduce potential effects to less than significant and new measures or revisions must be required.

The withdrawal of the Planned Development application would not change the significance determination related to land use and planning as detailed in the IS/MND. Instead, the proposed Project would conform to the site's existing CD-4 zoning district and comply with all applicable development standards for implementation. In addition, the Project Applicant would continue to use State Density Bonus regulations and the City's Affordable Housing Concessions Menu; thus, the Project would be eligible for a 30% density bonus as well as concessions on floor area ratio and height with the inclusion of 41 affordable housing units. Overall, the proposed Project would still be subject to Design Review approval. These changes to discretionary actions would not result in new, avoidable significant effects on the environment.

The Project has been revised to include 14,346 square feet of office uses rather than the originally proposed 16,481 square feet of commercial uses. This represents a refinement of the proposed land use and total square footage on site. The proposed office use is an allowable use under the City's General

Plan and the CD-4 zoning district; thus, the Project would not require a General Plan amendment or zone change. The Medium Mixed-Use General Plan designation is intended to support the development of multi-story buildings with a variety of compatible commercial (retail and office) and residential uses. Development is characterized by shared open spaces, extensive landscaping, small to medium separations between buildings, and shared driveways and parking. Sites may be exclusively commercial or exclusively residential, or with buildings vertically integrating housing with non-residential uses. Typically, office uses are less intensive land uses (e.g., less vehicle trip generation, less utility supply and demand generations, etc.) when compared to other commercial uses. For example, as detailed in Response to Comment 1-3, using the generation factors provided by LACSD, the previously proposed project would have result in approximately 57,509 gallons per day of wastewater⁶ (without considering the existing uses) and the revised Project is anticipated to result in 43,897 gallons per day.⁷ As such, the revised Project would generate in less wastewater as compared to the previously proposed project. Given this, the revisions to the proposed Project do not result in any new significant impacts or a substantial increase in the severity of any environmental impacts.

In addition, a new Transportation Impact Analysis was prepared by Pasadena Department of Transportation on February 24, 2022 (included as Attachment B to this Final MND). The analysis assumed a project scenario with 263 residential units and 16,229 square feet of office. These inputs are slightly different than the Project Applicant's revised design (see Attachment A to this Final MND); however, the City has reviewed and confirmed that the transportation-related impact analysis is accurate and no new modeling beyond what is included in Attachment B is required.

Finally, the proposed Project has been revised to total 254,152 square feet from 253,917 square feet in size. Although this change is an increase from what was previously included in the IS/MND, this change is considered to be negligible given that the proposed office uses represents a decrease and the total number of residential units proposed would not change. As such, the change in square footage is representative of nominal ancillary space due to changes in the overall project design.

Therefore, as demonstrated in the revised Initial Study in Attachment A, avoidable significant effects have been identified, no new mitigation measures were added, and the text of the document has not been substantially revised in a manner requiring recirculation.

⁶ (263 units x 156 gallons per day) + [16,481 sf x (1000 gallons per day/1000 square feet)] = 57,509 gallons per day

⁷ (263 units x 156 gallons per day) + [14,346 sf x (200 gallons per day/1000 square feet)] = 43,897 gallons per day

3 MITIGATION MONITORING AND REPORTING PROGRAM

The State CEQA Guidelines, Section 15074(d), requires that a lead or responsible agency adopt a mitigation monitoring plan when approving or carrying out a project when an IS/MND identifies changes that the lead agency has required in the project or made a condition of approval to mitigate or avoid significant environmental effects. As lead agency for the project, the City is responsible for adoption and implementation of the Mitigation Monitoring and Reporting Program (MMRP).

The MMRP is presented below in Table 3-1 and will be in place and effective throughout all phases of the Project. The City will be responsible for administering the MMRP and ensuring that all parties comply with its provisions. The City may delegate monitoring activities to staff, consultants, or contractors. The City will also ensure that monitoring is documented and that deficiencies are promptly corrected.

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Table 3-1. Mitigation Monitoring and Reporting Program Checklist

Mitigation Measure	Method of Verification	Implementing Party	Timing of Verification			Verifying Party	Completed		Comments
			Pre-Construction	During Construction	Post-Construction		Initials	Date	
Cultural Resources									
MM-CUL-1 Prior to commencement of construction activities at the Project site, the City of Pasadena’s construction contractor and construction personnel shall attend and complete a Workers Environmental Awareness Program (WEAP) training conducted by a qualified archaeologist. The WEAP training shall provide: (1) the types and characteristics of archaeological materials that may be identified during construction and explain the importance of and legal basis for the protection of significant cultural resources; (2) proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities, including procedures for work curtailment or redirection; and (3) protocols for the contact of the site supervisor and archaeological monitor upon discovery of a resource. The procedures and protocols shall be included in the construction plans and require that a qualified archaeologist be retained to evaluate cultural resource discoveries as they occur, to determine the significance of the resource and the appropriate approach forward.	Submittal of documentation of WEAP training (e.g., syllabus, sign-in sheet, etc.) to City for review	Construction Contractor/ Qualified Archaeologist	X			City of Pasadena			
MM-CUL-2 If cultural resources are discovered during construction of the proposed Project in the City of 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 of Pasadena 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.	Submittal letter report of excavations and findings to City for review	Construction Contractor/ Registered Professional Archaeologist		X		City of Pasadena			
Geology and Soils									
MM-GEO-1 Prior to commencement of any grading activity on-site, the Project Applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological	Submittal of PRIMP to City for review/ Submittal of construction	Qualified Paleontologist	X	X		City of Pasadena			

Table 3-1. Mitigation Monitoring and Reporting Program Checklist

Mitigation Measure	Method of Verification	Implementing Party	Timing of Verification			Verifying Party	Completed		Comments	
			Pre-Construction	During Construction	Post-Construction		Initials	Date		
Resources Impact Mitigation Program (PRIMP) for the proposed Project. The PRIMP shall be consistent with the SVP (2010) guidelines and should outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the proposed Project site based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The PRIMP shall also address reducing or terminating monitoring when no resources are found pursuant to the SVP (2010) guidelines. The qualified paleontologist shall attend the preconstruction meeting and a paleontological monitor shall be on-site during all rough grading and other significant ground-disturbing activities beyond a depth of five feet below the existing ground surface or the depth of any artificial fill in previously undisturbed, fine-grained older Quaternary (e.g., Pleistocene age) alluvial fan deposits. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find.	monitoring logs to City for review									
Hazards and Hazardous Materials										
Prior to commencement of any demolition or construction activities, a Hazardous Materials Contingency Plan (HMCP) shall be developed that addresses potential impacts in soil and the potential presence of USTs associated with the former gasoline service station located on the Project site. The HMCP shall include training procedures for identification of contamination and USTs, including procedures for a geophysical survey to identify USTs in the area of the former gasoline service station. The HMCP shall describe procedures for assessment, characterization, management, and disposal of contaminated soils; <u>assessment, characterization, and management of soil vapor</u> ; and notification and decommissioning procedures for tanks, in accordance with all	Submittal of the HMCP to City for review	Construction Contractor/ Environmental Monitor	X			City of Pasadena				

Table 3-1. Mitigation Monitoring and Reporting Program Checklist

Mitigation Measure	Method of Verification	Implementing Party	Timing of Verification			Verifying Party	Completed		Comments
			Pre-Construction	During Construction	Post-Construction		Initials	Date	
<p>applicable state and local regulations. The HMCP will be an internal document used by the permittee and/or its designee (e.g. environmental monitor). The HMCP will designate an environmental monitor who would determine disposal and reporting requirements for contaminated soils, <u>and will be present on-site during grading activities in areas where potentially impacted soils may be encountered</u> as outlined in the HMCP. Contaminated soils shall be managed and disposed of in accordance with local and state regulations (e.g. City of Pasadena Best Management Practices for soil stockpiles (City of Pasadena 2018), Draft Regional Water Board Fill Material Definitions (RWQCB 2020), DTSC Voluntary Cleanup Program and/or RWQCB Leaking Underground Storage Tank program, as applicable). <u>Should soil vapor contamination be identified above applicable regulatory levels, as outlined in the HMCP, soil vapor intrusion methods will be outlined in the final report based on the findings on site and in accordance with February 2023 DTSC Final Draft Supplemental Guidance for Screening and Evaluating Vapor Intrusion. Proposed engineering methods for attenuation of vapor intrusion will be prepared and submitted with building plans and approved by the permitting agency prior to issuance of construction permits.</u> The HMCP shall include health and safety measures, which may include but are not limited to periodic work breathing zone monitoring and monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. Health and safety measures will be based on California and federal Occupational Safety and Health Administration (OSHA) requirements for worker safety, including permissible exposure limits (PELs). The permittee or its designee shall implement the HMCP during construction activities for the proposed Project.</p>									
<p>MM-HAZ-2 Prior to commencement of demolition or construction activities on the southern portion of the Project site (APNs: 5734-025-027 and 5734-025-029), a hazardous building materials survey shall be conducted to identify asbestos, lead-based paint, and other potentially hazardous building materials (such as mercury thermometers, lighting and electrical appurtenances). The survey shall be conducted on</p>	<p>Submittal of hazardous building materials survey to City for review</p>	<p>Construction Contractor/ Hazardous Materials Surveyor</p>	<p>X</p>			<p>City of Pasadena</p>			

Table 3-1. Mitigation Monitoring and Reporting Program Checklist

Mitigation Measure	Method of Verification	Implementing Party	Timing of Verification			Verifying Party	Completed		Comments
			Pre-Construction	During Construction	Post-Construction		Initials	Date	
the two buildings in the southern portion of the Project site scheduled to be disturbed/demolished. Following results of the hazardous materials survey, demolition or renovation plans and contract specifications shall incorporate abatement procedures for the removal of materials containing asbestos and lead. All abatement work shall be done in accordance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency, Occupational Safety and Health Administration, California Occupational Safety and Health Administration, and the South Coast Air Quality Management District.									
Noise									
<p>MM-NOI-1 Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, the Project applicant shall retain a team to prepare a vibration monitoring plan. The team shall include a professional structural engineer with experience in structural vibration analysis and monitoring for historic buildings and a historical architect to perform the following tasks:</p> <ul style="list-style-type: none"> • Review the Project plans for demolition and construction; • Survey the Project site and the property/buildings to the south (i.e., 128 South Oak Knoll Avenue and 133 South Hudson Avenue); • Conduct geological testing if determined to be necessary, and; • Prepare and submit a report to the Director of Planning and Community Development to include, but not be limited to, the following: <ul style="list-style-type: none"> ○ The information from the survey identified above; ○ Any modifications to the permissible vibration level thresholds based on the structural conditions of the adjacent properties to the south, soil conditions, and planned demolition and construction methods to ensure that vibration levels would remain below the potential for damage to the adjacent structures to the south; 	Submittal of a vibration monitoring plan to City for review	Construction Contractor/ Vibration Analysis and Monitoring Team	X	X		City of Pasadena			

Table 3-1. Mitigation Monitoring and Reporting Program Checklist

Mitigation Measure	Method of Verification	Implementing Party	Timing of Verification			Verifying Party	Completed		Comments
			Pre-Construction	During Construction	Post-Construction		Initials	Date	
<ul style="list-style-type: none"> Specific measures (such as requiring the use of lighter, less-powerful equipment when applicable – a small bulldozer rather than a large bulldozer for example - in proximity to the southern Project boundary) to be taken during demolition / construction to ensure that vibration level limits identified by the structural engineer (or 0.12 ppv in/sec in lieu of such specified limits) are not exceeded; A monitoring plan to be implemented during demolition and construction that includes post-construction and post-demolition surveys of the adjacent properties to the south and documentation demonstrating that the measures identified in the report have been implemented. 									
Transportation									
<p>To reduce the <u>original</u> Project's VT per capita, the Project Applicant/Developer shall either develop and implement a Transportation Demand Management (TDM) Plan that includes strategies to reduce the Project's vehicle trips by a minimum of 27% or implement a mix of uses that achieves a minimum of 27% reduction of VT as the Project described in the Revised IS/MND does. If the TDM Plan approach is undertaken as a result of the original Project, then Programmatic programmatic strategies to reduce VT per capita shall complement City's Trip Reduction Ordinance minimum requirements and shall include, but not necessarily be limited to, the following:</p> <ul style="list-style-type: none"> Unbundled parking for the residential use; The Project Applicant/Developer shall purchase 121 Metro passes and offer them to interested residents at 50% discount for five consecutive years from the issuance of Certificate of Occupancy. The Project Applicant/Developer shall provide an Annual TDM Survey beginning one year after the issuance of Certificate of Occupancy to demonstrate 	Submittal of Transportation Demand Management Plan to City for review and approval prior to the issuance of a Certificate of Occupancy	Project Applicant	X		X	City of Pasadena			

Table 3-1. Mitigation Monitoring and Reporting Program Checklist

Mitigation Measure	Method of Verification	Implementing Party	Timing of Verification			Verifying Party	Completed		Comments
			Pre-Construction	During Construction	Post-Construction		Initials	Date	
the minimum 27% reduction of Project vehicular trips per capita is maintained.									
Tribal Cultural Resources									
MM-TCR-1 The Project Applicant shall be required to retain and compensate for the services of a tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the Native American Heritage Commission’s (NAHC) Tribal Contact List for the area of the Project location. This list is provided by the NAHC. The monitor/consultant will only be present on site during the construction phases that involve ground-disturbing activities. Ground-disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the Project area. The tribal monitor/consultant will complete daily monitoring logs that will provide descriptions of the day’s activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the Project site grading and excavation activities are completed, or when the tribal representatives and monitor/consultant have indicated that the site has a low potential for impacting tribal cultural resources.	Submittal of daily construction monitoring logs to the City for review	Tribal Monitor		X		City of Pasadena			
MM-TCR-2 Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by Project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians – Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians – Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the Project while evaluation and, if necessary, mitigation takes place (California Environmental Quality Act [CEQA] Guidelines Section 15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a	Submittal of letter report documenting periodic monitoring to the City for review	Construction Contractor/ Qualified Archaeologist/ Tribal Monitor		X		City of Pasadena			

Table 3-1. Mitigation Monitoring and Reporting Program Checklist

Mitigation Measure	Method of Verification	Implementing Party	Timing of Verification			Verifying Party	Completed		Comments
			Pre-Construction	During Construction	Post-Construction		Initials	Date	
“historical resource” or “unique archaeological resource,” time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and for unique archaeological resources.									
MM-TCR-3 Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.	Submittal of letter report documenting treatment of archaeological material to City for review	Construction Contractor/ Qualified Archaeologist/ Tribal Monitor		X		City of Pasadena			
MM-TCR-4 Native American human remains are defined in Public Resources Code (PRC) 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and PRC 5097.98 shall be followed.	Submittal of letter report documenting discovery and treatment of human remains	Construction Contractor/ Qualified Archaeologist/ Tribal Monitor		X		City of Pasadena			
MM-TCR-5 Upon discovery of human remains, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the	Submittal of letter report documenting discovery and treatment of human	Construction Contractor/ Qualified Archaeologist/		X		City of Pasadena			

Table 3-1. Mitigation Monitoring and Reporting Program Checklist

Mitigation Measure	Method of Verification	Implementing Party	Timing of Verification			Verifying Party	Completed		Comments
			Pre-Construction	During Construction	Post-Construction		Initials	Date	
<p>tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the Native American Heritage Commission as mandated by state law who will then appoint a Most Likely Descendant.</p>	<p>remains to City for review</p>	<p>Tribal Monitor</p>							
<p>MM-TCR-6 If the Gabrieleño Band of Mission Indians – Kizh Nation is designated as the Most Likely Descendant, the following treatment measures shall be implemented. To the tribe, the term “human remains” encompasses more than human bones. In ancient as well as historic times, tribal traditions included, but were not limited to, the burial of funerary objects with the deceased and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.</p>	<p>Submittal of letter report documenting discovery and treatment of human remains to City for review</p>	<p>Construction Contractor/ Qualified Archaeologist/ Tribal Monitor</p>		X		City of Pasadena			
<p>MM-TCR-7 Prior to the continuation of ground-disturbing activities, the land owner shall arrange a designated site location within the footprint of the Project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the</p>	<p>Submittal of letter report documenting discovery and treatment of human remains and/or ceremonial objects to City for review</p>	<p>Construction Contractor/ Qualified Archaeologist/ Tribal Monitor</p>		X		City of Pasadena			

Table 3-1. Mitigation Monitoring and Reporting Program Checklist

Mitigation Measure	Method of Verification	Implementing Party	Timing of Verification			Verifying Party	Completed		Comments
			Pre-Construction	During Construction	Post-Construction		Initials	Date	
<p>tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery, and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the tribe and the Native American Heritage Commission. The tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains.</p> <p>Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects, and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within 6 months of recovery. The site of reburial/repatriation shall be on the Project site but at a location agreed upon between the tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.</p>									
<p>MM-TCR-8 Professional Standards: Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of the Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in Southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.</p>	<p>Submittal of qualifications for Qualified Archaeologist/ Tribal Monitor to City for review</p>	<p>Construction Contractor/ Qualified Archaeologist/ Tribal Monitor</p>		X		City of Pasadena			

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~~DRAFT~~ **FINAL** INITIAL STUDY/MITIGATED
NEGATIVE DECLARATION

**740-790 East Green Street
Mixed-Use Project**

Prepared for:

City of Pasadena
175 North Garfield Avenue
Pasadena, California 91101-1704

Prepared by:

DUDEK
38 North Marengo Avenue
Pasadena, California 91101

~~DECEMBER 2020~~ **JUNE 2023**

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CITY OF PASADENA
175 NORTH GARFIELD AVENUE
PASADENA, CA 91101-1704

INITIAL STUDY

In accordance with the Environmental Policy Guidelines of the City of Pasadena, this analysis, the associated "Master Application Form," and/or Environmental Assessment Form (EAF) and supporting data constitute the Initial Study for the subject project. This Initial Study provides the assessment for a determination whether the project may have a significant effect on the environment.

SECTION I. PROJECT INFORMATION

1. Project Title:	740-790 East Green Street Mixed-Use Project
2. Lead agency name and address:	City of Pasadena 175 North Garfield Avenue Pasadena, CA 91101-1704
3. Contact person and phone number:	<u>Stephanie Cisneros, Senior Planner</u> <u>(626) 744-7219</u> David Sinclair, Senior Planner (626) 744-6766 Jennifer Driver, Planner (626) 744-6756
4. Project location:	740-790 East Green Street (between Oak Knoll and Hudson Avenues), City of Pasadena. Project site includes Assessor Parcel Numbers 5734-025-024, -014, -026, -030, -029, and -027.
5. Project sponsor's name and address:	Stanford Pasadena, LLC
6. General plan designation:	Medium Mixed-Use (0 to 2.25 Floor to Area Ratio [FAR])
7. Zoning:	CD-4 (Central District Specific Plan, Pasadena Playhouse)
8. Description of project:	See Project information below

PROJECT SUMMARY

The 740-790 East Green Street Mixed-Use Project (proposed Project) would involve the demolition of five commercial buildings and the construction and operation of a new mixed-use project within the City of Pasadena Playhouse District. The proposed mixed-use structure is comprised of one 4-story mixed-use building on the northern portion and one 5-story residential building on the southern portion, which is connected by an outdoor ground-level breezeway and external pedestrian bridges connection at Level 2, Level 3, and Level 4. The proposed buildings would be located on top of a two-level subterranean parking garage that encompasses the majority of the 2.33-acre property. Table 1-1 provides a summary of the Project’s total floor area (i.e. ~~253,917~~ **254,152** square feet [sf]), which is the amount of occupiable floor area on the Project site.

Table 1-1. Proposed Project Floor Area

Level	4-Story Building	5-Story Building	Total
1	26,506 25,069	34,400 33,506	60,606 58,575
2	26,390 24,850	34,980 35,222	61,370 60,072
3	26,390 24,850	34,980 35,222	61,370 60,072
4	8,134 11,433	34,980 35,222	43,114 46,655
5	- 266	21,421 21,455	21,421 21,721
P1	-	-	4,304 4,589
P2	-	-	1,732 2,468
Total	87,420 86,468	160,461 160,627	253,917 254,152

The ~~253,917~~ **254,152**-sf development includes 263 for-rent units (including 41 units designated as affordable housing), ~~16,481~~ **14,346** sf of commercial **office** use (e.g., retail, café), lobby area, a leasing office, business center, fitness center, and pool lounge, as well as bicycle parking and mechanical equipment areas within the parking garage. The Project also includes ~~27,180~~ **27,795** sf of outdoor community open space (i.e. ~~4,110~~ **4,033**-sf publicly available pocket park, breezeways, swimming pool courtyard, roof terraces), 600 sf of indoor community open space, and ~~44,703~~ **11,585** sf of private open space (i.e. balconies), for a total of ~~39,483~~ **39,980** sf of community open space.

The proposed Project would require a zone change from CD-4 to Planned Development No. 37 (PD 37). The Project proposes to use the State Density Bonus legislated by the California Government Code Section 65915 to develop 263 for-rent apartment units (30% above the 87 dwelling units per acre currently allowed in the CD-4 zone). Because the proposed Project would include 20% on-site affordable housing units, the Project would comply with the City’s Inclusionary Housing Ordinance, which would allow the Project to utilize the City’s concessions to increase the Project’s floor area ratio (FAR) from 2.0 to 2.5 and to increase the building height 12 feet above the allowed height limit of 35 feet along Green Street in the northern portion and 50 feet along Hudson Avenue and Oak Knoll Avenue in the southern portion. With incorporation of the City’s Affordable Housing Concession Menu, the proposed 4-story building would be built to a maximum height of 47 feet and the proposed 5-story building would be built to a maximum height of 62 feet. In addition, the proposed Project requests Design Review Approval.

PROJECT LOCATION

As shown in Figure 1, Project Location, the proposed Project site is located in the City of Pasadena (City) approximately 7 miles north of from Downtown Los Angeles. Regional access to the Project site is via Interstate (I) 210, exiting South Lake Avenue. Figure 1 shows the location of the Project site within the County and an aerial view of the immediately surrounding land uses. The Project site is bound by East Green Street to the north, South Hudson Avenue to the east, private property to the south, and South Oak Knoll Avenue to the west. The site is located in the “Central District Transit Oriented Development Area” of the City of Pasadena and within the Playhouse District South/Green Street Precinct. The Project is located at 740-790 East Green Street (between Oak Knoll and Hudson Avenue) and is comprised of six Assessor’s Parcel Numbers (APNs): 5734-025-014 -024, -026, -027, -030, and -029, which total 2.33 acres.

ENVIRONMENTAL SETTING

Existing Site Conditions

As shown on Figure 2, Existing Site Conditions, the Project site is currently developed with 5 commercial buildings, totaling approximately 34,668 sf. The existing buildings and their current uses are described in more detail below.

- **Building A** is a 5-story building with a 3,998 sf footprint, located on APN 5734-025-024 on the northwestern portion of the Project site, fronting Green Street. The building is currently utilized as a dance studio and as office space for a certified public accounting agency and a business management consulting firm.
- **Building B** is a 5-story building with a 723 sf footprint, located on APN 5734-025-014, mid-block on the northern portion of the Project site, fronting Green Street. The building is currently utilized as restaurant space and studio space for a drama school.
- **Building C** is a 2-story office building with a 17,308 sf footprint, located on the northeastern corner of the Project site, fronting Green Street. Building C is located on APN 5734-025-026 and is currently utilized as office space for a law firm.
- **Building D** is a 1-story building with a 5,214 sf footprint, located on the southwestern portion of the Project site. Building D is located on APN 5734-025-027 near the southern boundary of the Project site, fronting Oak Knoll Avenue. The building is currently utilized as a family services center.
- **Building E** is a 1-story office building with a 7,425 sf footprint, located on the southeastern portion of the Project site, fronting Hudson Avenue. Building E is located on APN 5734-025-029. The building is currently utilized as a family services center.

The Project site also contains an existing paved surface parking lot located between Buildings A and D is located on APN 5734-025-030.

Existing Land Use and Zoning Designations

According to the City’s General Plan, the Project site is designated as Medium Mixed-Use (0 to 2.25 Floor to Area Ratio [FAR]) and is located within the CD-4 (Central District, Pasadena Playhouse) zoning district.

Properties designated as Mixed-Use by the Land Use Diagram may be developed for a singular use or a mix of uses on the same site. The Medium Mixed-Use designation is intended to support the development of multi-story buildings with a variety of compatible commercial (retail and office) and residential uses. Development is characterized by shared open spaces, extensive landscaping, small to medium separations between buildings, and shared driveways and parking. Sites may be exclusively commercial or exclusively residential, or with buildings vertically integrating housing with non-residential uses. Mixed-use development projects containing housing shall incorporate amenities contributing to a quality living environment for residents including courtyards, recreation facilities, and similar elements. Where buildings face the street frontage, they shall be designed to enhance pedestrian activity with transparent facades for retail uses and distinctive entries for housing. Parking shall be located below or to the rear of the street. Projects constructed at Medium Mixed Use densities may be required to develop pedestrian-oriented streetscape amenities along their primary street frontages, consistent with the improvement concepts and plans defined by the City (City of Pasadena 2015b).

The Project site is within the Central District Specific Plan, Pasadena Playhouse, which is an urbanized area within the City. According to the Central District Specific Plan, it is recognized by the City's residents as "Downtown" and is appropriate for infill and higher density transit-oriented development. The Central District Specific Plan was developed to provide neighborhood-specific design and land use regulations for notable areas, including City Hall, Pasadena Playhouse, Central Park, Paseo Colorado, and Shops on Lake. The Pasadena Playhouse Sub-district, particularly Playhouse South/Green Street is characterized as a pedestrian-oriented place, featuring appropriately scaled commercial buildings focused on the street. Antique and specialty shops, and restaurants are among the uses, and a consistent street tree canopy adds to the identity of the street. South of Green Street the structures and uses transition to the in-town residential neighborhood (City of Pasadena 2004).

Surrounding Land Uses

Adjacent land uses include single- and multi-family residential and commercial to the west across Oak Knoll Avenue; commercial and parking to the north across Green Street; multi-family residential and parking to the east across Hudson Avenue; and offices and a church immediately to the south, with multi-family and office uses beyond. The nearest light rail stations are the Lake Metro Gold Line Station located at the Interstate (I) 210 approximately 0.5-mile to the north, and the Del Mar Metro Gold Line Station located approximately 0.8-mile to the west near Central Park.

PROJECT CHARACTERISTICS

Project Design

Figure 3, Site Plan, shows the overall layout of the proposed Project site in the context of the surrounding streets and adjacent land uses. The proposed Project includes ~~253,917~~ **254,152** sf of mixed-use residential and ~~commercial~~ **office** land uses within one 4-story mixed-use building (~~87,420~~ **84,469** sf); one 5-story residential building (~~160,461~~ **160,627** sf); and two levels of subterranean parking with ~~6,036~~ **7,056** sf of bicycle parking, stairs, and mechanical space. The residential components of the two buildings are connected by an outdoor ground-level breezeway ~~and external pedestrian bridges connection at Level 2, Level 3, and Level 4.~~

The proposed 4-story building would front onto Green Street and has a maximum height of 47 feet, with the frontage on Green Street at Oak Knoll Avenue at 31 feet and the frontage on Green Street at Hudson Avenue at 35 feet. The proposed 5-story building would be located at the interior of the Project site and has a maximum height of 62 feet. The proposed uses within each building are described in more detail below.

4-Story Mixed-Use Building

- **First Floor.** As shown in Figure 4, Level One Floor Plan, the first floor of the mixed-use building would include ~~16,481~~ 14,346 sf of ~~commercial~~ office uses fronting Green Street, including ~~2,034~~ sf of ~~restaurant/café uses~~ and ~~5,483~~ 6,576 sf of ~~commercial~~ office/retail space on the western half of the first floor separated by a ~~1,242~~ 1,190-sf central lobby from an additional ~~5,222~~ 7,770 sf of ~~commercial~~ office/retail space and a ~~second~~ 3,496-sf café space on the eastern half of the first floor. The mixed-use building would also include residential/community uses on the interior-facing portion of the building, including a ~~3,150~~ 3,378-sf fitness center, a ~~1,694~~ 1,708-sf business center, a ~~903~~ 1,083-sf leasing office, an ~~813~~ 614-sf mail/package room, and a ~~2,684~~ 2,901-sf pool lounge. The ~~commercial~~ office uses fronting Green Street and the interior-facing residential/community uses on the first floor of the mixed-use building would be accessible from the pedestrian sidewalk on Green Street and from interior stairwells and elevators from the subterranean parking structure.
- **Second and Third Floor.** As shown in Figure 5, Level Two and ~~Level Three Floor Plan~~, and Figure 6, Level Three Floor Plan, the second and third floors of the mixed-use building would have the same floors plans and would each include ~~34~~ 28 dwelling units comprising ~~8~~ 4 studios, 15 one-bedroom, and ~~8~~ 9 two-bedroom for-rent apartment units. ~~Exterior pedestrian breezeways would connect the second and third floors of the mixed-use building to the second and third floors of the proposed residential building.~~
- **Fourth Floor.** As shown in Figure 6, Level Four Floor Plan, the fourth floor of the proposed mixed-use building would include ~~8~~ 9 one-bedroom and ~~1~~ 3 two-bedroom apartment units. The remaining area of the fourth floor would comprise the roof of the mixed-use building. ~~An exterior pedestrian breezeway would connect the fourth floor apartment units of the mixed-use building to the fourth floor of the residential building.~~ The roof would be 45 feet at its highest point, per the City's Municipal Code Section 17.43.055B Inclusionary Housing Ordinance Concession), which allows for an additional 12 feet of building height over the applicable zone's height limit.

5-Story Residential Building

- **First Floor.** As shown in Figure 4, Level One Floor Plan, the first floor of the residential building would be separated from the first floor of the mixed-use building by community open space, including the pool and interior courtyard. The first floor of the residential building would comprise two lobbies with street and garage access, one lobby on the western side and one lobby on the eastern side of the building. A total of 41 dwelling units, including ~~15~~ 18 studios, ~~19~~ 17 one-bedrooms, and ~~7~~ 6 two-bedroom apartments would be located on the first floor of the residential building.
- **Second, Third, and Fourth Floor.** As shown in Figure 5, Level Two and ~~Level Three Floor Plan~~, and Figure 6, Level Three Floor Plan, the second and third floors of the residential building would have the same floors plans and would each include ~~42~~ 43 dwelling units comprising ~~15~~ 17 studios, 19 one-bedroom, and ~~8~~ 7 two-bedroom for-rent apartment units. Similarly, as shown in Figure ~~6~~ 7, Level Four Floor Plan, the fourth floor of the proposed residential building would also include ~~42~~ 43 dwelling

units comprising ~~15-17~~ studios, 19 one-bedroom, and ~~8-7~~ two-bedroom for-rent apartment units. The second, third, and fourth floors of the residential building would each comprise two small lobbies, one on the western and one on the eastern side of the building. ~~Exterior pedestrian breezeways would connect the second, third, and fourth floors of the residential building to the second, third, and fourth floors of the mixed-use building.~~

- **Fifth Floor.** As shown in Figure ~~7-8~~, Level Five Floor Plan, the fifth floor of the proposed residential building would include 25 dwelling units comprising 10 studios, 12 one-bedroom, and 3 two-bedroom apartment units. Additionally, the residential building would include a ~~2,427-2,116~~-sf rooftop terrace.

The proposed base density allowed according to CD-4 zone standards is 87 du/acre, which allows for up to 203 units. With the addition of the 41 affordable housing units, and the associated 30% affordable housing density bonus, the proposed Project proposes a total of 263 units, including 86 studio units, 126 one-bedroom units, and 51 two-bedroom units. Table 1-2 compares the development standards for the proposed Project with the existing CD-4 zone and General Plan standards.

Table 1-2. Project Development Standards

Standard	Proposed Project	CD-4	General Plan
Density ¹	113 du/acre	60 du/acre	0-87 du/acre
FAR ¹	2.5	2	0 - 2.25
Height ¹	47 feet – 62 feet	35 feet to 50 feet	N/A
Setbacks:			
Green Street	0 feet to 5 feet	0 feet to 5 feet	N/A
Oak Knoll Avenue	0 feet to 10 feet	0 feet to 5 feet	
Hudson Avenue	0 feet to 5 feet	0 feet to 5 feet	
Interior ²	10 feet	None Required	

Note: du/acre = dwelling unit per acre; FAR = floor-to-area ratio.

¹ Per Zoning Code Section 17.43.055, On-Menu Density Bonus, a 30% increase in the density, a 0.5 increase in FAR and a 12-foot increase in height is permitted by designating 41 units as affordable housing on-site.

² Interior refers to the setback from the adjacent lot to the south of the Project site.

Circulation, Transportation, and Parking

Residents would enter the proposed 4-story building via the lobby located off of Green Street and would enter the proposed 5-story building via the lobbies off of Hudson Avenue and Oak Knoll Avenue. The parking garage entrance on Oak Knoll Avenue would be utilized by both residents and patrons of the ~~commercial-office~~ uses; however, residential parking would be separated from the ~~commercial-office~~ parking by a restricted access gate. Both buildings could also be accessed from the pocket park on Oak Knoll Avenue via a pathway that connects to the 5-story building.

As shown in Figure ~~8-9a~~, Parking Garage Level 1, and Figure ~~8-9b~~, Parking Garage Level 2, the parking garage would provide ~~443-416~~ vehicle parking spaces and ~~49-48~~ bicycles spaces. The parking garage includes two levels (Level 1 and Level 2), each of which have an 11-foot height clearance. Level 1 includes ~~65-33~~ parking spaces for ~~commercial-office~~ uses, including ~~3-2~~ American Disabilities Act (ADA) compliant parking spaces. Level 1 also includes ~~27-24~~ residential guest parking spaces and 118 resident-only parking spaces, including ~~6-7~~ ADA compliant parking spaces and ~~8-16~~ resident tandem spaces, and ~~49-48~~ bicycle parking spaces. Level 2 includes ~~233-214~~ parking spaces for residents only, ~~including 2 ADA-compliant parking spaces and 24 resident tandem spaces.~~ In total, the subterranean parking garage

includes ~~354~~**355** resident parking spaces (including ~~8~~**7** resident ADA spaces, and ~~32~~**16** resident tandem spaces), ~~27~~**26** resident guest spaces, and ~~65~~**35** parking spaces for commercial ~~office~~ uses (including ~~3~~**2** ADA spaces).

Architectural Materials

As shown in Figure ~~9-10a~~, East and West Elevations, Figure ~~9-10b~~, North and South Elevations, and Figure ~~9-10c~~, Interior Courtyard Elevation, the proposed Project is contemporary in style; ~~however, the buildings and incorporates some design elements of historic Spanish Revival buildings in Pasadena, including such as~~ a base-middle-top visual order, roof articulation, upper floor step backs, and a paired windows pattern. As shown in the elevations illustrated in Figures ~~9-10a~~ through ~~9-10c~~, architectural materials contemplated to be incorporated into Project design include white and accent plaster, accent ceramic tile, metal railing, vinyl window frames and door frames, and glass guard railing. Materials and colors are subject to review and approval by the City's Design Commission through the City's Design Review Process.

Open Space and Landscaping

As shown on Figure ~~10-11~~, Open Space Areas, the proposed Project includes ~~27,180~~**27,795** sf of outdoor community open space (i.e. ~~4,110~~**4,033**-sf publicly available pocket park, breezeways, swimming pool courtyard, roof terraces), 600 sf of indoor community open space, and ~~44,703~~**11,585** sf of private open space (i.e. balconies), for a total of ~~39,483~~**39,980** sf of community open space. Figure ~~11~~, Open Space Concept, identifies the amenities to be included within each of the open space areas. As shown in Figure ~~11~~, the ~~The~~ pocket park would be located in the ~~southeast~~**southwest** corner of the Project site, the pool and spa are located in the central-eastern portion of the Project site, ~~and the breezeway would traverse the Project site from east to west with a water feature, overhead structure, with~~ an outdoor kitchen and furnishings, and a fire pit.

As shown on Figure 12, Tree Inventory, there are 12 existing trees within the Project site (Numbers 11B, 12, 16B, 17-24) and ~~45~~**14** existing street trees¹ within the adjacent public sidewalks (Numbers 1-11 and 13-16). All 12 of the existing on-site trees would be removed under the proposed Project, as would 4 existing street trees that are in poor health. All on-site trees proposed for removal would be removed and replaced per the City's Municipal Code Section 8.52.010. **See Attachment C, Protected Tree Report, of the Final MND for more information.**

Lighting

Exterior lighting associated with Project would include pedestrian safety lighting and landscape lighting. The City's Municipal Code Section 17.40.080 governs outdoor lighting standards for developments within the City. Specifically, exterior lighting on private property should be energy-efficiency and shielded; no lights shall blink, flash or be of high intensity or brightness; and lighting shall be appropriate in scale, intensity, and height. Additionally, per Section 17.30, Central District Specific Plan, the Project would comply with requirements of 17.40.080. During the plan check process, the City will review a photometric plan to ensure compliance with the City's Municipal Code.

¹ **One right-of-way tree (identified as #ST5 in Attachment C of the Final MND) has been removed since an earlier tree inventory by EPT Design, which indicated that ST5 was in poor condition.**

Sustainability Features

The Project must comply with the 2019 California Green Building Standards Code (CalGreen), which is codified in Section 14.04, Building Code and Related Codes of the City's Municipal Code. In addition, sustainability features proposed as part of the Project include electric vehicle charging stations. In accordance with CalGreen, 25% of the total number of parking spaces on the Project site, provided for all types of parking facilities, are required to be electric vehicle charging spaces (EV spaces) capable of supporting future electric vehicle supply equipment (EVSE) and 5% of the total number of parking spaces on a building site, provided for all types of parking facilities, are required to be electric vehicle charging stations (EVCS).

Off-Site Project Components

The Project site is surrounded to the north, east, and west by sidewalks and street trees. Mature Ficus trees line East Green Street while a mix of other street trees, including Holly Oaks, Camphor trees, and Kurrajong Bottletree, are located in the rights-of-way of South Hudson Avenue and South Oak Knoll Avenue. As shown in Figure 12, Tree Inventory, the proposed Project would be constructed such that the mature trees along East Green Street would be preserved in place, whereas some existing street trees along South Hudson Avenue and South Oak Knoll Avenue that are in poor health would be removed and replaced with new trees. All street/public trees proposed for removal would be removed and replaced per the City's Municipal Code Section 8.52.010. It is anticipated that tree-trimming would be required to accommodate the demolition and/or construction equipment to the trees lining East Green Street. **Moreover, the Applicant conducted a Protected Tree Report prepared by a certified arborist on February 4, 2022 (included as Attachment C to the Final MND) which made recommendations in compliance with the City's Municipal Code.**

New driveways and curb/gutter construction would be required to accommodate the driveway on South Oak Knoll Avenue and the driveway and loading/unloading dock on South Hudson Avenue. Trenching would be required to make connections for electrical service, water service, sanitary sewer, storm drain, gas service, and telecommunications.

Short-Term Construction Activities

Project demolition activities would begin in approximately May 2023, and construction activities would end approximately December 2025, approximately 34 months later.² Construction activities would occur in one phase, with the occupancy of the property expected in the January 2026. Construction activities could take place Monday to Friday between 7:00 a.m. and 7:00 p.m. and Saturday between 8:00 a.m. to 5:00p.m., per the City Noise Ordinance, Section 9.36.070 of the Municipal Code.

Table 1-3, Estimated Construction Activities provides a summary of the Project's anticipated construction phases, equipment and schedule, which are used in consideration of short-term construction related impacts.

² **The analysis in this IS/MND assumes a construction start date of May 2023. Upon reevaluation of a realistic schedule, construction is anticipated to begin at a later date. However, using an earlier start date for construction represents a more conservative assessment of construction impacts because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years. Therefore, no remodeling of Air Quality, Greenhouse Gas, or Energy is required due to a delay in construction.**

Table 1-3. Estimated Construction Activities

Construction Phase	One-Way Vehicle Trips			Equipment			Schedule	
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Types	Quantity	Usage Hours	Start Date	Finish Date
Demolition	16	0	546	Rubber-Tired Dozers	2	8	06/01/2023	06/30/2023
				Excavators	3	8		
				Concrete/Industrial Saws	1	8		
Grading	20	0	5,094	Excavators	2	8	07/01/2023	09/30/2023
				Graders	1	8		
				Rubber Tired Dozers	1	8		
				Scrapers	2	8		
				Tractors/Loaders/Backhoes	2	8		
Trenching	4	0	0	Trenchers	1	8	07/01/2023	12/31/2024
Building Construction	288	68	0	Cranes	1	7	10/01/2023	12/31/2024
				Forklifts	3	8		
				Generator Sets	1	8		
				Tractors/Loaders/Backhoes	3	7		
				Welders	1	8		
Paving	16	0	0	Pavers	2	8	09/01/2025	12/31/2025
				Paving Equipment	2	8		
				Rollers	2	8		
Architectural Coating	58	0	0	Air Compressors	1	6	01/01/2025	12/31/2025

Notes: See Appendix A for details.

Discretionary Actions

The proposed Project site is located in the CD-4 Zoning District of the City of Pasadena. ~~The Project Applicant requests the establishment of a Planned Development No. 37 (PD 37) zoning district (via a Zone Change) for the Project site and adoption of a PD Plan that prescribes the development standards and allowed or conditionally allowed uses in the PD No. 37 Zone.~~ In order to construct up to 263 residential units, the Project Applicant proposes to use the State Density Bonus regulations legislated by the California Government Code Section 65915 as well as the City’s Affordable Housing Concession Menu. ~~In the City’s Central District (CD) Zone, a PD Plan may not authorize a greater height than that permitted in the CD. Per the PD Plan, the proposed maximum permitted density for the Project site would be 87 dwelling units per acre (du/acre), or 203 units. However, with~~ **With** the inclusion of 41 affordable housing units, the Project would be eligible for a 30% density bonus; thus, increasing the maximum allowed density to 263 units. Under the State’s Bonus Density Law, and the City’s Affordable Housing Concession Menu, the Project Applicant is able to request two concessions to the City’s development standards established by the City’s Zoning Code. Because the proposed Project would include 20% on-site affordable housing units, the Project would comply with the City’s Inclusionary Housing Ordinance, which would allow the Project to utilize the City’s concessions of FAR increase of 0.5 and a height increase of 12 feet for no more than 60% of the building footprint.

The Project Applicant is requesting the following concessions:

- The Project Applicant is requesting to increase the Project's floor area ratio from 2.0 to 2.5.
- The Project site is located within an area that establishes a maximum height limit of 35 feet along Green Street in the northern portion and up to 50 feet along Hudson Avenue and Oak Knoll Avenue in the southern portion. The Project Applicant is requesting a height limit increase of 12 feet, in order for the northern portion to be built to a maximum height of 47 feet and the southern portion to be built to a maximum height of 62 feet.

~~The City's process for reviewing the PD Plan begins with the Design Commission, which advises the City's Planning Commission. The Planning Commission reviews the proposal and makes a recommendation to the City Council. The City Council is the decision maker for the requested entitlements and may make recommendations to approve, revise, or deny the proposed Project. Permits and approvals required from the City of Pasadena for development of the proposed Project are anticipated to include, but are not limited to, the following:~~

- ~~• Planned Development, which includes:~~
 - ~~○ Zone Map Amendment to change the zoning designation of the site from CD-4 to Planned Development No. 37 (PD 37)~~
 - ~~○ PD Plan that prescribes allowed and conditionally allowed uses, applicable development standards, and conditions of approval~~
- Design Review approval
- All other ~~discretionary~~ and ministerial permits needed to implement the Project, **such as grading and building permits**

9. Surrounding land uses and setting:

As shown in Figure 1, Project Location, the proposed Project site is located in an urbanized area of the City of Pasadena. Land uses surrounding the Project site are disparate and include a wide variety of commercial, office, residential, and mixed-use land uses per the CD-4 and CD-5 zoning.

Land uses to the north of the Project site across Green Street include an office building, retail uses, and a multi-level parking structure. Building heights range from single-story to 5-story structures along Green Street. Land uses located further north include retail, surface parking and a 9-story office building.

Land uses to the east of the Project site across Hudson Avenue include a 4-story mixed-use residential building and surface parking along Hudson Avenue. Land uses located further east include multi-level, mixed-use residential/retail development, surface parking, and office uses.

Land uses to the south of the Project site include medical office and a church. Building heights range from 1-story to 2-story structures just south of the property line. Land uses located further south include multi-level, multi-family residential development, surface parking, and office uses.

Land uses to the west of the Project site across Oak Knoll Avenue include a retail uses and single- and multi-family residential. Building heights range from single-story to 4-story structures along Oak Knoll Avenue. Land uses located further west include multi-level, multi-family residential development, retail, and surface parking.

10. Other public agencies whose approval is required:

No discretionary approvals from other public agencies are expected to be required.

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?

Yes, see Section 2.18, Tribal Cultural Resources.

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.

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

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	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 revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one 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.
<input type="checkbox"/>	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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Prepared By

Date

Reviewed By

Date

Printed Name

Printed Name

Negative Declaration/Mitigated Negative Declaration adopted on: _____

Adoption attested to by: _____
Signature

Date

Printed name

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 may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (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 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 “Earlier Analyses,” as described in (5) below, may be cross-referenced).
5. Earlier analyses 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. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - 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 document and the extent to which they 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. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. 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 significance.

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SECTION II. ENVIRONMENTAL CHECKLIST FORM

Background

Date checklist submitted: December 3, 2020

Department requiring checklist: Planning and Community Development Department

Case Manager: David Sinclair, Jennifer Driver

2.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Would the project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. Scenic vistas generally refer to views of expansive open space areas or other natural features, such as mountains, undeveloped hillsides, large natural water bodies, or coastlines. Less commonly, certain urban settings or features, such as a striking or renowned skyline, may also represent a scenic vista. Scenic vistas generally refer to views that are accessible from public vantage points, such as public roadways and parks. According to the City’s General Plan Draft EIR, the City of Pasadena is known for its numerous scenic resources, including historic buildings, pristine residential areas, and natural areas of Arroyo Seco, Eaton Wash, and the San Rafael Hills (City of Pasadena 2015a). Scenic vistas in Pasadena include certain views of the San Gabriel Mountains, the Arroyo Seco Corridor, and Eaton Canyon (City of Pasadena 2015a).

The proposed Project is not within the general vicinity or view corridor of either the Arroyo Seco or Eaton Canyon. Limited views of the San Gabriel Mountains are available from the City’s north–south roadway corridors; however, views are largely obscured by distance and urban development, including buildings, utility infrastructure, and signage. Potential effects of the proposed Project on public views of the San Gabriel Mountains are characterized below.

Oak-Knoll Avenue: Oak Knoll Avenue is a north-south running arterial that borders the Project site’s western perimeter. North-facing views of the San Gabriel Mountains are not readily available from Oak

Knoll Avenue where it traverses west of the Project site due to prevailing urban development and ornamental vegetation (i.e. mature street trees), which obstruct views of the San Gabriel Mountains. Additionally, the proposed Project would not include any infrastructure or building features that would encroach into the Oak Knoll Avenue ROW.

South Hudson Avenue: South Hudson Avenue is a north-south running arterial that borders the Project site's eastern perimeter. On clear days (i.e. days with high visibility), partial north-facing views of the San Gabriel Mountains are available from Hudson Avenue; however, are obstructed by urban development and ornamental vegetation (i.e. mature street trees). The proposed Project would not include any infrastructure or building features that would encroach into the Hudson Avenue ROW and, upon operation, the proposed Project would not result in any changes to the existing views of the mountains from Hudson Avenue.

Cordova Street: Cordova Street is an east-west running arterial that borders the southern perimeter of the block on which the Project site is located. North-facing views of the San Gabriel Mountains are generally obstructed by urban development and ornamental landscaping from Cordova Street in the vicinity of the Project site. The proposed Project would not be visible from Cordova Street, and, as such, the proposed Project would have no impact on north-facing views of the San Gabriel Mountains from Cordova Street.

In summary, obstructed views of the San Gabriel Mountains are available from one or more public viewpoints, including from public roadways surrounding the Project site. However, these existing views are limited due to obstructions typical of urban development, such as utility poles, street trees, and commercial and residential development. The proposed Project would introduce new development to the Project site, which would reach a maximum height of 62 feet. However, due to its location, the proposed Project would not further obstruct existing views of the San Gabriel Mountains beyond existing conditions from motorists and pedestrians traveling along Oak Knoll Avenue, Hudson Avenue, and Cordova Street.

Additionally, motorists and pedestrians are transient, and their views of the mountains are fleeting (temporary and brief) by nature. Therefore, longer-term views of the mountains for pedestrians and motorists would not be affected. As such, the introduction of a new structure on the Project site would not have a substantial adverse effect on a scenic vista, including views of the San Gabriel Mountains. The proposed Project would have a less than significant impact on scenic vistas. No mitigation is required.

b) Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The proposed Project is not within the immediate vicinity of a state designated scenic highway. The California Department of Transportation (Caltrans) classifies the I-210 as an Eligible State Scenic Highway (not officially designated) where it runs from the I-5 near Tunnel Station to State Route (SR-) 134 (Caltrans 2020). However, the Project site is located 1.2-mile southeast of the I-210 and would not be visible from the highway. The nearest Designated State Scenic Highway is the SR-2 where it traverses the San Gabriel Mountains from La Canada/Flintridge to San Bernardino County (USGS 2019a). However, the Project site is located 6.5 miles southeast of the SR-2 and would not be visible from the highway. As such, the proposed Project would have no impact on any scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

- c) **In non-urbanized areas, would the project 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 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?**

Less Than Significant Impact. The Project site and surrounding area are generally characterized by disparate commercial and multi-family residential land uses that are inconsistent in size, style, and, as such, lack visual cohesion and uniformity. Vegetation on the Project site is limited to 12 on-site trees and two sparse planter beds, which would be removed under the proposed Project. The only distinct visual element on the project site and/or in the vicinity are the mature ficus trees along Green Street.

As shown in Figures 9-10a through 9-10c, the proposed Project would develop mixed-use residential and ~~commercial~~ **office** buildings consisting of up to 263 rental apartment units, approximately ~~16,481~~ **14,346** sf of ~~commercial~~ **office** development (e.g. retail, restaurant), and a 4,110 ~~4,033~~ sf publicly accessible pocket park.

As shown in Figure 9-10b, North and South Elevations, the massing of the buildings would be setback from Green Street. Additionally, the existing mature ficus trees along Green Street would be preserved. Figure 9-10b, North and South Elevations, depicts the Project site from the southern boundary of the Project site. As shown, the pocket park would be located adjacent to the existing off-site church on the south side of the Project site in order to transition the land uses and set back the proposed buildings from surrounding land uses.

The height and setback variations proposed for the mixed-use development would allow for the visual dispersal of the Project's density by utilizing step-down massing between floors. Passive solar shading would occur along the paseo/breezeway while solar gain would occur in the proposed community areas, pool deck, patios, and rooftop decks. The proposed mixed-use Project would be contemporary in style; however, the building would incorporate design elements found in many of the historic Spanish Revival buildings that define Pasadena's architecture. The aesthetic design goal of the proposed Project is to provide a form, proportion, and articulation that relates to similar architectural approaches throughout the urban areas of Pasadena and maintains a clean and streamlined composition conveyed in a contemporary manner. As shown in the renderings illustrated in Figures 9-10a through 9-10c, architectural materials incorporated into Project design would include white and accent plaster, accent tile, metal railing, vinyl window frames and door frames, and glass guard railing. The design of the proposed Project is intended to be consistent with the visual character and quality of the project site and surrounding area by incorporating a project that is compatible with Pasadena's Spanish Revival architectural history and also visually consistent with the style and aesthetic of existing contemporary buildings in Pasadena.

With regard to the distinctive mature ficus trees on Green Street, as shown in Figure 12, Tree Inventory, the proposed Project would be constructed such that the mature trees along East Green Street would be preserved in place, whereas those existing street trees along South Hudson Avenue and South Oak Knoll Avenue that are in poor condition would be removed and replaced with new trees. All street/public trees proposed for removal are in poor condition and would be removed per the City's municipal code Section 8.52.010. It is anticipated that tree-trimming would be required to accommodate the demolition and/or construction equipment to the trees lining East Green Street. Any tree trimming would be carried out according to City standards to protect the health of the trees. **Moreover, the Applicant conducted a**

Protected Tree Report prepared by a certified arborist on February 4, 2022 (included as Attachment C to the Final MND) which made recommendations in compliance with the City’s Municipal Code.

The General Plan policies specific to the aesthetic character and quality of development within the City, as well as the applicable City Municipal Code and Central District Specific Plan requirements that affect aesthetic character are listed and analyzed in Table 2.1-1, General Plan Policy/Programs, Municipal Code, and Specific Plan Consistency Analysis.

Table 2.1-1. General Plan Policy/Programs, Specific Plan, and Municipal Code Consistency Analysis

Applicable Policy/Regulation	Consistency Analysis
<i>General Plan, Land Use Element</i>	
<p>Policy 3.1 High-Impact Uses. Avoid the concentration of uses and facilities in any neighborhood or district where their intensities, operations, and/or traffic could adversely impact the character, safety, health, and quality of life.</p>	<p>Consistent. The proposed Project would not include a high-impact use that would adversely impact the aesthetic character of the Project site or the surrounding area. The design of the proposed Project is intended to be consistent with the visual character and quality of the Project site and surrounding area by incorporating a project that is compatible with Pasadena’s Spanish Revival architectural history and also visually consistent with the style and aesthetic of existing contemporary buildings in Pasadena. See Section 2.1(c) for additional details.</p>
<p>Policy 4.2 A Diversity of Places. Maintain and enhance the City’s urban form with distinct, compact, and walkable areas with a diversity of uses, densities, and characters. Offer choices for living, working, shopping, and recreation consistent with community values, needs, and demographics.</p>	<p>Consistent. The proposed Project is a mixed-use project that would provide residential, commercial <u>office</u>, and public open space uses. The proposed Project would include pedestrian paseos and a central breezeway, as well as a public pocket park, all of which would contribute to the walkability of the Project site and adjacent streets.</p>
<p>Policy 4.10 Architecture that Enhances. Locate and design buildings to relate to and frame major public streets, open spaces, and cityscape. New development at intersections should consider any number of corner treatments, and should balance safety and accessibility concerns with the vision of the area and the need for buildings to engage the street and create a distinct urban edge.</p>	<p>Consistent. The height and setback variations proposed for the mixed-use buildings would allow for the visual dispersal of the Project’s density by utilizing step-down massing between floors. The proposed mixed-use Project would be contemporary in style; however, the building would incorporate design elements found in many of the historic Spanish Revival buildings that contribute to Pasadena’s architecture. The aesthetic design goal of the proposed Project is to provide a form, proportion, and articulation that relates to similar architectural approaches throughout the urban areas of Pasadena and maintains a clean and streamlined composition conveyed in a contemporary manner. The proposed Project would include a pocket park on Oak Knoll Avenue, which would serve to compliment the proposed Project’s step-down architectural design and integrate the Project density into the neighborhood.</p>

Table 2.1-1. General Plan Policy/Programs, Specific Plan, and Municipal Code Consistency Analysis

Applicable Policy/Regulation	Consistency Analysis
<p>Policy 4.11 Development that is Compatible. Require that development demonstrates a contextual relationship with neighboring structures and sites addressing such elements as building scale, massing, orientation, setbacks, buffering, the arrangement of shared and private open spaces, visibility, privacy, automobile and truck access, impacts of noise and lighting, landscape quality, infrastructure, and aesthetics.</p>	<p>Consistent. See response to Policy 4.10. For more information regarding land use impacts, noise impacts, and transportation impacts, see Sections 2.11, 2.13, and 2.17 of this IS/MND, respectively.</p>
<p>Policy 4.12 Transitions in Scale. Require that the scale and massing of new development in higher density centers and corridors provide appropriate transitions in building height and bulk and are sensitive to the physical and visual character of adjoining lower-density neighborhoods.</p>	<p>Consistent. See response to Policy 4.10.</p>
<p>Policy 6.1: Sense of Place and History. Require new development and changes to existing development to be located and designed to respect the defining elements of Pasadena’s character and history such as its grid street pattern, block scale, public realm, neighborhoods and districts, building massing and heights, significant architecture, and relationship to the mountains and Arroyo Seco.</p>	<p>Consistent. See response to Policy 4.10.</p>
<p>Policy 6.4 View sheds. Recognize and protect significant views of the San Gabriel Mountains, the Arroyo Seco, and other open spaces, along with views of significant structures such as the City Hall, Central Library and the Civic Auditorium.</p>	<p>Consistent. The proposed Project is not within the viewshed of the Arroyo Seco, City Hall, Central Library, or Civic Auditorium and would have a less than significant impact on significant views, including views of the San Gabriel Mountains. See Section 2.1(a) of this IS/MND for additional details.</p>
<p>Policy 6.5 Public Art. Integrate public art in private projects and in public spaces, including streetscapes, parks and civic spaces.</p>	<p>Consistent. The proposed Project would include a large public art space on the southwest corner of the Project site (on Oak Knoll Avenue), which would include a public art installation determined at a later date. Additionally, the proposed Project would provide a 4,1104,033 sf pocket park located on Oak Knoll Avenue, which would provide landscaped open space and pedestrian amenities in an area of the City that is largely developed and lacking such amenities.</p>

Table 2.1-1. General Plan Policy/Programs, Specific Plan, and Municipal Code Consistency Analysis

Applicable Policy/Regulation	Consistency Analysis
<p>Policy 7.1 Architectural Quality. Design each building as a high-quality, long term addition to the City’s urban fabric; exterior design and buildings material shall exhibit permanence and quality, minimize maintenance concerns, and extend the life of the building.</p>	<p>Consistent. The proposed Project would be designed to high architectural quality, using buildings materials that shall exhibit permanence and quality, minimize maintenance concerns, and extend the life of the building. As shown in the renderings illustrated in Figures 9-10a through 9-10c, architectural materials incorporated into Project design would include white and accent plaster, accent tile, metal railing, vinyl window frames and door frames, and glass guard railing. The design of the proposed Project is intended to imply long-term commitment to the City’s urban fabric by incorporating elements that are compatible with Pasadena’s Spanish Revival architectural history, visually consistent with the style and aesthetic of existing contemporary buildings in Pasadena, and consistent with the existing design guidelines intended to guide future development.</p>
<p>Policy 7.2: Architectural Diversity & Creativity. Allow for the development of a diversity of buildings styles. Support innovative and creative design solutions to issues related to context and environmental sustainability.</p>	<p>Consistent. As shown in the renderings illustrated in Figures 9-10a through 9-10c, architectural materials incorporated into Project design would include white and accent plaster, accent tile, wood texture composite siding, metal railing, vinyl window frames and door frames, and glass guard railing. The design of the proposed Project is intended to be consistent with the visual character and quality of the project site and surrounding area by incorporating a project that is compatible with Pasadena’s Spanish Revival architectural history and also visually consistent with the style and aesthetic of existing contemporary buildings in Pasadena. The Project would comply with the 2019 California Green Building Standards Code (CalGreen), which is codified in Section 14.04, Building Code and Related Codes of the City’s Municipal Code. In addition, sustainability features proposed as part of the Project include electric vehicle charging stations.</p>
<p>Policy 7.3: Compatibility. Require that new and adaptively re-used buildings are designed to respect and complement the defining built form, massing, scale, modulation, and architectural detailing of their contextual setting.</p>	<p>Consistent. See response to Policy 4.10.</p>
<p>Policy 7.4 Design Review. Require design review for new and redeveloped projects to assure compatibility with community character, while promoting creativity, innovation, and design quality.</p>	<p>Consistent. The proposed Project would be subject to the City’s design review process.</p>
<p>Policy 9.2 Urban Beautification. Embrace public arts as a citywide urban beautification effort. Build a collection of art in public places. Facilitate public art and public art partnerships with City Departments, private developers, and art and cultural organizations.</p>	<p>Consistent. See response to Policy 6.5.</p>
<p>Policy 9.4 Arts Contributions to a More Walkable City. Implement artist-designed crosswalks, murals, free-standing artworks and environments in pedestrian-oriented retail and entertainment districts.</p>	<p>Consistent. See response to Policy 6.5.</p>

Table 2.1-1. General Plan Policy/Programs, Specific Plan, and Municipal Code Consistency Analysis

Applicable Policy/Regulation	Consistency Analysis
<p>Policy 23.1 Character and Design. Design and modulate buildings to avoid the sense of “blocky” and undifferentiated building mass, incorporate well-defined entries, use building materials, colors, and architectural details complementing the neighborhood, while allowing flexibility for distinguished design solutions.</p>	<p>Consistent. See response to Policy 4.10 and Policy 7.2.</p>
<p>Policy 23.2 Parking Areas and Garages. Minimize the visibility of parking areas and garages.</p>	<p>Consistent. The proposed Project would provide a subterranean parking garage comprising two levels, which, with the exception of the entrance-exit, would not be visible from the street level.</p>
<p>Policy 23.3 Landscaped Setbacks and Walkways. Provide appropriate setbacks, consistent with the surrounding neighborhood, along the street frontage and, where there are setbacks, ensure adequate landscaping is provided.</p>	<p>Consistent. The proposed Project would provide the appropriate setbacks and sidewalks (per the LADOT requirements and the City’s Municipal Code), and would include 37,666 39,980 sf of open space, which includes the pocket park, paseo/breezeway and courtyards, pool courtyard and indoor recreation space, rooftop terraces, and private decks and patios.</p>
<p>Policy 23.5 Streetscapes. Provide ample public spaces and tree-lined sidewalks furnished with pedestrian amenities that contribute to comfortable and attractive settings for pedestrian activity.</p>	<p>Consistent. See response to Policy 6.5.</p>
<p>Policy 25.4 Architecture and Site Design. Require that new development protect community character by providing architecture, landscaping and urban design of equal or greater quality, and by respecting the architectural character and scale of adjacent buildings.</p>	<p>Consistent. See response to Policy 4.10 and Policy 7.2.</p>
<p>Policy 25.5 Connectivity to Neighborhoods. Link commercial areas to adjoining residential neighborhoods and other districts by well-designed and attractive streetscapes with pedestrian sidewalks and street amenities.</p>	<p>Consistent. See response to Policy 6.5.</p>
<p>Policy 25.7 Buffering Adjoining Residential Areas. Ensure commercial uses adjoining residential neighborhoods or mixed residential and commercial uses are designed to be compatible with each other.</p>	<p>Consistent. See response to Policy 6.5 and Policy 7.1.</p>

Table 2.1-1. General Plan Policy/Programs, Specific Plan, and Municipal Code Consistency Analysis

Applicable Policy/Regulation	Consistency Analysis
<p>Policy 28.2 Development Scale. Establish standards to assure that an adequate scale and footprint of any single use is achieved in mixed-use areas to establish a cohesive environment that minimizes impacts attributable to the adjacency of different uses. This may define minimum parcel and building size, number of housing units, and/or nonresidential square footage, as well as relationships and setbacks.</p>	<p>Consistent. With approval of the PD Zone Change and demonstrated compliance with the Affordable Housing Concession Menu, the proposed Project would construct up to 263 residential units through the State Density Bonus regulations legislated by Government Code Section 65916. In order to construct the additional residential units, the Project Applicant is requesting to exceed the maximum FAR of 2.0 by 0.5, resulting in a FAR of 2.5. Additionally, the Project Applicant is requesting to exceed the maximum height limit of 35 feet in the northern portion and the maximum height limit of 50 feet in the southern portion by 12 feet, resulting in a maximum height of 47 feet and 62 feet, respectively, as shown on Table 1-2. As also shown in Table 1-2, the Project would increase density from the current zoning of 60 du/acre to 113 du/acre. Thus, the Project proposes an increase in development scale compared to the existing conditions. The Project would include height and setback variations to allow for visual dispersal of the Project's density by utilizing step-down massing between floors and by increasing the setback at Oak Knoll Avenue from 5 feet to 10 feet. In addition, the aesthetic design goal of the proposed Project is to provide a form, proportion, and articulation that relates to similar architectural approaches throughout the urban areas of Pasadena and maintains a clean and streamlined composition conveyed in a contemporary manner. Therefore, upon Project approval, the proposed Project would be within the appropriate development scale as afforded by the Affordable Housing Concession Menu.</p>
<p>Policy 28.4 Design Integration. Require residential and nonresidential portions of mixed-use buildings and sites to be integrated through architectural design, development of pedestrian walkways and landscaping.</p>	<p>Consistent. The Project includes 37,666 39,980 sf of pedestrian amenities and open space, including a 4,110 4,033 sf pocket park, pool lounge and private outdoor space, all of which would provide landscaped pedestrian amenities and enhance walkability. Additionally, the proposed Project is located 500 feet south of Colorado Boulevard and the downtown Pasadena amenities, which would further encourage walkability.</p>
<p>Policy 31.2 Sub-District Identity. Enhance the distinctive, yet complementary nature of the Central District's sub-areas by recognizing and building on their unique attributes and features through signage, streetscape designs, design guidelines and encouraging new uses and infill development that fits with the vision of each sub-area.</p>	<p>Consistent. See response to Policy 4.10 and Policy 7.2.</p>
<p>Policy 31.4 Contextual Development in Historic Districts. Require new development within and adjacent to the historic districts to be compatible with the scale, density, and urban design features of existing historic buildings and districts.</p>	<p>Consistent. See response to Policy 4.10 and Policy 7.2.</p>

Table 2.1-1. General Plan Policy/Programs, Specific Plan, and Municipal Code Consistency Analysis

Applicable Policy/Regulation	Consistency Analysis
Policy 37.4 Visual Variety. Allow for a diversity of architectural design styles and building types contributing to the distinctive characteristics of the area’s intended artistic, cultural, and creative businesses.	Consistent. See response to Policy 4.10 and Policy 7.2.
City of Pasadena Municipal Code	
Chapter 2.80: Design Commission	Consistent. The proposed Project would be subject to the Design Commissions review and approval.
Chapter 8.52: City Trees and Tree Protection Ordinance	Consistent. Any trees removed under the proposed Project would be removed according to Chapter 8.52 of the City Municipal Code.
Chapter 17.40: General Property development and Use Standards	Consistent. With approval of the PD Zone Change and demonstrated compliance with the City’s Affordable Housing Concession Menu, the proposed Project would construct up to 263 residential units through the State Density Bonus regulations legislated by Government Code Section 65915. In order to construct the additional residential units, the Project Applicant is requesting to exceed the maximum FAR of 2.0 by 0.5, resulting in a FAR of 2.5. Additionally, the Project Applicant is requesting to exceed the maximum height limit of 35 feet in the northern portion and the maximum height of 50 feet in the southern portion by 12 feet resulting in a maximum height of 47 feet and 62 feet, respectively, as shown on Table 1-2. As also shown in Table 1-2, the Project would increase density from the current zoning of 60 du/acre to 113 du/acre. Thus, the Project proposes to deviate from existing general property and development standards with regards to height and density. As previously addressed, the Project would include height and setback variations to allow for visual dispersal of the Project’s density by utilizing step-down massing between floors and by increasing the setback at Oak Knoll Avenue from 5 feet to 10 feet. In addition, the aesthetic design goal of the proposed Project is to provide a form, proportion, and articulation that relates to similar architectural approaches throughout the urban areas of Pasadena and maintains a clean and streamlined composition conveyed in a contemporary manner. Thus, the Project’s deviation from such general property and design standards would not result in significant impacts to visual quality. Further, the City’s process for reviewing the PD plan begins with Design Commission to review the Project amongst applicable development standards. Upon approval, the Project would be consistent with the general property and development use standards as determined by the PD zone. The Project would comply with all of the City’s development standards, including but not limited to, the City’s outdoor lighting ordinance, walls and fences guidelines, and public art requirements (as set forth in Chapter 17.40 of the Municipal Code). Furthermore, the proposed Project would be subject to the City’s design review and approval process.
Chapter 17.44: Landscaping	Consistent. The proposed Project would adhere to the City’s landscaping requirements and all landscaping plans would be submitted to the City for review and approval prior to implementation of the proposed Project.
Section 17.61.030: Design Review	Consistent. The proposed Project would be subject to the City’s design review and approval.

Table 2.1-1. General Plan Policy/Programs, Specific Plan, and Municipal Code Consistency Analysis

Applicable Policy/Regulation	Consistency Analysis
<i>Central District Specific Plan, District-Wide Urban Design Concept</i>	
<p>Downtown Linkages: It has been noted that the planning concept for Downtown emphasizes diverse Sub-districts that are interconnected and complementary of one another. This component addresses the multiple physical and visual linkages that create a more integrated and accessible Downtown, especially from a pedestrian point-of-view.</p>	<p>Consistent. The proposed Project is a mixed-use project that would provide residential, commercial-office, and public open space uses. The proposed Project would include pedestrian paseos and a central breezeway, as well as a public pocket park, all of which would enhance the walkability and connectivity of the Project site and adjacent streets. Additionally, the proposed Project would be located along Green Street and 500 feet south of Colorado Boulevard and, thus, integrated within and accessible to the amenities of downtown Pasadena.</p>
<p>The Public Realm: An engaging public realm is important to the development of any great city. Pasadena’s residents also believe that their quality of life is related to the provision of accessible outdoor space that not only serves their recreational needs, but also finds a balance between built and natural resources. Building on the notion of a well-connected Downtown, this component describes a District-wide network of key pedestrian streets, public parks and civic spaces.</p>	<p>Consistent. The proposed Project is a mixed-use project that would provide residential, commercial-office, and public open space uses. The proposed Project would include pedestrian paseos and a central breezeway, as well as a public pocket park, all of which would contribute to the walkability and connectivity of the Project site and adjacent streets. Also see Section 2.16, Recreation.</p>
<p>Public - Private Interface: A vibrant and economically vital Downtown is best served by private developments that positively contribute to the public realm. This demands close interaction between Downtown’s buildings and its streets; the essential treatment of building setbacks, orientation and use is discussed. Signage is also addressed.</p>	<p>Consistent. The proposed Project is a mixed-use project that would provide residential, commercial-office, and public open space uses. The proposed Project would include pedestrian paseos and a central breezeway, as well as a public pocket park, all of which would contribute to the walkability and connectivity of the Project site and adjacent streets, while positively contributing to the public realm.</p>
<p>The Private Realm: Although this component is referred to as “The Private Realm,” because it establishes limitations on private development projects, these concepts have a profound impact on the quality and livability of the Downtown environment. Height recommendations work in concert with the FAR proposal to describe the basic three-dimensional character of Downtown. Additional development standards and design guidelines further regulate development in the Downtown.</p>	<p>Consistent. The City’s process for reviewing the PD plan begins with Design Commission to review the Project amongst applicable development standards. The review process for this Project would establish limitations on private development projects. As previously discussed, the Project proposes to deviate from existing development standards with regards to FAR, height and density. The Project would include height and setback variations to allow for visual dispersal of the Project’s density by utilizing step-down massing between floors and by increasing the setback at Oak Knoll Avenue from 5 feet to 10 feet. In addition, the aesthetic design goal of the proposed Project is to provide a form, proportion, and articulation that relates to similar architectural approaches throughout the urban areas of Pasadena and maintains a clean and streamlined composition conveyed in a contemporary manner. Thus, the Project’s deviation from such design standards would not result in significant impacts to visual quality. With approval of the proposed Project’s Zone Change to PD and demonstrated compliance with the City’s Affordable Housing Concession Menu, the proposed Project would be consistent with City’s land use plans and development standards.</p>

Source: City of Pasadena 2004; City of Pasadena 2015b

As described above in Table 2.1-1, the proposed Project would be consistent with the City's General Plan policies, Municipal Code Sections, and Specific Plan concepts that pertain to the preservation of the scenic quality of the City. With ~~approval of the Project site's zone change to PD and~~ demonstrated compliance with the City's Affordable Housing Concession Menu, the proposed Project would be consistent with the City's zoning. Furthermore, proposed Project design would add architectural and landscape features that would contribute to the visual quality of the Project site and the Project area.

Given the above, the proposed Project would not conflict with applicable zoning and other regulations governing scenic quality; rather, the proposed Project would develop a new ~~commercial~~ **office** mixed-use development project that would be designed specifically with Pasadena's architectural history in mind. Therefore, impacts would be less than significant. No mitigation is required.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. Lighting is of most concern when it may spill over or trespass from a Project site onto sensitive surrounding land uses, such as residential properties, resulting in nuisance. The proposed Project is located in a commercial segment of the Specific Plan and is approximately 500 feet south of the City's main downtown thoroughfare, Colorado Boulevard. The Project site is surrounded by commercial and residential land uses. Existing sources of daytime and nighttime light include streetlights, business identification signs, building and landscape accent lights, safety lights, and lit windows.

Any lighting that would be implemented as part of the proposed Project would adhere to the City's Municipal Code, Section 17.40.080, which establishes the standards for exterior lighting in the City. In summary, the standards require: that lighting be energy efficient and shielded or recessed so that direct glare and reflections are confined to the maximum extent practicable and directed downward and away from adjoining properties; lights shall not blink, flash, or be of high intensity or brightness; and, lighting be appropriate in scale, intensity, and height.

Similarly, extraneous glare associated with the use of highly reflective building materials (glass, steel etc.) could result in nuisance to surrounding land uses. The proposed Project would include some reflective building materials such as glass and steel; however, these materials would be utilized in a manner consistent with Municipal Code, Section 17.40.080, which requires that any proposed land use or activity producing glare be shielded so that glare is not perceptible beyond the property line. As such, compliance with City regulations would ensure that the proposed Project would have a less than significant impact regarding the creation of a new source of substantial light or glare, which would adversely affect day or nighttime views in the area. No mitigation is required.

2.2 AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the project 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?

No Impact. The City does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP (DOC 2019). As such, there are no designated farmlands on or near the Project site and the proposed Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Additionally, the Project site is located in an urban area on a site that is fully developed with buildings and asphalt paving, which precludes agricultural activities. No impact would occur.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project site is located in an urban area on a site that is fully developed with buildings and asphalt paving, which precludes agricultural activities. The Project site is designated CD-4 (Central District), which does not allow for agricultural land use activities. ~~Similarly, the proposed Zone Change (to PD) associated with the proposed Project would not allow for agricultural activities.~~ There are no agricultural land use zones or lands under Williamson Act contracts on or near the Project site under existing conditions (DOC 2016). Given this, the proposed Project would not conflict with existing zoning for agricultural use or with a Williamson Act contract.

c) Would the project 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))?

No Impact. As stated above, the Project site is fully developed under existing conditions, and is located in an urban area of downtown Pasadena. The proposed Project would not conflict with existing zoning, proposed zoning, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. Additionally, the Project site is surrounded by urban development and is not within the general or local vicinity of forest land or timberland. As such, no impact would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As stated above, the Project site is fully developed under existing conditions, and is located in an urban area of downtown Pasadena. The Project site is zoned, ~~and proposed to be zoned,~~ for ~~commercial~~ office and multi-family uses and would not conflict with existing zoning, proposed zoning, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. Additionally, the Project site is surrounded by urban development and is not within the general or local vicinity of forest land or timberland. As such, the proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. As stated above in Section 2.2(c) and (d), the Project site is located in an urban area, is surrounded by developed land uses and there is no farmland or forest land on or near the Project site. The proposed Project would include a mixed-use development with residential and ~~commercial~~ office land uses, and would not entail land uses that involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.

2.3 AIR QUALITY

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The proposed Project site is located within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County, and is within the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD).

The SCAQMD administers the Air Quality Management Plan (AQMP) for the SCAB, which is a comprehensive document outlining an air pollution control program for attaining all California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). The most recent adopted AQMP is the 2016 AQMP (SCAQMD 2017), which was adopted by the SCAQMD Governing Board in March 2017. The 2016 AQMP focuses on available, proven, and cost-effective alternatives to traditional strategies while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases (GHGs) and toxic risk, as well as efficiencies in energy use, transportation, and goods movement (SCAQMD 2017).

The purpose of a consistency finding is to determine if a proposed Project is inconsistent with the assumptions and objectives of the regional air quality plans, and, thus, if it would interfere with the region’s ability to comply with federal and state air quality standards. The SCAQMD has established criteria for determining consistency with the currently applicable AQMP in Chapter 12, Sections 12.2 and 12.3, in the SCAQMD CEQA Air Quality Handbook. The criteria are as follows (SCAQMD 1993):

- **Consistency Criterion No. 1:** Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP.

- **Consistency Criterion No. 2:** Whether the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

To address the first criterion regarding the proposed Project's potential to result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP, Project-generated criteria air pollutant emissions were estimated and analyzed for significance and are addressed under Section 2.3(b). Detailed results of this analysis are included in Appendix A, CalEMMod Outputs. As presented in Section 2.3(b), construction and operation of the proposed Project would not generate criteria air pollutant emissions that exceed the SCAQMD's thresholds, and it would therefore be consistent with Criterion No. 1.

The second criterion regarding the Project's potential to exceed the assumptions in the AQMP or increments based on the year of Project buildout and phase is primarily assessed by determining consistency between the project's land use designations and potential to generate population growth. In general, projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook). The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by the Southern California Association of Governments (SCAG) for its Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2016), which is based on general plans for cities and counties in the SCAB, for the development of the AQMP emissions inventory (SCAQMD 2017).³ The SCAG 2016 RTP/SCS, and associated Regional Growth Forecast, are generally consistent with the local plans; therefore, the 2016 AQMP is generally consistent with local government plans.

As discussed in the introduction to Section I of this IS/MND, Existing Land Use and Zoning Designations, the General Plan land use designation for the proposed Project site is Medium Mixed-Use, and the zoning designation is CD-4 (Central District, Pasadena Playhouse). The Medium Mixed-Use designation is intended to support the development of multi-story buildings with a variety of compatible ~~commercial (retail and office)~~ and residential uses. The proposed base density allowed according to CD-4 zone standards is 87 dwelling units per acre, which allows for up to 203 units. With the addition of the 41 affordable housing units, and the associated 30% affordable housing density bonus, the Project proposes a total of 263 units, including 87 studio units, 125 one-bedroom units, and 51 two-bedroom units. Based on the unit count and number of bedrooms, a total of 39,450 square feet of open space is required. The Project incorporates ~~39,483~~ **39,980** square feet of open space, which includes ~~27,180~~ **27,795** square feet of common open space, ~~41,703~~ **11,585** square feet of private open space, and 600 square feet of interior common open space. Thus, the Project would not require a land use change.

³ Information necessary to produce the emission inventory for the SCAB is obtained from the SCAQMD and other governmental agencies, including the California Air Resources Board, Caltrans, and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socioeconomic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into its Travel Demand Model for estimating/projecting vehicle miles traveled and driving speeds. SCAG's socioeconomic and transportation activities projections in their 2016 RTP/SCS are integrated in the 2016 AQMP (SCAQMD 2017).

The Project site is well-located to encourage the use of public transit and active transportation modes. The Project site is currently served by LA Metro, Foothill Transit, LA Department of Transportation, and Pasadena Transit. Furthermore, the Project would be a mixed-use development, providing a mix of retail, restaurant, and residential uses that could result in a reduction of vehicle miles traveled and associated air emissions from the resident's trips to work and other activities. Accordingly, the Project is consistent with the SCAG RTP/SCS forecasts used in the SCAQMD AQMP development.

In summary, based on the considerations presented for the two criteria, impacts relating to the Project's potential to conflict with or obstruct implementation of the applicable AQMP would be less than significant. No mitigation is required.

b) Would the project 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?

Less Than Significant Impact. Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulatively considerable contribution on air quality. If a project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003).

A quantitative analysis was conducted to determine whether proposed construction activities would result in a cumulatively considerable net increase in emissions of criteria air pollutants for which the SCAB is designated as nonattainment under the NAAQS or CAAQS. Criteria air pollutants include ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM_{2.5}), and lead. Pollutants that are evaluated herein include volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which are important because they are precursors to O₃, as well as CO, sulfur oxides (SO_x), PM₁₀, and PM_{2.5}.

Regarding NAAQS and CAAQS attainment status,⁴ the SCAB is designated as a nonattainment area for national and California O₃ and PM_{2.5} standards (CARB 2018; EPA 2018a). The SCAB is designated as a nonattainment area for California PM₁₀ standards; however, it is designated as an attainment area for national PM₁₀ standards. The SCAB nonattainment status of O₃, PM₁₀, and PM_{2.5} standards is the result of cumulative emissions from various sources of air pollutants and their precursors within the SCAB, including motor vehicles, off-road equipment, and commercial and industrial facilities. The SCAB is designated as an attainment area for national and California NO₂, CO, and SO₂ standards. Although the

⁴ An area is designated as in attainment when it is in compliance with the NAAQS and/or the CAAQS. The NAAQS and CAAQS are set by the Environmental Protection Agency (EPA) and California Air Resources Board (CARB), respectively, for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. Attainment = meets the standards; attainment/maintenance = achieve the standards after a nonattainment designation; nonattainment = does not meet the standards.

SCAB has been designated as partial nonattainment (Los Angeles County) for the federal rolling 3-month average lead standard, it is designated attainment for the state lead standard.⁵

The SCAQMD has established Air Quality Significance Thresholds, as revised in April 2019, which set forth quantitative emissions significance thresholds below which a project would not have a significant impact on ambient air quality (SCAQMD 2019). The quantitative air quality analysis provided in this section (Section 2.3) applies the SCAQMD thresholds to determine the potential for the Project to result in a significant impact under CEQA, as presented in Table 2.3-1.

Table 2.3-1. SCAQMD Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	Construction (Pounds per Day)	Operation (Pounds per Day)
VOC	75	55
NO _x	100	55
CO	550	550
SO _x	150	150
PM ₁₀	150	150
PM _{2.5}	55	55
Lead ^a	3	3
Toxic Air Contaminants (TACs) and Odor Thresholds		
TACs ^b (including carcinogens and noncarcinogens)	Maximum incremental cancer risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic and Acute Hazard index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality Standards for Criteria Pollutants^c		
NO ₂ 1-hour average NO ₂ annual arithmetic mean	SCAQMD is in attainment; proposed project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.030 ppm (state) and 0.0534 ppm (federal)	
CO 1-hour average CO 8-hour average	SCAQMD is in attainment; proposed 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)	
PM ₁₀ 24-hour average PM ₁₀ annual average	10.4 µg/m ³ (construction) ^d 2.5 µg/m ³ (operation) 1.0 µg/m ³	
PM _{2.5} 24-hour average	10.4 µg/m ³ (construction) ^d 2.5 µg/m ³ (operation)	
SO ₂ 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal- 99 th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 µg/m ³ (state)	

⁵ Re-designation of the lead NAAQS designation to attainment for the Los Angeles County portion of the SCAB is expected based on current monitoring data. The phase out of leaded gasoline started in 1976. Since gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

Table 2.3-1. SCAQMD Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds	
CO	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: ^a
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)

Source: SCAQMD 2019.

SCAQMD = South Coast Air Quality Management District; VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; TAC = toxic air contaminant; NO₂ = nitrogen dioxide; ppm = parts per million; µg/m³ = micrograms per cubic meter.

- ^a The phase-out of leaded gasoline started in 1976. Since gasoline no longer contains lead, the proposed Project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.
- ^b TACs include carcinogens and non-carcinogens.
- ^c Ambient air quality standards for criteria pollutants are based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.
- ^d Ambient air quality threshold are based on SCAQMD Rule 403.

A project would result in a substantial contribution to an existing air quality violation of the NAAQS or CAAQS for O₃, which is a nonattainment pollutant, if the project’s construction or operational emissions would exceed the SCAQMD VOC or NO_x thresholds shown in Table 2.3-1. These emission-based thresholds for O₃ precursors are intended to serve as a surrogate for an “ozone significance threshold” (i.e., the potential for adverse O₃ impacts to occur) because O₃ itself is not emitted directly, and the effects of an individual project’s emissions of O₃ precursors (VOCs and NO_x) on O₃ levels in ambient air cannot be determined through air quality models or other quantitative methods.

The following discussion quantitatively evaluates Project-generated emissions and impacts that would result from implementation of the proposed Project.⁶

Construction Emissions

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity; the specific type of operation; and, for dust, the prevailing weather conditions. Therefore, an increment of day-to-day variability exists and, as a result, such emission levels can only be approximately estimated.

Emissions from the construction phase of the proposed Project were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. For emission estimation purposes, demolition and construction is assumed to begin in May 2023 and conclude in December 2025.⁷ A detailed depiction

⁶ The analysis in this IS/MND represents a conservative analysis since the revisions to the Project Description, as shown in Section I of this document, include a decrease of approximately 2,000 square feet of office use, which would result in an incremental decrease in operational impacts accordingly.

⁷ The analysis in this IS/MND assumes a construction start date of May 2023. In practice, construction is anticipated to begin at a later date. However, using an earlier start date for construction represents a conservative scenario for construction impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

of expected construction schedules—including information regarding phasing, equipment used during each phase, trucks, and worker vehicles—is provided in Appendix A. The analysis assumes a construction start date of May 2023, which represents the earliest date construction would initiate. In the event construction is started later than May 2023, the analysis performed represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

The construction equipment mix used and estimated hours of operation per day for estimating the construction emissions of the proposed Project are based on CalEEMod default assumptions and are shown in Table 2.3-2. For this analysis, it was assumed that heavy construction equipment would operate 5 days a week during Project construction.

Table 2.3-2. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment			Schedule	
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Types	Quantity	Usage Hours	Start Date	Finish Date
Demolition	16	0	546	Rubber Tired Dozers	2	8	06/01/2023	06/30/2023
				Excavators	3	8		
				Concrete/Industrial Saws	1	8		
Grading	20	0	5,094	Excavators	2	8	07/01/2023	09/30/2023
				Graders	1	8		
				Rubber Tired Dozers	1	8		
				Scrapers	2	8		
				Tractors/Loaders/Backhoes	2	8		
Trenching	4	0	0	Trenchers	1	8	07/01/2023	12/31/2024
Building Construction	288	68	0	Cranes	1	7	10/01/2023	12/31/2024
				Forklifts	3	8		
				Generator Sets	1	8		
				Tractors/Loaders/Backhoes	3	7		
				Welders	1	8		
Paving	16	0	0	Pavers	2	8	09/01/2025	12/31/2025
				Paving Equipment	2	8		
				Rollers	2	8		
Architectural Coating	58	0	0	Air Compressors	1	6	01/01/2025	12/31/2025

Notes: See Appendix A for details.

Demolition of on-site existing buildings and asphalt is anticipated to generate a total of 5,515 tons of demolition debris. Export of demolition material is anticipated to require 273 round haul truck trips (546 one-way trips). It is anticipated that no fill material would be imported, and 40,741 cubic yards would be exported during construction. Assuming a haul truck capacity of 16 cubic yards per truck, it is anticipated that 2,547 round haul truck trips (5,094 one-way trips) would be required to export excavated material off site.

The Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during any dust-generating activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active dust areas three times per day, with additional watering depending on weather conditions. The Project would involve application of architectural coating (e.g., paint and other finishes). The construction contractor is required to procure architectural coatings from a supplier that complies with the requirements of SCAQMD’s Rule 1113 (Architectural Coatings).

Estimated maximum daily construction criteria air pollutant emissions from all on-site and off-site emission sources is provided in Table 2.3-3, Estimated Maximum Daily Construction Emissions.

Table 2.3-3. Estimated Maximum Daily Construction Emissions

Year	VOC	NO _x	CO	SO _x	PM ₁₀ ^a	PM _{2.5} ^a
	<i>pounds per day</i>					
2023 ^b	4.19	50.80	36.05	0.13	5.38	3.21
2024	3.13	21.91	29.48	0.08	3.73	1.59
2025	8.45	9.89	18.58	0.03	1.12	0.62
Maximum Daily Emissions	8.45	50.80	36.05	0.13	5.38	3.21
<i>SCAQMD Threshold</i>	75	100	550	150	150	55
Threshold exceeded?	No	No	No	No	No	No

Source: See Appendix A for detailed results.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

^a These estimates reflect control of fugitive dust required by SCAQMD Rule 403 (SCAQMD 2005).

^b The analysis in this IS/MND assumes a construction start date of May 2023. In practice, construction is anticipated to begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

As shown in Table 2.3-3, daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM₁₀, or PM_{2.5} during Project construction. Therefore, construction impacts of the proposed Project would be less than significant, and no mitigation is required.

Operational Emissions

Operation of the proposed Project would produce VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} emissions associated vehicular traffic, area sources (consumer products, architectural coatings, landscaping equipment), and energy sources (natural gas, appliances, and space and water heating). It was assumed that the proposed Project would not include any woodburning or natural gas fireplaces. As such, area source emissions associated with hearths were not included. Operational year 2026 was assumed following completion of Project construction.

Emissions from the existing office land use were also estimated using CalEEMod to present the net change in criteria air pollutant emissions. The existing buildings were assumed to be general office building for purposes of the transportation analysis to be general office building. Therefore, the same existing use was assumed for air quality for consistency. Operational year 2020 was assumed for existing conditions.

On-road vehicular emissions associated with the proposed Project were modeled using CalEEMod default trip generation rates for retail, residential, and restaurant land uses. Emissions from energy sources include electricity and natural gas combustion for appliances and space and water heating. CalEEMod defaults were used for area sources landscape maintenance equipment, consumer products, and architectural coatings for maintenance of buildings.

Trip generation rates for the Project and existing scenario were based on the TIA prepared for the Project (Pasadena Department of Transportation 2020). For the Project and the existing scenario, the assumed Saturday and Sunday trip rates were adjusted in proportion to the CalEEMod default weekday, Saturday and Sunday trip rates and the TIA weekday trip rate.

Table 2.3-4, Estimated Maximum Daily Operational Emissions, summarizes the net change in maximum area, energy, and mobile source emissions of criteria pollutants that would be generated by the development of the proposed Project in 2026 and operation of the existing land use in 2020. The values shown are the maximum summer or winter daily emissions (i.e., foreseeable worst case) results from CalEEMod. Details of the emission calculations are provided in Appendix A.⁸

Table 2.3-4. Estimated Maximum Daily Operational Emissions

Emission Source	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
	<i>(pounds per day)</i>					
Proposed Project						
Area	6.76	0.25	21.72	0.00	0.12	0.12
Energy	0.11	0.96	0.55	0.01	0.08	0.08
Mobile	3.77	16.60	41.33	0.17	14.74	4.03
Total	10.64	17.81	63.60	0.17	14.94	4.22
Existing						
Area	1.55	0.00	0.01	0.00	0.00	0.00
Energy	0.02	0.19	0.16	0.00	0.01	0.01
Mobile	1.35	6.62	18.61	0.06	4.69	1.30
Total	2.92	6.82	18.78	0.06	4.71	1.31
Net Change (Proposed Project minus Existing)	7.72	10.99	44.82	0.11	10.23	2.91
<i>SCAQMD Threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No

Source: See Appendix A for detailed results.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter.

Area sources = consumer product use, architectural coatings, and landscape maintenance equipment. Energy sources = natural gas. Mobile sources = motor vehicles.

⁸ The analysis in this IS/MND represents a conservative analysis since the revisions to the Project Description, as shown in Section I of this document, include a decrease of approximately 2,000 square feet of office use, which would result in an incremental decrease in operational impacts accordingly.

The values shown are the maximum summer or winter daily emissions results from CalEEMod.

As shown in Table 2.3-4, the net change in combined emissions would not exceed the SCAQMD thresholds for VOC, NO_x, CO, SO_x, PM₁₀, or PM_{2.5}.

If a project's emissions would exceed SCAQMD's significance thresholds, it would be considered to have a cumulatively considerable contribution to nonattainment status in the SCAB. If a project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality. The basis for analyzing the project's cumulatively considerable contribution is if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact) and consistency with SCAQMD's 2016 AQMP, which addresses cumulative emissions in the SCAB.

As previously discussed, the SCAB has been designated as a federal nonattainment area for O₃ and PM_{2.5}, and a state nonattainment area for O₃, PM₁₀, and PM_{2.5}. Construction and operational activities of the proposed Project would generate VOC and NO_x emissions (precursors to O₃) and emissions of PM₁₀ and PM_{2.5}. However, as indicated in Tables 2.3-3 and 2.3-4, Project-generated emissions would not exceed the SCAQMD emission-based significance thresholds for VOCs, NO_x, PM₁₀, or PM_{2.5}, and therefore the proposed Project would not cause a cumulatively significant impact.

Cumulative localized impacts would potentially occur if a project were to occur concurrently with another off-site project. Schedules for potential future projects near the project area are currently unknown; therefore, potential impacts associated with two or more simultaneous projects would be considered speculative.⁹ However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM₁₀ and PM_{2.5} emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all sites in the SCAQMD.

Therefore, the proposed Project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant during construction and operation. No mitigation is required.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, places where sensitive receptors congregate include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). Sensitive receptors near the proposed Project site include the following:

- Single- and multi-family residential land uses adjacent to the proposed Project site.

⁹ The CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145).

- Multi-family residential to the east across Hudson Avenue.

Localized Significance Thresholds

Less Than Significant Impact. The SCAQMD recommends a localized significance threshold (LST) analysis to evaluate localized air quality impacts to sensitive receptors in the immediate vicinity of the Project site as a result of construction activities. The impacts were analyzed using methods consistent with those in the SCAQMD’s *Final Localized Significance Threshold Methodology* (SCAQMD 2009). The proposed Project is located in Source-Receptor Area (SRA) 8 (West San Gabriel Valley).

The proposed Project area is 2.33 acres; therefore, the maximum daily disturbed acreage was conservatively assumed to be 2 acres. The SCAQMD LST screening thresholds for 2 acres within Source–Receptor Area 8 with a receptor distance of 25 meters (the shortest distance provided by the SCAQMD) were compared to emissions from the proposed Project.

Project construction activities would result in temporary sources of on-site criteria air pollutant emissions associated with construction equipment exhaust and dust-generating activities. Off-site emissions from trucks and worker vehicle trips are not included in the LST analysis because they occur off site. The maximum daily on-site construction emissions generated during construction of the proposed Project is presented in Table 2.3-5, Construction Localized Significance Thresholds Analysis, and compared to the SCAQMD localized significance screening thresholds for SRA 8 to determine whether Project-generated on-site construction emissions would result in potential LST impacts.

Table 2.3-5. Construction Localized Significance Thresholds Analysis

Pollutant	Project Construction Emissions (Pounds per Day)	LST Screening Thresholds (Pounds per Day)	Exceeds LST?
NO ₂	37.75	98	No
CO	30.64	812	No
PM ₁₀	4.04	6	No
PM _{2.5}	2.81	4	No

Source: See Appendix A for detailed results.

Notes: NO₂ = nitrogen dioxide; CO = carbon monoxide; PM₁₀ = particulate matter; PM_{2.5} = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.

Localized significance thresholds are shown for a 2-acre project site corresponding to a distance to a sensitive receptor of 25 meters.

These estimates reflect control of fugitive dust required by Rule 403.

The emissions represent worst-case operating scenario during construction.

As shown in Table 2.3-5, proposed construction activities would not generate emissions in excess of location specific LST screening thresholds; therefore, localized Project construction impacts would be less than significant. No mitigation is required.

CO Hotspots

Less Than Significant Impact. Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed CO “hotspots.” CO transport is extremely limited and disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near

a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors. Typically, high CO concentrations are associated with severely congested intersections operating at an unacceptable level of service (LOS) (LOS E or worse is unacceptable). Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots.

The Code of Federal Regulations (CFR) Procedures for Determining Localized CO, PM₁₀, and PM_{2.5} Concentrations (hot-spot analysis), states that “CO, PM₁₀, and PM_{2.5} hot-spot analyses are not required to consider construction-related activities, which cause temporary increases in emissions. Each site which is affected by construction-related activities shall be considered separately, using established ‘Guideline’ methods. Temporary increases are defined as those which occur only during the construction phase and last five years or less at any individual site” (40 CFR 93.123(c)(5)). While Project construction would involve on-road vehicle trips from trucks and workers during construction, construction activities are considered temporary and less trip-inducing than project operation. As a result, the proposed construction activities would not require a Project-level construction hotspot analysis.

Mobile source impacts occur on two scales of motion. Regionally, Project-related travel would add to regional trip generation and increase the vehicle miles traveled (VMT) within the local airshed and the SCAB. Locally, Project-generated traffic would be added to the City of Pasadena’s (City’s) roadway system near the Project site. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles cold-started and operating at pollution-inefficient speeds, and is operating on roadways already crowded with non-Project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing.

To verify that the Project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO hotspots was conducted for operation. The potential for CO hotspots was evaluated based on the results of the Traffic Impact Analysis for the Project (Pasadena Department of Transportation 2020), and the California Department of Transportation Institute of Transportation Studies Transportation Project-Level Carbon Monoxide Protocol (CO Protocol; Caltrans 1997) was followed. For projects located within an area designated as attainment or unclassified under the CAAQS or NAAQS, the CO Protocol identifies screening criteria for consideration. The first screening criteria focuses on projects that are likely to worsen air quality, which would occur if (1) the project significantly increases the percentage of vehicles operating in cold-start mode (greater than 2%), (2) the project significantly increases traffic volumes (greater than 5%), and/or (3) the project worsens traffic flow. In addition to consideration of whether the project would worsen air quality, CO hotspots are typically evaluated when (1) the LOS of an intersection or roadway decreases to LOS E or worse, (2) signalization and/or channelization is added to an intersection, and (3) sensitive receptors such as residences, schools, and hospitals are located in the vicinity of the affected intersection or roadway segment. No intersections studies in the Traffic Impact Analysis identified a LOS that would exceed the screening thresholds (Pasadena Department of Transportation 2020). Therefore, the project would not cause an intersection to exceed the screening thresholds to necessitate a quantitative CO hotspots analysis.

Accordingly, the Project would not generate traffic that would contribute to potential adverse traffic impacts that may result in the formation of CO hotspots. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing. Based on these considerations, the Project would result in a less-than-significant impact to air quality with regard to potential CO hotspots. No mitigation is required.

Toxic Air Contaminants

Less Than Significant Impact. Toxic air contaminants (TACs) are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. The nearest sensitive-receptor land use (i.e., a residence) is located approximately 60 feet from the Project site boundary.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SCAQMD recommends an incremental cancer risk threshold of 10 in 1 million. “Incremental cancer risk” is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a Project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of Environmental Health Hazard Assessment (OEHHA) risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. The SCAQMD recommends a Hazard Index of 1 or more for acute (short-term) and chronic (long-term) non-carcinogenic effects.¹⁰ TACs that would potentially be emitted during construction activities associated with development of the proposed Project would be diesel particulate matter.

Project construction would result in emissions of diesel particulate matter from heavy construction equipment and trucks accessing the site. Diesel particulate matter is characterized as a TAC by the State of California. The Office of Environmental Health Hazard Assessment has identified carcinogenic and chronic non-carcinogenic effects from long-term exposure but has not identified health effects due to short-term exposure to diesel exhaust. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should be limited to the period/duration of activities associated with the Project. Thus, the duration of the proposed construction activities would only constitute a small percentage of the total 30-year exposure period. Due to this relatively short period of exposure (32 months) and minimal particulate emissions on site, TACs generated by the Project would not result in concentrations causing significant health risks. Overall, the Project would not result in substantial TAC exposure to sensitive receptors in the vicinity of the proposed Project, and impacts would be less than significant.

Following completion of on-site construction activities, the proposed Project would not involve operational activities that would generate TAC emissions. For the reasons described above, the Project would not result in substantial TAC exposure to sensitive receptors in the vicinity of the proposed Project, and impacts would be less than significant. No mitigation is required.

¹⁰ Non-cancer adverse health risks are measured against a hazard index, which is defined as the ratio of the predicted incremental exposure concentrations of the various non-carcinogens from the project to published reference exposure levels that can cause adverse health effects.

Health Effects of Criteria Air Pollutants

Less Than Significant Impact. Construction of the proposed Project would generate criteria air pollutant emissions; however, the project would not exceed the SCAQMD mass-emission thresholds.

Health effects associated with O₃ include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2019). VOCs and NO_x are precursors to O₃, for which the SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. Thus, existing O₃ levels in the SCAB are at unhealthy levels during certain periods. Because the proposed Project would not involve construction or operational activities that would result in O₃ precursor emissions (VOC or NO_x) in excess of the SCAQMD thresholds, the proposed Project is not anticipated to substantially contribute to regional O₃ concentrations or the associated health impacts.

Exposure to NO₂ and NO_x can irritate the lungs, cause bronchitis and pneumonia, lower resistance to respiratory infections, and enhance allergic responses (CARB 2019). Project construction and operation would not exceed the SCAQMD NO_x threshold, and existing ambient NO₂ concentrations are below the NAAQS and CAAQS. Thus, implementation of the proposed Project is not expected to exceed the NO₂ standards or contribute to associated health effects.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (CARB 2019). CO tends to be a localized impact associated with congested intersections. CO hotspots were discussed previously as a less than significant impact. Thus, the proposed Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing (EPA 2016b). The SCAB is designated as nonattainment for PM₁₀ under the CAAQS and nonattainment for PM_{2.5} under the NAAQS and CAAQS. Implementation of the proposed Project would not generate emissions of PM₁₀ or PM_{2.5} that would exceed the SCAQMD's thresholds. Accordingly, the proposed Project's PM₁₀ and PM_{2.5} emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, the proposed Project would not result in a potentially significant contribution to regional concentrations of non-attainment pollutants and would not result in a significant contribution to the adverse health effects associated with those pollutants. Impacts would be less than significant. No mitigation is required.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. The occurrence and severity of potential odor impacts depend on numerous factors. The nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying, cause distress among the public, and generate citizen complaints.

During Project construction, exhaust from equipment may produce discernible odors typical of most construction sites. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. However, such odors would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. Accordingly, impacts associated with odors during construction would be less than significant.

SCAQMD provides a list of land uses associated with odor concerns, which include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The proposed Project includes operation of residences, retail, and restaurant spaces, which are not anticipated to generate odors and do not result in operation of the types of land uses listed in SCAQMD’s screening criteria. For the reasons described above, odor impacts from Project construction and operation would be less than significant. No mitigation is required.

2.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) **Would the project 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?**

No Impact. As shown in Figure 1, the Project site is entirely paved and surrounded by urban development under existing conditions. Vegetation on the Project site is limited to 12 on-site trees and two sparse planter beds, which would be removed under the proposed Project. Given this, the Project site does not support any naturally vegetated areas or green spaces that could contribute to habitat or habitat linkages for candidate, sensitive, or special-status species. The nearest protected open space which provides support for a number of native plant and wildlife communities is the Arroyo Seco, located approximately 1.8 miles west of the Project site (City of Pasadena 2015a). However, the Arroyo Seco is separated from the Project site by land uses that are urban in nature and as such, preclude the movement of wildlife in the direction of the Project site. For these reasons, no special-status species are expected to occur in the Project area, and development of the proposed Project would not either directly or through habitat modifications, result in a substantial adverse effect on any species identified as a candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service, and no mitigation is required.

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

No Impact. There are no riparian habitat communities or other sensitive natural communities located on the Project site, which is fully developed with urban uses, with vegetation limited to ornamental landscaping under existing conditions. According to the United States Fish and Wildlife Service's (FWS) National Wetlands Inventory (NWI), the nearest sensitive natural community is the Arroyo Seco, parts of which are considered Freshwater Forested/Shrub Wetlands with associated Forested/Shrub Riparian habitat (NWI 2019). As stated above, the Arroyo Seco is located approximately 1.8 miles west of the Project site, and is separated from the Project site by prevailing urban development. As such, demolition and construction activities at the Project site would have no impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

- c) **Would the project 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?**

No Impact. As stated above in Section 2.4(b), there are no state or federally protected wetlands on or within the general vicinity of the Project site (NWI 2019). As such, Project implementation would not 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. No impact would occur.

- d) **Would the project 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?**

Less Than Significant ~~Impact with Mitigation Incorporated~~. As stated in Section 2.4(a), the Project site is located in a fully developed, urban area surrounded by urban land uses. The existing ornamental landscaping on the Project site does not provide substantial habitat for wildlife, nor could it serve as a native wildlife nursery site.

As stated in the General Plan EIR, the City is predominantly developed with urban land uses and sensitive biological resources are limited to the Arroyo Seco Watershed (1.8 miles west of the Project site), the foothills of the San Gabriel Mountains (four miles north of the Project site), the San Rafael Hills in the western part of the City (four miles northwest of the Project site), and the Eaton Wash (3.2 miles northeast of the Project site; City of Pasadena 2015). As such, wildlife movement is already greatly restricted within the City due to existing urban development. The Project site is separated from the undeveloped areas within and adjacent to the City by dense urban development, the presence of which restricts native wildlife movement in the direction of the Project site. As such, the proposed Project would not interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

As stated in Section 2.4(b) and 2.4(c), there are no state or federal wetlands within proximity of the Project site (NWI 2019). The Arroyo Seco Watershed, located approximately 1.8 miles west, is the closest riparian habitat to the Project site. As such, the proposed Project would not interfere substantially with the movement of any native resident or migratory fish.

However, the existing ornamental trees and around on the Project site could be utilized by migratory bird species for nesting during the breeding season. Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (CFGC). Construction-related activities, including the removal of some of these trees (see Figure 12) and construction noise, could disturb nesting birds protected under the MBTA. Compliance with MBTA would protect migratory birds, and further, compliance with Sections 3503, 3503.5, and 3513 – Native Bird Protection of the CFGC would avoid impacts to nesting birds. As such, the Project’s compliance with the MBTA and the CFGC would result in a less than significant impact on the movement of native resident or migratory fish or wildlife species and established native resident or migratory wildlife corridors, and the Project would not impede the use of native wildlife nursery sites.

- e) **Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

Less Than Significant Impact. The Project site is surrounded to the north, east, and west by sidewalks and street trees. Mature ficus trees line East Green Street while a mix of other street trees, including Holly Oaks, Camphor trees, and Kurrajong Bottletree, are located in the ROW of South Hudson Avenue and South Oak Knoll Avenue. As shown in Figure 12, Tree Inventory, the proposed Project would be constructed such that the mature trees along East Green Street would be preserved in place, whereas some existing street trees along South Hudson Avenue and South Oak Knoll Avenue that are in poor health would be removed and replaced with new trees. All street/public trees proposed for removal would be removed per the City’s municipal code Section 8.52.010. **Moreover, the Applicant conducted a**

Protected Tree Report prepared by a certified arborist on February 4, 2022 (included as Attachment C to the Final MND) which made recommendations in compliance with the City’s Municipal Code. The Protected Tree Report was reviewed by the City’s Urban Forestry staff, which concurred with its conclusions that the Project would not require the removal of any of the existing ficus trees on Green Street. With adherence to the City’s Municipal Code, the proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Impacts would be less than significant. No mitigation is required.

f) **Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

No Impact. The proposed Project would not be located within the planning area of any habitat conservation plans or natural community conservation plans, or other approved local, regional, or state habitat conservation plan (CDFW 2019). As such, Project implementation would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No impacts would occur.

2.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) **Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?**

Less Than Significant Impact. Historic-age structures are those that are built more than 45 years ago and, therefore, have the potential to be considered historical resources pursuant to Section 15064.5 of the CEQA Guidelines. While some historical resources are also considered archaeological resources, such resources are addressed in Section 2.5(b), as part of the discussion of archaeological resources. The five commercial structures proposed for demolition, located at 740-750 East Green Street (constructed 1963), 770-784 East Green Street (constructed 1956), 790 East Green Street (constructed 1967), 111 South Hudson Avenue (constructed 1950), and 118 South Oak Knoll Avenue (constructed 1951), are of historic-age.

The cultural resources assessment for the proposed Project (Appendix B, Cultural Resources Technical Report) includes a description of the historic-age structures that could be affected by the proposed Project

and an evaluation as to whether the proposed Project would cause a substantial adverse change in the significance of a historical resource. As such, these buildings would be directly affected by the proposed Project and, therefore, were evaluated for their historical significance in consideration of National Register of Historic Places, California Register of Historical Resources, and City of Pasadena Historical Resources criteria and integrity requirements.

No cultural resources were identified within the Project site as a result of the California Historical Resources Information System (CHRIS) at the South Central Coast Information Center (SCCIC), Sacred Lands File (SLF) search, extensive archival research, field survey, and property significance evaluations. The evaluation of the properties located at 740-750 East Green Street, 770-784 East Green Street, 790 East Green Street, 111 South Hudson Avenue, and 118 South Oak Knoll Avenue found that they do not appear eligible for NRHP, CRHR, or City designation due to a lack of significant historical associations, architectural merit, and integrity in all cases (Appendix B). Therefore, these five commercial buildings (740-750 East Green Street, 770-784 East Green Street, 790 East Green Street, 111 South Hudson Avenue, and 118 South Oak Knoll Avenue) are not considered historical resources for the purposes of CEQA. As such, removal of these buildings as part of the proposed Project would not cause a substantial adverse change in the significance of a historical resource.

Additionally, the cultural resources assessment for the proposed Project analyzed the results of the CHRIS records search, SLF search, California Historic Resource Inventory database with a focus on Pasadena properties, and extensive archival research. No additional cultural resources were identified adjacent to the Project site which might be indirectly affected by the proposed Project resulted from this analysis. As such, the proposed Project would not indirectly affect any adjacent historic-age structures. For these reasons, impacts would be less than significant.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant Impact with Mitigation Incorporated. A records search of the CHRIS at the SCCIC was conducted on April 16, 2019. The CHRIS records search did not identify any previously recorded archaeological resources mapped within the Project site or within 0.5-mile of the Project site. The records search identified 18 previously conducted cultural resources technical investigations within the records search area, two of which are adjacent to Project's northern boundary. None of these studies identified any cultural resource issues warranting additional study. Historic maps and aerial images were reviewed and demonstrated that structures did exist at least as early as 1927 with gradual development up to the 1950s. Given that the extant buildings within the Project site were constructed in the early to mid-twentieth century, there is potential for important older historic features or artifact concentrations to exist subsurface.

Additionally, Dudek contacted the Native American Heritage Commission (NAHC) on August 13, 2019, and requested a review of the SLF. The NAHC replied via email on September 13, 2019, stating that the results of the SLF search were positive, though specific information pertaining to the location of these resources within the Project site was not provided by the NAHC. No additional tribal outreach was conducted by Dudek; however, in compliance with Assembly Bill (AB) 52, the City has contacted all NAHC-listed traditionally geographically affiliated tribal representatives that have requested Project notification. AB 52 consultation efforts conducted by the City are discussed in Section 2.18, Tribal Cultural Resources.

No newly or previously recorded archaeological resources were identified within the Project site or 0.5-mile records search buffer as a result of the CHRIS records search and NAHC SLF search. However, it is possible that previously undiscovered intact archaeological deposits are present at subsurface levels and could be uncovered during ground-disturbing activities. If such unanticipated discoveries were encountered, impacts to encountered resources could be potentially significant. In order to ensure that all Project personnel are aware of the potential for encountering unknown archaeological resources within the Project site, a worker's environmental awareness program (WEAP) training will be required to be implemented under MM-CUL-1 to ensure early identification and response to inadvertent discovery of unknown archaeological resources. In the event of an inadvertent discovery of an archaeological resource, a resource-specific management plan will be appropriately developed and implemented to ensure any potential adverse change to this resource is appropriately addressed under CEQA as defined under MM-CUL-2. Therefore, impacts to archaeological resources would be less than significant with MM-CUL-1 and MM-CUL-2 incorporated.

MM-CUL-1 Prior to commencement of construction activities at the Project site, the City's construction contractor and construction personnel shall attend and complete a Workers Environmental Awareness Program (WEAP) training conducted by a qualified archaeologist. The WEAP training shall provide: (1) the types and characteristics of archaeological materials that may be identified during construction and explain the importance of and legal basis for the protection of significant cultural resources; (2) proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities, including procedures for work curtailment or redirection; and (3) protocols for the contact of the site supervisor and archaeological monitor upon discovery of a resource. The procedures and protocols shall be included in the construction plans and require that a qualified archaeologist be retained to evaluate cultural resource discoveries as they occur, to determine the significance of the resource and the appropriate approach forward.

MM-CUL-2 If cultural resources are discovered during construction of the proposed Project in the City of 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) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact. No prehistoric or historic burials were identified within the Project site based on the results of the CHRIS records search. Therefore, the likelihood of encountering human remains within the proposed Project site is low. In the event human remains are inadvertently encountered during construction activities, the discovery would require handling in accordance with California Public Resources Code 5097.98, which requires the County Coroner to be immediately notified

if human remains are discovered. No further excavation or disturbance of the Project site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains. Compliance with regulations would ensure that potential disturbance of any human remains, including those interred outside of dedicated cemeteries, would be less than significant.

2.6 ENERGY

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) **Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Less Than Significant Impact. The construction and operation of the proposed Project would require the consumption of energy resources in several forms at the proposed Project site and within the proposed Project site area. In general, the aggregated-temporary (approximate 32 months) construction energy consumption would be less than energy consumed during the long-term operation of the facility. To facilitate the discussion of whether the Project would result in environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy, the construction and operational energy consumption is evaluated in detail below.¹¹

Construction

Electricity

Temporary electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers) would be provided by Pasadena Water and Power (PWP). The electricity used for such activities would be temporary and be substantially less than that required for Project operation, and would have a negligible contribution to the Project’s overall energy consumption.

Natural Gas

Natural gas is not anticipated to be required during construction of the proposed Project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under “Petroleum.” Any minor amounts of natural gas that may be consumed as a result of Project construction would be substantially less than that required for Project operation and would have a negligible contribution to the Project’s overall energy consumption.

¹¹ The analysis in this IS/MND represents a conservative analysis since the revisions to the Project Description, as shown in Section I of this document, include a decrease of approximately 2,000 square feet of office use, which would result in an incremental decrease in operational impacts accordingly.

Petroleum

Heavy-duty construction equipment associated with demolition and construction activities would rely on diesel fuel, as would vendor trucks involved in delivery of materials to the Project site. Construction workers would travel to and from the Project site throughout the duration of construction. It is assumed in this analysis that construction workers would travel in gasoline-powered light-duty vehicles.

Heavy-duty construction equipment of various types would be used during each phase of Project construction. Appendix C, Energy Calculations lists the assumed equipment usage for each phase of construction. The Project’s construction equipment is estimated to operate a total combined 37,610 hours.

Fuel consumption from construction equipment was estimated by converting the total carbon dioxide (CO₂) emissions from each construction phase to gallons using the conversion factors for CO₂ to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton of CO₂ per 1 gallon of gasoline, and the conversion factor for diesel is 10.21 kilograms per metric ton of CO₂ per 1 gallon of diesel (The Climate Registry 2020). The estimated diesel fuel usage from construction equipment is provided in Table 2.6-1.

Table 2.6-1. Construction Equipment Diesel Demand (Off-Road Equipment)

Phase	Pieces of Equipment	Equipment CO ₂ (MT)	kg/CO ₂ /Gallon	Gallons
Demolition	6	37.39	10.21	3,662.21
Grading	8	177.24	10.21	17,359.37
Trenching	1	58.46	10.21	5,726.24
Building Construction	9	379.06	10.21	37,126.20
Architectural Coating	1	33.32	10.21	3,263.46
Paving	6	88.08	10.21	8,627.29
Total				75,764.77

Sources: Pieces of equipment and equipment CO₂ (Appendix C); kg/CO₂/Gallon (The Climate Registry 2020).

Notes: CO₂ = carbon dioxide; MT = metric ton; kg = kilogram.

Fuel consumption from worker, vendor, and haul truck trips are estimated by converting the total CO₂ emissions from each construction phase to gallons using the conversion factors for CO₂ to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline, and vendor/hauling vehicles are assumed to be diesel. Calculations for total worker, vendor, and haul truck fuel consumption are provided in Table 2.6-2, Table 2.6-3, and Table 2.6-4.

Table 2.6-2. Construction Worker Gasoline Demand

Phase	Trips	Vehicle MT CO ₂	kg/CO ₂ /Gallon	Gallons
Demolition	352	1.62	8.78	184.27
Grading	1,300	5.98	8.78	680.54
Trenching	352	7.06	8.78	803.82
Building Construction	112,896	422.10	8.78	48,074.98
Architectural Coating	5,232	64.81	8.78	7,381.48
Paving	15,138	6.03	8.78	686.56
Total				57,811.64

Sources: Trips and vehicle CO₂ (Appendix C); kg/CO₂/Gallon (The Climate Registry 2020).
Notes: MT = metric ton; CO₂ = carbon dioxide; kg = kilogram.

Table 2.6-3. Construction Vendor Diesel Demand

Phase	Trips	Vehicle MT CO ₂	kg/CO ₂ /Gallon	Gallons
Demolition	0	0.00	10.21	0.00
Grading	0	0.00	10.21	0.00
Trenching	0	0.00	10.21	0.00
Building Construction	22,236	256.13	10.21	25,085.92
Architectural Coating	0	0.00	10.21	0.00
Paving	0	0.00	10.21	0.00
Total				25,085.92

Sources: Trips and vehicle CO₂ (Appendix C); kg/CO₂/Gallon (The Climate Registry 2020).
Notes: MT = metric ton; CO₂ = carbon dioxide; kg = kilogram.

Table 2.6-4. Construction Haul Truck Diesel Demand

Phase	Trips	Vehicle MT CO ₂	kg/CO ₂ /Gallon	Gallons
Demolition	546	19.71	10.21	1,930.15
Grading	5,094	183.86	10.21	18,007.64
Trenching	0	0.00	10.21	0.00
Building Construction	0	0.00	10.21	0.00
Architectural Coating	0	0.00	10.21	0.00
Paving	0	0.00	10.21	0.00
Total				19,937.79

Sources: Trips and vehicle CO₂ (Appendix C); kg/CO₂/Gallon (The Climate Registry 2020).
Notes: MT = metric ton; CO₂ = carbon dioxide; kg = kilogram.

In summary, construction of the Project is conservatively anticipated to consume 57,812 gallons of gasoline and 120,788 gallons of diesel over approximately 32 months. By comparison, California’s consumption of petroleum is approximately 74.8 million gallons per day. Based on these assumptions, approximately 53 billion gallons of petroleum would be consumed in California over the course of the construction period (EIA 2017). Within Los Angeles County, approximately 24 billion gallons of petroleum (gasoline and diesel) would be consumed over the course of the construction period (CARB 2019). Thus, the Project’s construction fuel demand represents 0.0001% and 0.0002% of the fuel consumption for the State and County, respectively. Further, the Project would be required to comply with CARB’s Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes, which would minimize fuel consumption. While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. Further, the petroleum consumed related to Project construction would be typical of construction projects of similar types and sizes and would not necessitate new petroleum resources beyond what are typically consumed in California. In addition, the Project site is well served by public transportation services and more construction workers would be anticipated to use public transportation to access the Project site during construction as compared to other sites that have fewer public transportation opportunities. Therefore, construction worker trips and associated petroleum consumption would be expected to be reduced compared to similar construction projects in rural locations.

Use of electricity, natural gas, and petroleum during Project construction would be required for the Project. Electricity and natural gas use would have a negligible contribution to the Project's overall energy consumption. Petroleum would be used in a manner that is typical for construction (i.e. construction equipment, worker, vendor, and haul truck trips) and would not result in a wasteful, inefficient, and unnecessary use of energy. Therefore, impacts associated during construction would be less than significant. No mitigation is required.

Operation¹²

Electricity

Operation of the Project upon buildout would require electricity for multiple purposes, including cooling, lighting, appliances, and various equipment. Additionally, the supply, conveyance, treatment, and distribution of water and wastewater would indirectly result in electricity usage. Electricity consumption associated with Project operation is based on CalEEMod outputs presented in Appendix C.

CalEEMod default values for energy consumption for each land use were applied for the Project analysis. The Project involves both residential and nonresidential uses. For residential energy use, CalEEMod uses data collected during the Residential Appliance Saturation Survey to develop energy intensity values (electricity and natural gas per square foot per year). The energy use from nonresidential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. For parking lots, CalEEMod includes calculation of energy use from lighting, ventilation, and elevators in parking lots and structures. Energy use in buildings (both natural gas and electricity) is divided by the program into end use categories subject to California Building Standards Code (Title 24) requirements (end uses associated with the building envelope, such as the HVAC system, water heating system, and integrated lighting) and those not subject to California Building Standards Code requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

The California Building Standards Code serves to enhance and regulate California's building standards. The Building Energy Efficiency Standards are part of the California Building Standards Code (specifically, Part 6 of Title 24). The most recent version of the Building Energy Efficiency Standards is referred to as the "2019 Building Energy Efficiency Standards" and went into effect in January 2020. As a result, the proposed Project would consume approximately 2,302,663 kilowatt-hours (kWh) per year during operation. The electricity consumption at the Project site under existing conditions was also calculated using CalEEMod and is estimated to be 1,146,795 kWh per year. As such, upon Project implementation, electricity demand at the Project site would increase by 1,155,868 kBTU per year as a result of the proposed increased development density on the site, and the associated: increased supply, conveyance, treatment, and distribution of water and wastewater; increased electricity use from the elevator in the parking structure; and increased electricity for lighting, appliances, and cooling from the multi-family residential buildings and retail buildings. For comparison, in 2018 the total residential and nonresidential electricity use in Pasadena Water and Power's service area was 1,040,640,000 kilowatt-hours (CEC 2020). The Project's electricity consumption would represent a 0.13% of the Pasadena Water and Power's existing demand (2018). The Project does not include a use that would result in a

¹² **The analysis in this IS/MND represents a conservative analysis since the revisions to the Project Description, as shown in Section I of this document, include a decrease of approximately 2,000 square feet of office use, which would result in an incremental decrease in operational impacts accordingly.**

wasteful, inefficient, and unnecessary use of electrical energy. Furthermore, the project would comply with current Title 24 Standards and the California Green Building Standards. Therefore, the project's electricity consumption would not be wasteful, inefficient, or unnecessary and would have a less-than-significant impact to electrical energy resources.

Natural Gas

Project operation would require natural gas for various purposes, including water heating and natural gas appliances. Natural gas consumption associated with operation is based on the CalEEMod outputs (see Appendix C).

CalEEMod default values for energy consumption for each land use were applied for the Project analysis. For residential energy use, CalEEMod uses data collected during the Residential Appliance Saturation Survey to develop energy intensity values (electricity and natural gas per square foot per year). The energy use from nonresidential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. Energy use in buildings (both natural gas and electricity) is divided by the program into end use categories subject to California Building Standards Code requirements (end uses associated with the building envelope, such as the HVAC system, water heating system, and integrated lighting) and those not subject to California Building Standards Code requirements (such as appliances, electronics, and miscellaneous "plug-in" uses). Based on CalEEMod estimations, the proposed Project would consume approximately 3,734,981 kilo-British Thermal Units (kBtu) per year. Under existing conditions, it is estimated that 722,891 kBtu per year is used by the existing uses. As such, upon Project implementation, natural gas demand at the Project site would increase by 3,012,090 kBtu per year, which would equate to 3,013 therms. Natural gas is supplied to the Project site by SoCalGas. As of 2018, approximately 5,156 million therms of natural gas were used in SoCalGas' service area per year (CEC 2020). Thus, the expected increase in use represents approximately 0.00007% of SoCalGas' existing 2018 demand. The project would comply with current Title 24 Standards and the California Green Building Standards. Therefore, due to the inherent increase in efficiency of building code regulations, the proposed Project would not result in a wasteful, inefficient, or unnecessary use of natural gas. Impacts related to operational natural gas use would be less than significant.

Petroleum

During operations, the majority of fuel consumption resulting from the Project would involve the use of motor vehicles traveling to and from the Project site including residents, employees, and customers.

Petroleum fuel consumption associated with motor vehicles traveling to and from the Project site is a function of the VMT as a result of Project operation. The annual VMT attributable to the proposed Project is expected to be 6,391,132 VMT. Under existing conditions at the Project site, the land uses to be demolished are estimated to result in 1,655,415 VMT per year (Appendix C). Similar to the construction worker and vendor trips, fuel consumption from operational trips are estimated by converting the total CO₂ emissions from operation of the Project to gallons using the conversion factors for CO₂ to gallons of gasoline or diesel.

Calculations for annual mobile source fuel consumption (gasoline and diesel) are provided in Table 2.6-5.

Table 2.6-5. Annual Operational Petroleum Demand

Scenario	Vehicle MT CO ₂	Kg CO ₂ / Gallon	Gallons
Proposed Project			
Gasoline	2,317.83	8.78	263,990.22
Diesel	187.52	10.21	18,366.59
Total Project Petroleum Use			282,356.82
Existing			
Gasoline	687.03	8.78	78,249.83
Diesel	53.45	10.21	5,234.68
Total Existing Petroleum Use			83,484.50
Net Increase in Petroleum Demand (Project minus Existing)			198,872.31

Sources: Trips and vehicle CO₂ (Appendix C); kg/CO₂/Gallon (The Climate Registry 2020).

Notes: MT = metric ton; CO₂ = carbon dioxide; kg = kilogram

As depicted in Table 2.6-5, the Project would consume approximately 282,357 gallons of petroleum per year and the existing scenario would consume approximately 83,485 gallons of petroleum per year, for an annual net increase of 198,872 gallons of petroleum. By comparison, California as a whole consumes approximately 28.7 billion gallons of petroleum per year. The anticipated increase in consumption associated with one year of Project operation is 0.0008% of the statewide use. The Project is a mixed-use development located near transit stops. The nearest light rail stations are the Lake Metro Gold Line Station located at the Interstate 210 approximately 0.5 miles to the north, and the Del Mar Metro Gold Line Station located approximately 0.8 miles to the west near Central Park. As such, the proposed Project would provide residence and employment opportunities within proximity to transit services. The nature of the Project’s land use mix and site location would reduce VMT and associated petroleum use by being in proximity to complimentary land uses and employment centers, which could encourage use of alternative transportation methods such as transit, walking, or biking, or would result in shorter vehicle trips. In addition, the project would install four electric vehicle charging stations.

Over the lifetime of the Project, the fuel efficiency of vehicles used by residents, employees, and customers, as well as vehicles used for deliveries to the Project site, is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the Project site during operation would decrease over time. There are numerous regulations in place that require and encourage increased fuel efficiency. For example, CARB has adopted an approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards. The approach also includes efforts to support and accelerate the number of plug-in hybrids and zero-emissions vehicles in California (CARB 2013). Additionally, in response to Senate Bill 375, CARB adopted the goal of reducing per-capita GHG emissions from 2005 levels by 8% by 2020, and 18% by 2035 for light-duty passenger vehicles in the SCAG planning area. As such, operation of the Project is expected to use decreasing amounts of petroleum over time due to advances in fuel economy.

In summary, the proposed Project would create additional electricity and natural gas demand. However, the Project would be subject to the 2019 Building Energy Efficiency Standards, which apply to new construction and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Compliance with the 2019 Building Energy Efficiency Standards would ensure that the energy efficiency of the proposed buildings is maximized to the extent feasible. Furthermore, the proposed Project would install 25 EV charging stations. For these reasons, the proposed Project would not result in wasteful,

inefficient, or unnecessary consumption of energy. Impacts would be less than significant, and no mitigation is required.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The proposed Project would be subject to state regulations for energy efficiency, namely, California's Building Energy Efficiency Standards and CALGreen, both of which are set forth in the California Code of Regulations, Title 24. California's Building Energy Efficiency Standards were established in 1978 and serve to enhance and regulate California's building standards. These standards include regulations for residential and nonresidential buildings constructed in California to reduce energy demand and consumption. The Building Energy Efficiency Standards are updated periodically (every 3 years) to incorporate and consider new energy efficiency technologies and methodologies. CALGreen institutes mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and state-owned buildings, as well as schools and hospitals. The 2016 CALGreen standards became effective on January 1, 2017. The new 2019 standard become effective on January 1, 2020. The proposed Project would meet Building Energy Efficiency Standards and CALGreen standards to reduce energy demand and increase energy efficiency. In addition, the proposed Project would be consistent with the City's Climate Action Plan (see Section 2.8).

At a regional level, the proposed Project would be subject to the policies set forth in SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) The most recently adopted RTP/SCS 2040-2045 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. With regard to individual developments, such as the Project, the strategies and policies set forth in Connect SoCal include increased mobility options and achieve a more sustainable growth pattern.

The 2016 RTP/SCS is a regional growth-management strategy that targets per-capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region pursuant to Senate Bill (SB) 375. In addition to demonstrating the region's ability to attain and exceed the GHG emission-reduction targets set forth by CARB, the 2016 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. Thus, successful implementation of the 2016 RTP/SCS would result in more complete communities with a variety of transportation and housing choices, while reducing automobile use. With regard to individual developments, such as the Project, the strategies and policies set forth in the 2016 RTP/SCS include improved energy efficiency. The 2016 RTP/SCS goal is to actively encourage and create incentives for energy efficiency, where possible. As discussed previously, the Project would comply with the 2019 CALGreen standards.

As discussed above, and in Section 2.8 b), the Project would be not conflict with the measures within Connect SoCal by constructing a mixed-use development located near transit stops. As such, the Project would be designed to encourage pedestrian activity and would provide residence and employment opportunities within proximity to transit services. In addition, in accordance with CalGreen, 25% of the total number of parking spaces on the Project site, are required to be electric vehicle charging spaces

and 5% of the total number of parking spaces on a building site, are required to be electric vehicle charging stations. For these reasons, the proposed Project would be consistent with the SCAG 2016 RTP/SCS and Connect SoCal.

The proposed Project would follow applicable energy standards and regulations during construction. In addition, the proposed Project would be built and operated in accordance with all existing, applicable regulations at the time of construction. As such, the proposed Project would not conflict with existing energy standards, regulations, or plans; therefore, impacts during construction and operation of the proposed Project would be less than significant, and no mitigation is required.

2.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) **Would the project 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.**

Less Than Significant Impact. According to the General Plan Safety Element, the City is located at the boundary between two of Southern California's geomorphic provinces, in an area that is being compressed by the geologic forces associated with the movement of the Pacific and North American plates (City of Pasadena 2002). In the Pasadena area, the main faults include the Sierra Madre fault, a reverse fault that extends across the City's northern boundary, and the left-lateral strike-slip Raymond fault that locally extends into Pasadena's southern and eastern boundaries (City of Pasadena 2002). Like all of Southern California, the proposed Project site is subject to potential moderate to strong seismic ground shaking as a result of movement along major regional faults. However, there are no faults underlying the proposed Project site. The proposed Project site is not located within Alquist-Priolo Earthquake Fault Zone (CGS 2019). Therefore, the risk of fault rupture in the immediate vicinity of the proposed Project site is low. The proposed Project would not directly or indirectly cause or exacerbate the risk of fault rupture. As such, the proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. Therefore, impacts would be less than significant, and no mitigation is required.

- ii) **Strong seismic ground shaking?**

Less Than Significant Impact. Like most of southern California, the City is located in a seismically active area. Movement along major faults in proximity to the City, as well as along buried blind thrust faults, can occur across the greater Los Angeles Area. These faults, as well as numerous other regional faults, are capable of producing moderate to large earthquakes that could affect the City. However, the proposed Project would be constructed in accordance with state and City building standards, as well as with the recommendations outlined in the Geotechnical Report prepared for the Project (Appendix D, Geotechnical Engineering Investigation). As with all development within the City, the proposed Project is required to comply with Title 24 of the California Building Code (CBC) and the Pasadena Building Code as legislated by Title 14 of the City's Municipal Code. Proper engineering and compliance with Title 24 of the CBC, the Pasadena Building Code, and the recommendations established in the Geotechnical Report (Appendix D) would ensure the maximum feasible protection of the buildings and occupants. Additionally, implementation of the proposed Project would not exacerbate the potential for strong seismic ground shaking to occur. As such, the proposed Project would not directly or indirectly cause or exacerbate adverse effects involving seismic ground shaking. Impacts would be less than significant, and no mitigation is required.

- iii) **Seismic-related ground failure, including liquefaction?**

Less Than Significant Impact. Liquefaction typically occurs in loose, saturated soils that lose their internal cohesion due to the associated pressure changes in the soil during seismic events. When liquefaction occurs, soils typically behave 'liquid-like', resulting in significant damage (i.e. collapse,

irreparable structural damage etc.) to structures and infrastructure built on them. According to the Geotechnical Report prepared for the Project, the soils underlying the proposed Project site are native alluvial soils comprising silty sands and sands, while the historically highest groundwater level beneath the proposed Project site was recorded at 90 feet below grade (Appendix D). As such, the proposed Project site would not be prone to liquefaction and associated lateral spreading during the ground motion expected during a major seismic event (Appendix D). Additionally, the California Geological Survey (CGS) has determined that the proposed Project site is not located in a liquefaction zone (CGS 2019). Furthermore, as with all development within the City, the proposed Project is required to comply with the CBC, the Pasadena Building Code, and the recommendations provided in the Geotechnical Report (Appendix D). As such, the proposed Project would not directly or indirectly cause or exacerbate adverse effects involving seismic-related ground failure, such as liquefaction. Impacts would be less than significant and no mitigation is required.

iv) Landslides?

Less Than Significant Impact. The proposed Project site is located on relatively flat terrain in downtown Pasadena. Both the California Geological Survey (2019) as well as the Geotechnical Report (Appendix D) prepared for the proposed Project have determined that the proposed Project site is not located within a region susceptible to landslides. The closest earthquake-induced landslide zone is located approximately 1.6 miles to the west of the proposed Project site (CGS 2019). Furthermore, implementation of the proposed Project would not exacerbate the potential for landslides to occur. As such, impacts would be less than significant, and no mitigation is required.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The proposed Project site is not located in a hillside development area or agricultural zone that could be susceptible to eroding soils or the loss of topsoil due to site development. The proposed Project site is fully developed and paved, with negligible amounts of soil exposed in areas of ornamental landscaping. However, during construction-related activities, soils exposed during grading and excavation would have increased potential for erosion as a result of exposure to the elements (e.g. wind and water runoff) and human activity (e.g. movement of construction workers and equipment).

Given that the proposed Project would disturb more than one acre of soil, the proposed Project would be required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2009-009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ, NPDES No. CAS000002) or the latest approved general permit. The General permit would include erosion-control measures as part of the Storm Water Pollution Prevention Plan (SWPPP) for the proposed Project. The required SWPPP will mandate the implementation of Best Management Practices (BMPs) to reduce or eliminate construction-related pollutants in the runoff, including sediment. Implementation of the erosion control BMPs in the SWPPP would reduce construction-related soil erosion and there would be no loss of topsoil associated with proposed Project implementation. Impacts would be less than significant, and no mitigation is required.

- c) **Would the project 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?**

Less Than Significant Impact. According to the State of California Seismic Hazard Zones map for the Los Angeles Quadrangle, the site is not located in an area potentially susceptible to earthquake induced landslides, lateral spreading, or liquefaction (CGS 2019). Based on the relatively flat topography, proposed Project construction would not initiate a landslide or increase the potential for landslides to occur. Additionally, liquefaction is unlikely as the proposed Project site is not located within a liquefaction zone (CGS 2019). According to the Geotechnical Report prepared for the proposed Project site, the underlying alluvial soils are relatively uniform and are not expected to result in excessive differential soil settlements during a seismic event (Appendix D). Given the above, the potential impacts associated with landslides, lateral spreading, liquefaction, collapse and subsidence would be less than significant and no mitigation is required.

- d) **Would the project 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?**

Less Than Significant Impact. Expansive soils are clay-rich soils that shrink when dry and swell when wet. This change in volume can exert substantial pressure on foundations, resulting in structural distress and/or damage. The proposed Project's underlining soil consists of native alluvial soils comprising uniform silty sands and sands (Appendix D). These soils typically contain very little clay material and are usually not subject to expansion. Proposed Project construction would not increase or exacerbate the potential for expansive soils to create substantial direct or indirect risks to life or property. Additionally, the proposed Project would be constructed according to the mandatory seismic and structural design guidelines established in the CBC, the Pasadena Building Code, and in the Geotechnical Report prepared for the Project (Appendix D). As such, impacts would be less than significant. No mitigation is required.

- e) **Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

No Impact. The proposed Project site is currently served by sewer infrastructure. No septic tanks or alternative wastewater disposal is proposed; therefore, the proposed Project would have no impacts related to soils supporting the use of septic tanks or alternative waste water disposal systems.

- f) **Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Less Than Significant Impact with Mitigation Incorporated. The Project site is located south of the San Gabriel Mountains and southwest of the San Bernardino Mountains within Los Angeles County (Dibblee and Ehrenspeck, 1989). The Project site is underlain by Quaternary gravel and sand (map unit Qof; 2.58 million to 11,700 years old), derived as alluvial fan deposits from the San Gabriel Mountains to the north according to surficial geological mapping by Dibblee and Ehrenspeck (1989) at a 1:24,000 scale. These Pleistocene (or "Ice Age"), older alluvial fan deposits may be encountered at the surface or at an unknown depth beneath fill (Dibblee and Ehrenspeck, 1989).

Although no fossils are recorded from within the Project site itself, they are documented in the region from similar sedimentary deposits as those underlying the Project area. According to the records search results received from the Natural History Museum of Los Angeles County (LACM) on October 31, 2019, a fossil specimen of mastodon (*Mammut*) was recovered from locality LACM 2027 in the City, northeast of the Project site and south of the intersection between Washington Boulevard and Allen Avenue, near the western end of Brigden Road (McLeod, 2019). Another fossil locality, located west-southwest of the Project area, in Eagle Rock, east of the Glendale Freeway (Highway 2) and Eagle Rock Boulevard, south of York Boulevard produced fossil specimens from older Quaternary deposits. This locality LACM (CIT) 342 yielded fossil specimens of turkey (*Parapavo californicus*) and mammoth (*Mammuthus*) at a depth of 14 feet below the ground surface (McLeod, 2019). Both specimens were documented in scientific publications (Miller, 1942; Roth, 1984). Given the proximity of past fossil discoveries in the surrounding area and potential for underlying, Pleistocene-age older alluvial fan deposits, these sedimentary deposits within the Project site are considered to be highly sensitive for supporting paleontological resources. Younger, Holocene age alluvial fan deposits and artificial fill, if encountered within the proposed Project site, have low potential to yield paleontological resources.

No paleontological resources were identified within the Project site as a result of the institutional records search or desktop geological review. As such, the Project site is not anticipated to be underlain by unique geologic features. If intact paleontological resources are located on-site, ground-disturbing activities associated with construction of the proposed Project, such as grading during site preparation, have the potential to destroy a unique paleontological resource or site. As such, the proposed Project site is considered to be potentially sensitive for paleontological resources and without mitigation, the potential damage to paleontological resources during construction associated with the proposed Project is considered a potentially significant impact. Upon implementation of MM-GEO-1, impacts would be reduced to below a level of significance.

MM-GEO-1 Prior to commencement of any grading activity on-site, the Project Applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the proposed Project. The PRIMP shall be consistent with the SVP (2010) guidelines and should outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the proposed Project site based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The PRIMP shall also address reducing or terminating monitoring when no resources are found pursuant to the SVP (2010) guidelines. The qualified paleontologist shall attend the preconstruction meeting and a paleontological monitor shall be on-site during all rough grading and other significant ground-disturbing activities beyond a depth of five feet below the existing ground surface or the depth of any artificial fill in previously undisturbed, fine-grained older Quaternary (e.g., Pleistocene age) alluvial fan deposits. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find.

2.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth’s temperature depends on the balance between energy entering and leaving the planet’s system, and many factors (natural and human) can cause changes in Earth’s energy balance. The greenhouse effect is the trapping and build-up of heat in the atmosphere near the Earth’s surface (the troposphere). The greenhouse effect is a natural process that contributes to regulating the Earth’s temperature, and it creates a livable environment on Earth. Human activities that emit additional greenhouse gases (GHGs) to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth’s surface temperature to rise. Global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state’s primary GHG emissions reduction programs, GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride (see also CEQA Guidelines Section 15364.5).¹³ The three GHGs evaluated herein are CO₂, CH₄, and N₂O because these gases would be emitted during Project construction and/or operations.

The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The reference gas used is CO₂; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO₂ equivalent (CO₂e). Consistent with CalEEMod Version 2016.3.2, this GHG emissions analysis assumed the GWP for CH₄ is 25 (i.e., emissions of 1 MT of CH₄ are equivalent to emissions of 25 MT of CO₂), and

¹³ Climate-forcing substances include GHGs and other substances such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in the California Health and Safety Code Section 38505; impacts associated with other climate-forcing substances are not evaluated herein.

the GWP for N₂O is 298, based on the Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC 2007).

The City adopted the Climate Action Plan (CAP) on March 5, 2018. The CAP is a strategic framework for measuring, planning, and reducing the City's share of GHG emissions and goals for reducing emissions. The CAP sets a goal to reduce community-wide GHG emissions 27% below 2009 levels by 2020, 49% below 2009 levels by 2030, 59% below 2009 levels by 2035, and 83% below 2009 levels by 2050. The CAP serves as a qualified GHG reduction plan consistent with CEQA Guidelines Section 15183.5. The CAP extends through the year of 2035, consistent with the horizon year of the City's 2015 General Plan Land Use Element. The City uses the CAP Consistency Checklist for discretionary projects subject to CEQA. The checklist is a tool for new development projects to demonstrate consistency with the CAP and to demonstrate a less-than-significant contribution to cumulative GHG emissions. Projects subject to CEQA review have three options to demonstrate consistency with the CAP: Option A, incorporate mandatory and selective sustainable development actions that will become conditions of the entitlement; Option B, quantify the project's GHG emission levels and demonstrate that the project is below Pasadena's service person efficiency threshold; and Option C, quantify the project's GHG emission levels and demonstrate that the project would not result in a net increase in GHG emissions (City of Pasadena 2018a). The City's CAP Option B GHG efficiency metric is used for this analysis. Under Option B, based on the Project's first operational year 2026, the City's GHG efficiency metric of 3.57 MT CO₂e per service person would be used. According to Section 2.14, Population and Housing, the Project would add 853 (815 residents and 38 full time employees) persons to the Project site.

Construction Emissions

Construction of the proposed Project would result in GHG emissions primarily associated with the use of off-road construction equipment, on-road trucks, and worker vehicles. A depiction of expected demolition and construction schedules (including information regarding phasing, equipment used during each phase, truck trips, and worker vehicle trips) assumed for the purposes of emissions estimation is provided in Table 2.3-2, Construction Scenario Assumptions, and in Appendix A. On-site sources of GHG emissions include off-road equipment, and off-site sources include trucks and worker vehicles. Table 2.8-1, Estimated Annual Construction GHG Emissions, presents construction GHG emissions for the proposed Project from on-site and off-site emissions sources. The analysis assumes a construction start date of May 2023, which represents the earliest date construction would initiate. In the event construction is started later than May 2023, the analysis performed represents the worst-case scenario for GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

The calculation methodology and default values provided in CalEEMod (CAPCOA 2017) were used to calculate potential CO₂ emissions associated with the one-time change in carbon sequestration capacity of a vegetation land use type. The calculation of the one-time loss of sequestered carbon is the product of the converted acreage value and the carbon content value for each land use type (vegetation community). CalEEMod calculates GHG emissions resulting from land conversion, and uses six general IPCC land use classifications for assigning default carbon content values (in units of MT CO₂ per acre). CalEEMod default carbon content values were assumed to estimate the loss of sequestered carbon (release of CO₂) from the removal of the scrub (14.3 MT CO₂ per acre), trees (111

MT CO₂ per acre), and grassland (4.31 MT CO₂ per acre) vegetation categories, which are based on data and formulas provided in the IPCC reports. The Project would permanently disturb a total of 0.21 acres of trees. Table 2.8-1 presents construction GHG emissions for the Project from on-site and off-site emission sources.

Table 2.8-1. Estimated Annual Construction GHG Emissions

Year	CO ₂	CH ₄	N ₂ O	CO ₂ e
	<i>Metric Tons per Year</i>			
2023	659.71	0.11	0.00	662.49
2024	887.34	0.10	889.94	895.92
2025	192.24	0.03	0.00	193.04
Total	1,739.30	0.25	889.94	1,751.45
<i>Vegetation Removal</i>				23.31
Total				1,774.46
<i>Amortized Over 30 Years</i>				59.16

Source: See Appendix A for complete results.

Notes: GHG = greenhouse gas; CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent.

As shown in Table 2.8-1, the estimated total GHG emissions in 2023 through 2025 would be approximately 1,751 MT CO₂e. Amortized over 30 years (SCAQMD 2008), construction and carbon loss from vegetation removal GHG emissions would be approximately 59 MT CO₂e per year. In addition, as with Project-generated construction criteria air pollutant emissions, GHG emissions generated during proposed construction activities would be short term, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions.

Because there is no separate GHG threshold for construction, the evaluation of significance is discussed in the operational emissions analysis in the following text.

Operational Emissions

Operation of the proposed Project would generate GHG emissions through motor vehicle trips to and from the Project site; landscape maintenance equipment operation; energy use (natural gas and generation of electricity consumed by the Project); solid waste disposal; and generation of electricity associated with water supply, treatment, and distribution and wastewater treatment. CalEEMod was used to calculate the annual GHG emissions.¹⁴ GHG emission estimates were based on the mobile source, area source, and energy (natural gas) operational assumptions described in Section 2.3(b), within the air quality analysis. CalEEMod default values were used to estimate GHG emissions associated with energy (electricity) consumption, solid waste, and water and wastewater.

CalEEMod default values were conservatively utilized for energy consumption, which assume compliance with the 2016 Title 24 Building Energy Efficiency Standards. However, since the publication of this IS/MND, the Project would be required to comply with the more stringent 2022 Title 24 Building Energy Efficiency Standards that became effective January 1, 2023. However, since the Project would be required to comply with the more stringent ~~The~~ 2019 Title 24 Building Energy

¹⁴ The analysis in this IS/MND represents a conservative analysis since the revisions to the Project Description, as shown in Section I of this document, include a decrease of approximately 2,000 square feet of office use, which would result in an incremental decrease in operational impacts accordingly.

Efficiency Standards **would result in** a 30% reduction—based on the California Energy Commission’s estimate that compared to the 2016 standards, “nonresidential buildings [built to 2019 standards] will use about 30% less energy due mainly to lighting upgrades” (CEC 2018). **Further, the 2022 standards build on 2016 and 2019 standards by encouraging electric heat pump technology and use, establish electric-ready requirements when natural gas is installed, expending solar photovoltaic system and battery storage requirements and strengthening ventilation standards to improve indoor air quality (CEC 2021).** Based on the age of the existing buildings to be demolished, the historical energy use (i.e., pre-2005 standards) option was selected in CalEEMod as the existing buildings were built in compliance with less stringent building energy efficiency codes.

The calculation methodology and default values provided in CalEEMod were also used to estimate the one-time carbon-stock change from planting new trees. Trees sequester CO₂ while they are actively growing and the amount of CO₂ sequestered depends on the type of tree. Thereafter, the accumulation of carbon in biomass slows with age and is assumed to be offset by losses from clipping, pruning, and occasional death. Active growing periods are subject to, among other things, species, climate regime, and planting density; however, for modeling purposes, CalEEMod assumes the IPCC active growing period of 20 years (CAPCOA 2017). CalEEMod calculates GHG sequestration that results from planting of new trees and has default carbon content values (in units of MT CO₂ per tree per year) for 10 different general tree species and a miscellaneous tree category.¹⁵ As the types of tree species that would be planted within the Project site are currently unknown, the CO₂ sequestration rate of 0.0354 MT CO₂ per tree per year for the miscellaneous tree species category was assumed in this analysis. It is assumed that all 20 trees would grow for a minimum of 20 years.

The estimated operational (2026) Project-generated and existing (2020) GHG emissions and net change in GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, and water usage and wastewater generation are shown in Table 2.8-2, Estimated Annual Operational GHG Emissions. In the event operation is started later than these projections, the analysis performed represents the worst-case scenario for GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

Table 2.8-2. Estimated Annual Operational GHG Emissions

Emission Source	CO ₂	CH ₄	N ₂ O	CO ₂ e
	metric tons per year			
Proposed Project				
Area	4.44	0.00	0.00	4.55
Energy	695.15	0.03	0.01	698.90
Mobile	2,505.36	0.12	0.00	2,508.33
Solid waste	20.05	1.19	0.00	49.68
Water supply and wastewater	74.58	0.52	0.01	91.33
Total	3,299.59	1.86	0.02	3,352.79
Existing				
Area	<0.01	0.00	0.00	<0.01
Energy	237.67	0.01	<0.01	238.92
Mobile	740.48	0.04	0.00	741.52
Solid waste	13.11	0.77	0.00	32.48

¹⁵ Species included aspen, soft maple, mixed hardwood, hardwood maple, juniper, cedar/larch, Douglas fir, true fir/hemlock, pine, spruce, and miscellaneous.

Table 2.8-2. Estimated Annual Operational GHG Emissions

Emission Source	CO ₂	CH ₄	N ₂ O	CO ₂ e
	metric tons per year			
Water supply and wastewater	57.93	0.41	0.01	71.10
Total	1,049.19	1.23	0.01	1,084.02
Net Change (Proposed Project minus Existing)	2,250.40	0.62	0.01	2,268.78
<i>Amortized Construction Emissions</i>				59.16
<i>Amortized Gain from Sequestered Carbon</i>				(0.47)
Total Net Operation + Amortized Construction Total				2,327.47

Notes: CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent; <0.01 = value reported is less than 0.01; values in parenthesis represent negative values.

See Appendix A for detailed results.

These emissions reflect proposed Project operational year 2026 and existing operational year 2020.

As shown in Table 2.8-2, the estimated net annual operational GHG emissions would be approximately 2,327 MT CO₂e, including amortized construction and loss and gain of carbon sequestration emissions. Based on the Project’s service population of 853, the Project’s GHG efficiency metric would be 2.73 MT CO₂e per service person starting in 2026, which does not exceed the City’s CAP GHG efficiency threshold of 3.57 MT CO₂e per service person. The Project has demonstrated consistency with the City’s CAP. Therefore, operational impacts associated with directly or indirectly generating a significant quantity of GHG emissions would be less than significant. No mitigation is required.

b) Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The City adopted the CAP on March 5, 2018. The CAP is a strategic framework for measuring, planning, and reducing the City’s share of GHG emissions and goals for reducing emissions. Other local policy documents include the Green City Action Plan, which was adopted in 2006, provides a list of environmental initiatives intended to guide the City towards sustainability and accelerate its environmental commitment. Furthermore, Project consistency with the SCAG 2016 RTP/SCS, CARB’s California’s 2017 Climate Change Scoping Plan (Scoping Plan), and statewide GHG reduction goals for 2030 or 2050 identified in Executive Order (EO) S-3-05 and SB 32, is discussed below.

Project Consistency with the City’s Climate Action Plan

The City uses the CAP Consistency Checklist for discretionary Projects subject to CEQA. The checklist is a tool for new development projects to demonstrate consistency with the CAP and to demonstrate a less-than-significant contribution to cumulative GHG emissions. As discussed in Section 2.8(b), under the City’s CAP Option B, the Project’s GHG efficiency metric would be 2.73 MT CO₂e per service person starting in 2026, which does not exceed the City’s CAP GHG efficiency threshold of 3.57 MT CO₂e per service person. Thus, the Project has demonstrated consistency with the City’s CAP.

Project Consistency with SCAG’s 2016 RTP/SCS and SCAG’s 2020–2045 RTP/SCS

SCAG’s 2016 RTP/SCS is a regional growth-management strategy that targets per capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region pursuant to SB 375. In addition to demonstrating the region’s ability to attain and exceed the GHG emission-reduction targets set forth by

CARB, the 2016 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. Thus, successful implementation of the 2016 RTP/SCS would result in more complete communities with a variety of transportation and housing choices, while reducing automobile use. With regard to individual developments, such as the Project, the strategies and policies set forth in the 2016 RTP/SCS can be grouped into the following three categories: (1) reduction of vehicle trips and VMT; (2) increased use of alternative fuel vehicles; and (3) improved energy efficiency. The proposed Project's consistency with these three strategy categories is presented below.

1. Consistency with VMT Reduction Strategies and Policies

The proposed Project's consistency with this aspect of the 2016 RTP/SCS is demonstrated via the Project's land use characteristics and features that would reduce vehicular trips and VMT, as well as the Project's consistency with the regional growth forecast assumed in the 2016 RTP/SCS for the City. Regarding VMT reduction characteristics, the Project is a mixed-use development located near transit stops. The nearest light rail stations are the Lake Metro Gold Line Station located at the Interstate 210 approximately 0.5 miles to the north, and the Del Mar Metro Gold Line Station located approximately 0.8 miles to the west near Central Park. As such, the proposed Project would provide residence and employment opportunities within proximity to transit services. The nature of the Project's land use mix and site location would reduce VMT and associated GHG emissions by being in proximity to complimentary land uses and employment centers, which could encourage use of alternative transportation methods such as transit, walking, or biking, or would result in shorter vehicle trips.

2. Increased Use of Alternative Fueled Vehicles Policy Initiative

The second goal of the 2016 RTP/SCS, with regard to individual development projects such as the proposed Project, is to increase alternative fueled vehicles to reduce per capita GHG emissions. This 2016 RTP/SCS policy initiative focuses on accelerating fleet conversion to electric or other near zero-emission technologies. The project would support this goal through the installation of four electric vehicle charging stations.

3. Energy Efficiency Strategies and Policies

The third important focus within the 2016 RTP/SCS, for individual developments such as the proposed Project, involves improving energy efficiency (e.g., reducing energy consumption) to reduce GHG emissions. The 2016 RTP/SCS goal is to actively encourage and create incentives for energy efficiency, where possible. The project would comply with the current Title 24 Standards CALGreen at the time of construction. Based on the previous analysis, the Project would be consistent with the SCAG 2016 RTP/SCS.

While striving to achieve the NAAQS for O₃ and PM_{2.5} and the CAAQS for O₃, PM₁₀, and PM_{2.5} through a variety of air quality control measures, the SCAQMD 2016 AQMP also accommodates planned growth in the SCAB. Projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors (e.g., population, employment) is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook). The demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by SCAG for their 2016–2040 RTP/SCS, which are based on general plans for cities and counties in the SCAB, were

used to estimate future emissions in the 2016 AQMP (SCAQMD 2017). Accordingly, the 2016 AQMP is generally consistent with local government plans. The Project does not require a land use change and, including the affordable housing density bonus, would not exceed the allowed population based density, and thus would not conflict with the growth projections within the 2016 AQMP. Therefore, the Project would be consistent with the goals of the 2016 AQMP.

On May 7, 2020, SCAG’s Regional Council adopted Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy) for federal transportation conformity purposes only. On September 3, 2020, the Regional Council approved of Connect SoCal in its entirety and for all other purposes. 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. Because the Project is not growth inducing, this type of consistency analysis does not apply. Nonetheless, the major goals of the Connect SoCal are outlined in Table 2.8-3, Project Consistency with the Southern California Association of Governments Connect SoCal RTP/SCS, along with the Project’s consistency with them.

Table 2.8-3. Project Consistency with the Southern California Association of Governments Connect SoCal RTP/SCS

RTP/SCS Goal	Project Consistency
Goal 1. Encourage regional economic prosperity and global competitiveness.	<i>Not applicable.</i> The Project would not inhibit SCAG from encouraging regional economic prosperity and global competitiveness.
Goal 2. Improve mobility, accessibility, reliability, and travel safety for people and goods.	<i>Not applicable.</i> The Project would not inhibit SCAG from strengthening the regional transportation network for goods movement.
Goal 3. Enhance the preservation, security, and resilience of the regional transportation system.	<i>Not applicable.</i> The Project would not inhibit SCAG from enhancing the resilience of the regional transportation system.
Goal 4. Increase person and goods movement and travel choices within the transportation system.	<i>Not applicable.</i> The Project would not inhibit SCAG from increasing person and goods movement and travel choices within the transportation system.
Goal 5. Reduce greenhouse gas emissions and improve air quality.	<i>No conflict.</i> The Project would result in criteria air pollutant and GHG emissions during construction and operation. The net change in GHG emissions between the Project and existing land use would not exceed the City’s CAP GHG efficiency threshold presented in Section 2.8(a). In addition, as presented in Section 2.3, the Project would not exceed the SCAQMD mass daily significance thresholds for all pollutants during construction and operation.
Goal 6. Support healthy and equitable communities.	<i>No conflict.</i> The Project would include the construction of a mixed-use development located near transit stops. The Project would be designed to encourage pedestrian activity and characteristics and features that would reduce vehicular trips and vehicle miles traveled. In addition, the Project would install four electric vehicle charging stations.

Table 2.8-3. Project Consistency with the Southern California Association of Governments Connect SoCal RTP/SCS

RTP/SCS Goal	Project Consistency
Goal 7. Adapt to a changing climate and support an integrated regional development pattern and transportation network.	<i>No conflict.</i> the Project is a mixed-use development located near transit stops. The nearest light rail stations are the Lake Metro Gold Line Station located at the Interstate 210 approximately 0.5 miles to the north, and the Del Mar Metro Gold Line Station located approximately 0.8 miles to the west near Central Park. As such, the proposed Project would provide residence and employment opportunities within proximity to transit services. In addition, in accordance with CalGreen, 25% of the total number of parking spaces on the Project site, are required to be electric vehicle charging spaces and 5% of the total number of parking spaces on a building site, are required to be electric vehicle charging stations.
Goal 8. Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	<i>Not applicable.</i> The Project would not inhibit SCAG from leveraging technology for the transportation system.
Goal 9. Encourage development of diverse housing types in areas that are supported by multiple transportation options.	<i>No conflict.</i> The Project would develop multi-family housing, including affordable housing, near transit stops. In addition, the Project would not inhibit SCAG from encouraging development of diverse housing types.
Goal 10. Promote conservation of natural and agricultural lands and restoration of habitats.	<i>No conflict.</i> The Project would not impact natural lands during construction or operation.

Source: SCAG 2020.

Notes: SCAG = Southern California Association of Governments; GHG = greenhouse gas; SCAQMD = Southern California Air Quality Management District; City = City of Pasadena.

As shown in Table 2.8-3, the Project would not conflict with the SCAG Connect SoCal RTP/SCS.

Project Consistency with the CARB Scoping Plan, SB 32, and EO S-3-05

The CARB Scoping Plan, approved by CARB in 2008 and updated in 2014 and 2017, provides a framework for actions to reduce California’s GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for Project-level evaluations.¹⁶ Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others.

The proposed Project would not impede the attainment of the GHG reduction goals for 2030 or 2050 identified in EO S-3-05 and SB 32. EO S-3-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. SB 32 establishes a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations

¹⁶ The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that “[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan” (CNRA 2009).

to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030. While there are no established protocols or thresholds of significance for that future year analysis; CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that “California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32” (CARB 2014). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update to the Climate Change Scoping Plan states that the level of reduction is achievable in California (CARB 2014). CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and EO S-3-05. This is confirmed in the *Second Update*, which states (CARB 2017):

The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasibility and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197.

The Project would not interfere with implementation of any of the previously described GHG reduction goals for 2030 or 2050 because the Project would not exceed the City’s CAP Option B GHG efficiency threshold of 3.57 MT CO₂e per service persons starting in year 2026. Because the Project would not exceed the threshold, this analysis provides support for the conclusion that the Project would not impede the state’s trajectory toward the previously described statewide GHG reduction goals for 2030 or 2050.

As discussed previously, the Project is consistent with the GHG emission reduction measures in the Scoping Plan and would not conflict with the state’s trajectory toward future GHG reductions. In addition, since the specific path to compliance for the state in regard to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures for the Project would be speculative and cannot be identified at this time. The Project’s consistency would assist in meeting the City’s contribution to GHG emission reduction targets in California. With respect to future GHG targets under SB 32 and EO S-03-05, CARB has also made clear its legal interpretation is that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet SB 32’s 40% reduction target by 2030 and EO S-03-05’s 80% reduction target by 2050; this legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the state on its trajectory toward meeting these future GHG targets. Based on the considerations previously outlined, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no mitigation is required. Therefore, impacts would be less than significant. No mitigation is required.

2.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site that 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The Los Angeles County Fire Department Health Hazardous Materials Division is the certified unified program agency (CUPA) for the City. The CUPA is designated to protect public health and the environment from accidental releases and improper handling, storage, transportation, or disposal of hazardous materials and waste (County of Los Angeles Fire Department 2020). The Pasadena Fire Department is responsible for ensuring that the transportation, use, and disposal of hazardous materials is conducted safely throughout the City (Pasadena Fire Department 2020).

Construction

Less Than Significant Impact. Construction of the proposed Project would involve demolition of five commercial buildings to construct a new ~~253,917~~ **254,152** sf mixed-use development. Construction would require the use of heavy machinery and equipment. Potentially hazardous materials used during routine construction activities may include gasoline, diesel fuel, lubricating oil, grease, adhesive materials, solvents, paints, and other materials that potentially contain hazardous substances. The materials used would not be in such quantities or stored in such a manner as to pose a significant safety or environmental hazard. Should materials that are stored onsite exceed reporting thresholds, their use would be documented and reported in a Hazardous Material Business Plan (HMBP) and submitted to the local CUPA via the California Environmental Reporting System (CERS). Project construction workers would be trained in safe handling and hazardous materials use, as required by their company health and safety plans and/or HMBP. Activities at the Project site, including those conducted by a contractor, would comply with existing federal, state, and local regulations regarding hazardous material use, storage, disposal, and transport to prevent Project-related risks to public health and safety. All on-site generated waste that meets hazardous criteria would be stored, manifested, transported, and disposed of in accordance with federal, state, and local requirements. On-site generated contaminated waste would be stored, transported, and disposed of as required by federal, state, and local requirements, and would be either treated or disposed of offsite at an authorized and permitted facility, as required. Any routine handling, transport, use, or disposal of hazardous materials would comply with the CUPA regulations. Impacts would be less than significant.

Operation

Less Than Significant Impact. The proposed Project includes residential, ~~commercial~~ **office** use (e.g., retail, restaurant), a parking garage, and open space. Potentially hazardous materials associated with operation of the proposed Project would include those materials typically associated with cleaning and maintenance activities. Although these materials would vary, they would generally include household cleaning products, solvents, paints, fertilizers, and herbicides and pesticides. Many of these materials are considered household hazardous wastes, common wastes, and universal wastes, which are types of wastes common to businesses and households and to pose a lower risk to people and the environment than other hazardous wastes when properly handled, transported, used, and disposed of (DTSC 2020). Federal, state, and local regulations typically allow these types of wastes to be handled and disposed of under less-stringent standards than other hazardous wastes, and many of these wastes do not need to be managed as hazardous waste.

Additionally, any potentially hazardous material handled on the Project site would be limited in quantity and concentration, consistent with other similar residential and ~~commercial~~ **office** uses located in the City, and any handling, transport, use, and disposal of such material would comply with applicable federal, state, and local agencies and regulations. Additionally, as mandated by the Hazard Communication Standard (29 CFR 1910.1200(g)), chemical manufacturer, distributor, or importer are required to provide Safety Data Sheets for each hazardous chemical to describe the proper handling, transportation, cleanup, and protective measures. Use of these products would be in accordance with requirements and recommendations in the Safety Data Sheet and would be managed in accordance with federal, state, and local laws and regulations. Therefore, long-term impacts associated with the routine use, transport, and disposal of hazardous materials would be less than significant.

- b) **Would the project 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?**

Construction

Less Than Significant Impact with Mitigation Incorporated. As previously described, potentially hazardous materials used during routine construction activities may include gasoline, diesel fuel, lubricating oil, grease, adhesive materials, solvents, paints, and other materials that potentially contain hazardous substances.

Should quantities of materials stored onsite be greater than reporting thresholds, these hazardous materials would be documented and reported to the CUPA via CERS in accordance with State and local requirements, which require spill response and contingency plans to address potential releases. If quantities onsite are below reporting thresholds, a significant release would not likely occur. Therefore, use of these hazardous materials for their intended purpose would not create a significant hazard to the public or the environment through foreseeable upset or accident condition.

A Desktop Environmental Review and Document Review and Phase I Environmental Site Assessment (ESA documents; Appendix E-1 and Appendix E-2) was performed to assess the potential presence of recognized environmental conditions (RECs) that could potentially impact the proposed Project. The ESA identified the following RECs:

- The east portion of the Project site located on APN 5734-025-026 was formerly utilized as a gasoline service station from sometime prior to 1931 until at least 1952. Car and battery repair and greasing also took place onsite. There has been no regulatory agency documentation of tank removal or soil sampling and analysis. As the site was improved with a new commercial building in 1964, it is likely, however not confirmed as yet, that any tanks were removed during demolition and grading of the site.
- The adjacent properties to the north of the Project site have been historically used for auto repair purposes since 1932. Based on the close proximity (within 100-feet) and long-term utilization of the property for auto repair purposes, the north adjacent property poses a potential vapor encroachment concern.

To evaluate whether the historical land uses on and surrounding the Project site have significantly impacted soil vapor conditions in the subsurface soil, a Vapor Intrusion Risk Assessment (Appendix E-3) was performed. A total of seven soil vapor probes were advanced to a depth of 5 feet below ground surface throughout the northern portion of the Project site and analyzed for volatile organic compounds (VOCs). VOCs were not detected in any of the seven soil vapor samples. Based on the Vapor Intrusion Risk Assessment, a threat to human health was not identified as a result of the former gasoline and auto repair operations at the Project site and at the north adjacent property. Therefore, potential risks associated with the vapor encroachment REC are less than significant. There are still potential impacts associated with the presence of the former gasoline service station, including potential underground storage tanks and impacts to subsurface soils. Potential contaminants of concern associated with former automotive and gasoline service station activities include, but are not limited to, petroleum hydrocarbons (gasoline, diesel, heavy oil), and volatile organic compounds (VOCs). Should construction occur in an

area where a UST was/is located or contaminated soils are found, this could result in an upset or accident resulting in a release of hazardous materials. As described in the ESA documents (Appendix E-1 and E2), groundwater is at a depth of approximately 145 feet below ground surface, and is not expected to be encountered during construction activities.

MM-HAZ-1 Prior to commencement of any demolition or construction activities, a Hazardous Materials Contingency Plan (HMCP) shall be developed that addresses potential impacts in soil and the potential presence of USTs associated with the former gasoline service station located on the Project site. The HMCP shall include training procedures for identification of contamination and USTs, including procedures for a geophysical survey to identify USTs in the area of the former gasoline service station. The HMCP shall describe procedures for assessment, characterization, management, and disposal of contaminated soils; **assessment, characterization, and management of soil vapor;** and notification and decommissioning procedures for tanks, in accordance with all applicable state and local regulations. The HMCP will be an internal document used by the permittee and/or its designee (e.g. environmental monitor). The HMCP will designate an environmental monitor who would determine disposal and reporting requirements for contaminated soils, **and will be present on-site during grading activities in areas where potentially impacted soils may be encountered** as outlined in the HMCP. Contaminated soils shall be managed and disposed of in accordance with local and state regulations (e.g. City of Pasadena Best Management Practices for soil stockpiles (City of Pasadena 2018), Draft Regional Water Board Fill Material Definitions (RWQCB 2020), DTSC Voluntary Cleanup Program and/or RWQCB Leaking Underground Storage Tank program, as applicable). **Should soil vapor contamination be identified above applicable regulatory levels, as outlined in the HMCP, soil vapor intrusion methods will be outlined in the final report based on the findings on site and in accordance with February 2023 DTSC Final Draft Supplemental Guidance for Screening and Evaluating Vapor Intrusion. Proposed engineering methods for attenuation of vapor intrusion will be prepared and submitted with building plans and approved by the permitting agency prior to issuance of construction permits.** The HMCP shall include health and safety measures, which may include but are not limited to periodic work breathing zone monitoring and monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. Health and safety measures will be based on California and federal Occupational Safety and Health Administration (OSHA) requirements for worker safety, including permissible exposure limits (PELs). The permittee or its designee shall implement the HMCP during construction activities for the proposed Project.

Given the age of the existing on-site buildings on the southern portion of the Project site (APNs: 5734-025-027 and 5734-025-029), there is potential for asbestos-containing building materials (ACM) and lead-based paint (LBP) to be encountered during demolition activities. Demolition of these structures without proper abatement of hazardous building materials could result in an upset or accident condition releasing hazardous materials to the environment. The proposed Project would be required to comply with SCAQMD Rule 1403, Asbestos Emissions from Demolition/Renovation Activities, which addresses asbestos emissions from demolition and renovation activities and requires the safe handling of known or suspected ACM (SCAQMD 1989). The purpose of SCAQMD Rule 1403 is to specify work practice

requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of ACM. The requirements for demolition and renovation activities include asbestos surveying; notification; ACM removal procedures and time schedules; ACM-handling and clean-up procedures; and storage, disposal, and landfilling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and to use appropriate warning labels, signs, and markings (SCAQMD 1989). The California Department of Public Health enforces lead laws and regulations related to the prevention of lead poisoning, accreditation and training for construction-related activities, lead exposure and screening, disclosures, and limitations on the amount of lead in products. Accredited specialists are required to find and abate lead hazards in a construction project and to perform lead-related construction work in an effective and safe manner. Additionally, construction debris may require screening for hazardous levels of leachable lead.

Nonetheless, demolition and disposal of these materials without proper abatement could cause an upset or accident condition. Proper identification, delineation, and abatement of potentially hazardous materials would prevent potential exposure of hazardous materials to the public or the environment during transportation and disposal of potentially contaminated media. Impacts related to ACM and LBP are potentially significant. With implementation of MM-HAZ-1 and MM-HAZ-2, construction impacts associated with potential upset and accident conditions would be less than significant.

MM-HAZ-2 Prior to commencement of demolition or construction activities on the southern portion of the Project site (APNs: 5734-025-027 and 5734-025-029), a hazardous building materials survey shall be conducted to identify asbestos, lead-based paint, and other potentially hazardous building materials (such as mercury thermometers, lighting and electrical appurtenances). The survey shall be conducted on the two buildings in the southern portion of the Project site scheduled to be disturbed/demolished. Following results of the hazardous materials survey, demolition or renovation plans and contract specifications shall incorporate abatement procedures for the removal of materials containing asbestos and lead. All abatement work shall be done in accordance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency, Occupational Safety and Health Administration, California Occupational Safety and Health Administration, and the South Coast Air Quality Management District.

Operation

Once operational, onsite hazardous materials would generally include household cleaning products, solvents, paints, fertilizers, and herbicides and pesticides. As discussed in impact analysis (a), these common household hazardous materials would be stored in small quantities and used in accordance with federal, state, and local regulations, as well as in accordance with manufacturer's instructions. Therefore, impacts would be less than significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact with Mitigation Incorporated. Futures Academy – Pasadena, is located approximately 0.17-mile north of the Project site at 35 N Lake Avenue. Hazardous materials required for construction and operation would be transported, handled, stored, and disposed of in accordance with federal, state, and local laws and regulations, as described in the previous analysis sections. Hazardous

materials used during construction of the proposed Project would be stored within proposed Project boundaries. Hazardous materials associated with potentially contaminated soils and/or USTs would be managed by a HMCP as described in MM-HAZ-1. Hazardous materials associated with potential ACM, LBP, and/or other hazardous building materials would be identified and abated as described in MM-HAZ-2. Therefore, impacts related to emissions or handling of hazardous materials near schools would be less than significant with mitigation incorporated.

Land uses and activities typically associated with hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste include heavy commercial, manufacturing, research, and industrial uses. The proposed Project does not include any such uses or activities. Once operational, onsite hazardous materials would generally include household cleaning products, solvents, paints, fertilizers, and herbicides and pesticides. As discussed in impact analysis (a), these common household hazardous materials would be stored in small quantities and used in accordance with federal, state, and local regulations, as well as in accordance with manufacturer's instructions.

- d) Would the project be located on a site that 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?**

Less Than Significant Impact with Mitigation Incorporated. The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the state, local agencies, and developers to comply with the CEQA requirements of providing information about the locations of hazardous materials release sites. California Government Code Section 65962.5 requires the California EPA to develop, at least annually, an updated Cortese List. However, the Cortese List is no longer updated as a single list; the information is contained in multiple regulatory databases. DTSC and the State Water Resources Control Board maintain multiple lists that meet the requirements of California Government Code Section 65962.5.

As part of the Phase I ESA conducted for the Project site (Appendix E-1 and E-2), a regulatory agency record review (EDR database search) was conducted for the Project site and surrounding properties. The EDR database search listed the Project site and surrounding properties in various databases indicating the use and storage of hazardous materials and/or petroleum products, and generation of hazardous waste. This database search includes Cortese List databases. While the Project site and adjoining sites were not identified on Cortese List databases, they were listed in other databases that identify hazardous material usage and/or potential hazardous material contamination. The Project site is listed as the Penn Oil & Supply Co. / Kirks Texaco Service (790 East Green Street) on the EDR Historical Auto Station (EDR US Hist Auto Stat) database. According to the listing, gas stations Penn Oil & Supply Co. and Kirks Texaco Service operated on the property during at least 1932 through 1942 and in 1951, respectively. In addition, several adjoining and immediately surrounding properties were identified as former auto service shops and one former dry cleaner (see Appendix E-2).

As discussed in previous impact sections, a Vapor Intrusion Risk Assessment (Appendix E-3) was conducted on the northern portion of the Project site in the area surrounding the former gasoline service station and adjacent potentially contaminated sites. The results of the Risk Assessment confirmed there were no detected VOCs in soil vapor at 5 feet below ground surface and, as such, no potential risk from contaminated soil vapors. However, as also discussed above, there is a potential for contaminated soils and USTs to be present on the Project site due to the presence of the former gasoline service station. Implementation of a HMCP would be required in accordance with MM-HAZ-1; therefore, any

contaminated soils and/or USTs onsite would be identified and properly managed in accordance with federal, state, and local laws and regulations. Thus, impacts associated with hazardous material sites would be less than significant with mitigation incorporated.

- 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?**

No Impact. The San Gabriel Airport, which is located approximately 6.8-miles southeast of the Project site in El Monte, is the closest public use airport. The Project site is more than 2 miles from the San Gabriel Airport and is not within an airport land use plan. As such, the proposed Project would not involve placing people or structures in proximity to aircraft operations. Therefore, no impacts associated with public airport hazards would occur.

- f) **Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Less Than Significant Impact. According to the General Plan EIR, the City has incorporated two emergency preparedness plans, namely, the Los Angeles County Operational Area Emergency Response Plan and the City's Emergency Operations Plan (EOP; City of Pasadena 2015a). Both plans provide the framework for emergency preparedness and response, although the EOP specifically provides a plan for the residents of Pasadena to respond to major emergencies or disasters. Additionally, the Pasadena Fire Department provides emergency response services, including hazardous materials emergency response (City of Pasadena 2015a).

According to the LADPW, Colorado Boulevard, which runs in an east-west direction approximately 500 feet south of the Project site, is an emergency disaster route and the I-210, which runs in an east-west direction approximately 0.5 mile north of the Project site, is a freeway disaster route (County of Los Angeles Department of Public Works 2008).

In the event of a major disaster or emergency, the Los Angeles County Operational Area Emergency Response Plan and the City's EOP would improve the efficiency of the City's disaster response. The proposed Project would not include the construction of any buildings or infrastructure that would preclude the City's or County's ability to implement an adopted emergency response plan or emergency evacuation plan. During construction of the proposed Project, it is anticipated that some of the construction activities may require short-term partial or full road closures of travel lanes along Oak Knoll Avenue or Hudson Avenue. As further detailed in Section 2.17, Transportation, the Project applicant would submit a Construction Staging and Traffic Management Plan (CSTMP) to the Pasadena Department of Public Works (DPW) that shall show the impact of various construction stages on the public right-of-way (Appendix H-1). The CSTMP would require coordination with agencies and City departments to obtain necessary occupancy permits in the event of road closures to identify any detour or alternate routes. With implementation of the CSTMP, impacts to emergency access during construction of the Project would be less than significant. Upon operation of the proposed Project, emergency access would be provided via Green Street, Oak Knoll Avenue, and Hudson Avenue. As such, the proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant. No mitigation is required.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

No Impact. The Project site is located within an urban setting and is surrounded by developed land uses, which are predominantly commercial and residential in nature. According to the CALFIRE Very High Fire Hazard Severity Zone (VHFHSZ) Map, the Project site is not located within a VHFHSZ (CAL FIRE 2011). The nearest fire hazard areas are the undeveloped, wildland areas of the Arroyo Seco, approximately 1.8 miles west of the Project site. Therefore, no impacts associated with wildland fires would occur.

2.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. A significant impact would occur if the proposed Project would discharge water that did not meet the water quality standards established by the State Water Resources Control Board (SWRCB) NPDES and waste discharge requirement (WDR) permit programs, and the Los Angeles Regional Water Quality Control Board's (LARWQCB) Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan; LARWQCB 2019). The proposed Project is not anticipated to violate any water quality standard or waste discharge requirement during construction and operation, for the reasons described below.

Construction

Construction General Permit. The demolition of the existing buildings on-site would disturb the entire Project site. As described in Section 2.7, Geology and Soils, grading and excavation activities would result in soil disturbance, which could potentially increase sediment loads in stormwater runoff by eroding soils newly loosened by construction activities. Additionally, as described in Section 2.9, Hazards and Hazardous Materials, the proposed Project could adversely affect water quality through the accidental spills and leaks of construction-related pollutants such as petroleum products from construction vehicles.

However, the proposed Project would comply with the provisions of the NPDES General Permit for Storm Water Associated with Construction Activities (Order No 2009-009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ, NPDES No. CAS000002). Because the proposed Project is greater than one acre in size, the Applicant would be required to submit a Notice of Intent to the LARWQCB in order to obtain approval to complete construction activities under the Construction General Permit. This permit would include a number of design, management, and monitoring requirements for the protection of water quality and the reduction of construction phase impacts related to stormwater (and some non-stormwater) discharges. Permit requirements would include the preparation of a SWPPP, implementation and monitoring of BMPs, implementation of best available technology for toxic and non-conventional pollutants, implementation of best conventional technology for conventional pollutants, and periodic submittal of performance summaries and reports to the LARWQCB. The SWPPP would apply to the Project as a whole and would include reference to the major construction areas, materials staging areas, and haul roads.

Typical BMPs that could be incorporated into the SWPPP include, but are not limited to, the following:

- Diverting off-site runoff away from the construction site
- Vegetating landscaped/vegetated swale areas as soon as feasible following grading activities
- Placing perimeter straw wattles to prevent off-site transport of sediment
- Using drop inlet protection (filters and sand bags or straw wattles), with sandbag check dams within paved areas
- Regular watering of exposed soils to control dust during demolition and construction
- Implementing specifications for demolition/construction waste handling and disposal
- Using contained equipment wash-out and vehicle maintenance areas
- Maintaining erosion and sedimentation control measures throughout the construction period

- Stabilizing construction entrances to avoid trucks from imprinting soil and debris onto City roadways
- Training, including for subcontractors, on general site housekeeping

Additionally, the proposed Project would comply with the City's Municipal Code, Section 8.70.010 et seq., which legislates stormwater management and discharge control during construction-related activities. Additionally, the proposed Project would be required to comply with the latest County of Los Angeles Department of Public Works Low Impact Development (LID) Standards Manual. The LID Standards Manual complies with the requirements of the NPDES Municipal Separate Storm Sewer System (MS4) Permit for stormwater and non-stormwater discharges from the MS4 within the coastal watersheds of Los Angeles County (CAS004001, Order No. R4-2012-0175), referred to as the 2012 MS4 Permit. The LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges (LADPW 2014). Given the above, the proposed Project would have a less than significant impact on water quality standards and waste discharge requirements and would not otherwise substantially degrade surface or ground water quality during construction, and no mitigation is required.

Operations

Operation of the proposed Project would have a less than significant impact to water quality through implementation of the following:

- **Stormwater Management and Discharge Control.** The purpose of the City's Municipal Code, Section 8.70.010 et seq. is to ensure the future health, safety, and general welfare of the residents of the City of Pasadena who recreate in and consume from the waters of the United States, and to protect marine habitats and ecosystems existing therein by: a) Regulating non-stormwater discharges to the municipal stormwater system; b) Providing for the control of spillage, dumping or disposal of materials into the municipal storm-water system; and, c) Reducing pollutants in stormwater and urban runoff to the maximum extent practicable. The proposed Project would adhere to the City's stormwater management and discharge control regulations and, as such, is not anticipated to violate any water quality standard or waste discharge requirement during operation.
- **LID Features.** In the City of Pasadena, all development and redevelopment projects must comply with the latest County of Los Angeles Department of Public Works LID Standards Manual. The LID Standards Manual complies with the requirements of the NPDES MS4 Permit for stormwater and non-stormwater discharges from the MS4 within the coastal watersheds of Los Angeles County (CAS004001, Order No. R4-2012-0175), referred to as the 2012 MS4 Permit. The LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges (City of Pasadena 2019).

Project design, construction, and operation would be completed in accordance with the LID Standards Manual, with the goal of reducing the amount of pollutants in stormwater and urban runoff. The Project would be required to comply with the LID ordinance and LID Standards Manual, which mandates completion of a LID Plan. This plan would include permanent control measures to reduce the long-term impacts of the Project on water quality and the tributary waterways. The LID Plan would use site design

and stormwater management in order to maintain the site's pre-development runoff rates and volumes. The goal of the LID Plan would be to mimic the site's pre-development hydrology by using design techniques that filter, store, evaporate, and detain runoff close to the source of rainfall. Some examples of these LID measures that would be incorporated into the Project include, but are not limited to:

- Minimizing impervious surfaces that are directly connected to the storm drain system, by routing runoff to landscaped areas;
- Using landscaping as a drainage feature;
- Using roofed trash enclosures;
- Connecting areas used for washing equipment to the sanitary sewer;
- Marking storm drain inlets with a "No Dumping" message;
- Street and parking lot sweeping;
- Regular inspection and cleaning of storm drain inlets; and
- Engineering source control treatment measures.

Per the LID Manual, the Project must retain the stormwater quality design volume (SWQDv) on-site through infiltration, evapotranspiration, stormwater runoff harvest and reuse, or a combination thereof, unless it is demonstrated that it is technically infeasible to do so. The SWQDv is defined as the greater of the 0.75-inch, 24-hour rain event, or the 85th percentile, 24-hour rain event, as determined from the Los Angeles County 85th percentile precipitation isohyetal map.

Compliance with SWPPP and LID features would ensure that the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. As such, Project impacts would be less than significant, and no mitigation is required.

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

Less Than Significant Impact. According to the City's 2015 Urban Water Management Plan (UWMP), local water supplies include local water from the Raymond Basin (approximately 40%) and purchased imported water (approximately 60%) from the Metropolitan Water District (MWD) of Southern California, which sources water from the State Water Project (SWP) and the Colorado River Aqueduct (UWMP 2015). The UWMP projects adequate water supply from the Raymond Basin in normal, single dry year, and multiple dry year conditions through the planning horizon of 2040 (UWMP 2015).

The proposed Project would not include the introduction of any infrastructure, including wells, which would decrease groundwater supplies. Rather, the proposed Project would tie-in to the existing water utility and, as such, would receive water supply from PWP, some of which would be sourced from groundwater supplies. Withdraw from the Raymond Basin is controlled by the Raymond Basin Management Board and, thus, the volume of water PWP withdraws from the Basin is not dependent on the City's water demand. With regard to groundwater recharge, the proposed Project site is entirely developed and paved under existing conditions, which precludes water infiltration and any associated groundwater recharge at the Project site. Upon Project operation, the Project site would be predominantly

paved, with the exception of a ~~4,440~~**4,033**-sf pocket park and other small open space areas. As such, the Project site would remain largely impermeable upon Project operation, and the existing on-site drainage patterns and groundwater recharge trends would prevail. Therefore, the proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin when compared to existing conditions. Impacts would be less than significant. No mitigation is required.

c) Would the project 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;

Less Than Significant Impact. As stated above in Section 2.10(b), the proposed Project site would remain largely impermeable upon Project operation, and the existing on-site drainage patterns would prevail. Therefore, the proposed Project would not substantially alter drainage patterns through the addition of impervious surfaces. Additionally, the Project site is not located within the general vicinity of a stream or river and, as such, would not alter the course of a stream or river. However, during construction-related activities, soils exposed during grading and excavation would have increased potential for erosion as a result of exposure to the elements (e.g. water runoff).

Given that the proposed Project would disturb more than one acre of soil, the Project would be required to obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2009-009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ, NPDES No. CAS000002) or the latest approved general permit. The General permit would include erosion-control measures as part of the SWPPP for the Project. The required SWPPP would mandate the implementation of BMPs to reduce or eliminate construction-related pollutants in the runoff, including sediment that could result in siltation. Implementation of the erosion control BMPs in the SWPPP would reduce construction-related soil erosion and siltation associated with Project implementation. Impacts would be less than significant, and no mitigation is required.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;

Less Than Significant Impact. As stated above in Section 2.10(b), the proposed Project site would remain largely impermeable upon Project operation, and the existing on-site drainage patterns would prevail. The Project site is not located within the general vicinity of a stream or river, and, as such, would not alter the course of a stream or river. Additionally, as stated above in Section 2.10(a), the proposed Project would implement LID features intended to mimic the site's pre-development hydrology by using design techniques that filter, store, evaporate, and detain runoff close to the source of rainfall. LID features should, as much as feasibly possible, minimize impervious surfaces, use landscape as a drainage feature, and improve drainage facilities to decrease the potential of flooding on and off site. With these features implemented, the development of the proposed Project would not result in a substantial increase in the rate or amount of surface runoff in a manner that would result in flooding. Impacts would be less than significant. No mitigation is required.

- 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; or**

Less Than Significant Impact. As stated above in Section 2.10(b), the proposed Project site would remain largely impermeable upon Project operation, and the existing on-site drainage patterns would prevail. The Project site is not located within the general vicinity of a stream or river, and as such, would not alter the course of a stream or river.

As previously discussed, during construction, erosion-control measures would be implemented as part of the SWPPP for the Project, consistent with the requirements of the NPDES General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2009-009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ, NPDES No. CAS000002) or the latest approved general permit. The site-specific SWPPP would ensure that runoff during construction would not exceed the capacity of existing or planned storm water infrastructure. In addition, the development of LID features would minimize post-construction sources of polluted runoff by mimicking the site's pre-development hydrology and filtering, storing, evaporating, and detaining water. With these features, the proposed Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Project impacts would be less than significant, and no mitigation is required.

- iv) **impede or redirect flood flows?**

No Impact. As stated above in Section 2.10(b), the proposed Project site would remain largely impermeable upon Project operation, and the existing on-site drainage patterns would prevail. The Project site is not located within the general vicinity of a stream or river, and, as such, would not alter the course of a stream or river. There are no drainages, creeks, or streams on the Project site and no flows would be diverted, impeded, or redirected due to the proposed Project. According to the Federal Emergency Management Agency (FEMA), the Project is located within Zone X, which is an area of Minimal Flood Hazard (FEMA 2008). Therefore, the Project site is not located within an area that would be subject to flooding or flood flows. No impact would occur.

- d) **In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?**

No Impact. The Project site is not located within an area at risk from floods, tsunamis, or seiches (CGS 2015). According to FEMA, the Project is located within Zone X, which is an area of Minimal Flood Hazard (FEMA 2008). Therefore, the Project site is not located within an area that would be subject to flooding. The nearest inundation zone to the Project site is associated with the Arroyo Seco Watershed, approximately 1.8 miles west of the Project site. The prevailing distance between the Arroyo Seco channel and the Project site precludes the risk of Project inundation. Given the above, the risk of release of pollutants due to Project inundation as a result of dam failure, flood hazard, tsunami, or seiche is low. No impact would occur.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties is the Water Quality Control Plan (WQMP) for the Los Angeles Region, which includes the City of Pasadena. The Basin Plan: (i) identifies beneficial uses for surface and ground waters, (ii) includes the narrative and numerical water quality objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's anti-degradation policy, and (iii) describes implementation programs and other actions that are necessary to achieve the water quality objectives established in the Basin Plan (LARWQCB 2019).

With compliance with applicable regulations, the proposed Project would not include any facilities or land uses that could generate pollutants that could result in substantial water quality impacts. As discussed in Threshold 2.10(a), compliance with the City's requirements would protect surface water quality in a manner pursuant to the NPDES Construction General Permit. Additionally, compliance with the General Permit issued by the SWRCB would require implementation of BMPs during construction to address the potential for pollutants from entering downstream waters. The Project's potential to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality would be less than significant and no mitigation is required.

California Department of Water Resources (DWR) is required to prioritize and update California's groundwater basin prioritization in accordance with the requirements of Sustainable Groundwater Management Act (SGMA) and related laws. SGMA requires that groundwater resources be managed sustainably for long-term reliability and multiple benefits for current and future beneficial uses and also allows the SWRCB to intervene if local agencies will not or do not meet the SGMA requirements. SGMA applies to all California groundwater basins and requires the DWR to prioritize California's 517 groundwater basins and subbasins as either high, medium, low, or very low (DWR 2019). The Raymond Basin, which underlies the City of Pasadena, was determined by DWR to be "Very Low" priority and is a fully adjudicated basin; therefore, the Raymond Basin is not subject to the requirements to form a GSA or to develop a Groundwater Sustainability Plan (DWR 2019).

As previously discussed, the SWPPP and LID features would reduce the Project's impact on water quality in accordance with all applicable federal, state, and local requirements. Additionally, the Project would be consistent with the assumptions set forth in the City's UWMP discussed in section 2.10(b). As a result, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, the Project's impact would be less than significant, and no mitigation is required.

2.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Would the project physically divide an established community?

Less Than Significant Impact. The proposed Project would be located on a site that is fully developed with commercial land uses under existing conditions. Adjacent land uses include single- and multi-family residential and commercial to the west across Oak Knoll Avenue; commercial and parking to the north across Green Street; multi-family residential and parking to the east across Hudson Avenue; and offices and a church immediately to the south, with multi-family and office uses beyond.

The proposed Project would include the construction of a mixed-use development, comprising 236 rental apartment units, approximately ~~16,481~~ **14,346** sf of ~~commercial~~ **office** development (e.g. retail, restaurant), and ~~37,666~~ **39,980** sf of open space and amenities, including a ~~4,110~~ **4,033** sf publicly accessible pocket park. As such, the proposed Project would be consistent with the land use patterns in the surrounding area. Moreover, the proposed Project would be developed on a single site and would not include the construction of any infrastructure or features that would encroach into adjacent ROWs, thereby physically dividing an established neighborhood. The site currently consists of commercial land uses, and the proposed Project would construct new residential and ~~commercial~~ **office** uses. Thus, the proposed Project would not physically divide an existing community, but rather, would facilitate the development of community within the area. Further, the proposed Project does not involve the displacement of existing residences or the construction of barriers through the developed residential areas of the City. Therefore, the proposed Project would not physically divide an established community. Impacts would be less than significant. No mitigation is required.

b) Would the Project 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?

Less Than Significant Impact. Land use plans and policies applicable to the proposed Project are set forth in the City’s General Plan and Zoning Ordinance. The City’s General Plan provides the planning framework through which development in the City is organized and carried out. The Project site is located within the CD-4 (Central District, Pasadena Playhouse) zoning district.

~~The proposed Project would establish a Planned Development (PD) zoning district (via a Zone Change) for the site and requires adoption of a PD Plan that prescribes the development standards and allowed or conditionally allowed uses in the PD. The Project proposes to use the State Density Bonus regulations~~

legislated by the California Government Code Section 65915 as well as the City’s Affordable Housing Concession Menu to develop 263 units, which would be allowed after applying a 30% density bonus based on the inclusion of 41 affordable housing units on-site. Because the proposed Project would include 20% on-site affordable housing units, the Project would comply with the City’s Inclusionary Housing Ordinance, which would allow the Project to utilize the City’s concessions of a FAR increase of 0.5 and a height increase of 12 feet for no more than 60% of the building footprint. The project would also require Design Review approval.

No General Plan Amendment is being sought by the proposed Project. With approval of the zone change from CD-4 to PD-37 and approval of the Project, including Design review, the proposed Project would be compatible with the City’s zoning designations and would have a less than significant impact on any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No mitigation is required.

2.12 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the project 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?

No Impact. According to the Department of Conservation’s State Mining and Geology Board, the proposed Project site is located in Mineral Resource Zone 3 (MRZ-3) for aggregate resources such as sand, gravel etc.; MRZ-3 is defined as an area containing mineral deposits, the significance of which cannot be evaluated from available data (DOC 1982). There are not active mining operations in the City and mining is not an allowed use in any of the City’s zones. As such, the proposed Project would not 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.

The DOC’s Division of Oil, Gas, and Geothermal Resources (DOGGR) does not list any wells on, or in the general vicinity of, the Project site (DOGGR 2019). The nearest well is located 3.98 miles south of the Project site and has been plugged (non-operable) since 1964 (DOGGR 2005). As such, the proposed Project would not 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. No impacts would occur. No mitigation is required.

b) Would the project 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?

No Impact. The General Plan EIR found that the projected buildout of the City would have no impact to mineral resources as well as oil, gas, and geothermal resources (City of Pasadena 2015a). There are no locally important mineral resource recovery sites in Pasadena that are identified in the City’s General Plan, Specific Plans, or other land use plans. No impact would occur. No mitigation is required.

2.13 NOISE

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Noise Characteristics

Sound may be described in terms of level or amplitude (measured in decibels (dB)), frequency or pitch (measured in hertz (Hz) or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the amplitude of sound is the decibel. Because the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against low and very high frequencies in a manner approximating the sensitivity of the human ear. Several descriptors of noise (noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise, on a community. These descriptors include the equivalent noise level over a given period (L_{eq}), the statistical sound level (L_n), the day–night average noise level (L_{dn}), and the community noise equivalent level (CNEL). Each of these descriptors uses units of dBA. In terms of changes in environmental or community noise levels, a 3 dBA increase or decrease is generally recognized as the threshold for an average person to notice a change has occurred.

L_{eq} is a sound energy level averaged over a specified time period (typically no less than 15 minutes for environmental studies). L_{eq} is a single numerical value that represents the amount of variable sound energy received by a receptor during a time interval. For example, a 1-hour L_{eq} measurement would represent the average amount of energy contained in all the noise that occurred in that hour. L_{eq} is an effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors. L_{max} is the greatest sound level measured during a designated time interval or event.

Unlike the L_{eq} metrics, L_{dn} and CNEL metrics always represent 24-hour periods, usually on an annualized basis. L_{dn} and CNEL also differ from L_{eq} because they apply a time-weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when speech and sleep disturbance is of more concern). “Time weighted” refers to the fact that L_{dn} and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 a.m.–7:00 p.m.) receives no penalty. Noise during the evening (7:00 p.m.–10:00 p.m.) is penalized by adding 5 dB, while nighttime (10:00 p.m.–7:00 a.m.) noise is penalized by adding 10 dB. L_{dn} differs from CNEL in that the daytime period is defined as 7:00 a.m.–10:00 p.m., thus eliminating the evening period. L_{dn} and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5 to 1 dB.

Existing Noise Conditions

The Project site is located at 740-790 East Green Street. The Project site is bounded by East Green Street to the north, South Hudson Avenue to the east, private property to the south, and South Oak Knoll Avenue to the west. Single- and multi-family residential uses are located to the west of the Project site, across South Oak Knoll Avenue. Multi-family residential uses are located to the east across Hudson Avenue. A church is located immediately to the south, and multi-family residential uses are located to the south of an office building.

A sound-level survey was conducted on September 17, 2019, to evaluate existing sound levels and assess potential Project noise impacts on the surrounding area. Short-term (1 hour or less) attended sound-level measurements were taken with a SoftdB Piccolo sound-level meter. This instrument is categorized as type 2, general use. The sound-measuring instrument used for the survey was set to the “slow” time response and the A-weighting scale for all noise measurements. To ensure accuracy, the calibration of the instrument was field checked before the measurements using a portable acoustical calibrator. The microphone height was 5 feet above the ground on a tripod, and the microphone was equipped with a windscreen.

Short-term sound levels were measured at four locations in the Project vicinity (Refer to Appendix F, Noise Assessment Technical Report, for further detail). During the field measurements, physical observations of the predominant noise sources were noted. The major noise source in the Project area was vehicle traffic. Other secondary noise sounds included distant conversations, birds, distant construction noise, and other community noises. Appendix A includes field data sheets from the measurements conducted in the site vicinity. Table 2.13-1 provides the measured noise levels and concurrent traffic volumes for the pertinent roadway facilities. As shown in Table 2.13-1, measured noise levels varied from 65 dBA L_{eq} at ST2 to 71 dBA L_{eq} at ST4.

Table 2.13-1. Measured Average Traffic Sound Level and Manual Traffic Count Results

Site	Primary Noise Source	Date	Time	Leq	Cars	MT ²	HT ³
ST1; 101 South Oak Knoll Avenue	Traffic on South Oak Knoll Avenue	9/17/19	9:49 to 10:04 a.m.	66 dBA	52	1	0
ST2; 128 South Oak Knoll Avenue	Traffic on South Oak Knoll Avenue		10:07 to 10:22 a.m.	65 dBA	44	1	0
ST3; 139-141 South Hudson Avenue	Traffic on South Hudson Avenue		10:32 to 10:47 a.m.	67 dBA	62	1	0
ST4; 820 East Green Street	Traffic on South Hudson Avenue		10:51 to 11:06 a.m.	71 dBA	61	1	0

Source: Appendix F

Notes:

- ¹ Equivalent Continuous Sound Level (Time-Average Sound Level)
- ² Medium Trucks
- ³ Heavy Trucks

Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and recreation areas would be considered noise- and vibration-sensitive and may warrant unique measures for protection from intruding noise. Sensitive receptors near the project site include residences to the east and west of the Project site (across Hudson Avenue and Oak Knoll Avenue, respectively). Additionally, a church is located immediately south of the Project site, and residences are also located to the south, south of an office building. In evaluating construction noise impacts, including impacts on these noise-sensitive land uses in the immediate proximity of the Project site, the City measures construction noise impacts at 100 feet from the source (i.e., equipment) to compare construction noise levels to the corresponding 85-dBA limitation in the City’s Noise Ordinance exemption.

The above sensitive receptors represent the nearest land uses with the potential to be impacted by construction and operation of the proposed development. Additional sensitive receptors are located farther from the Project site in the surrounding community and would be less impacted by noise and vibration levels from the Project.

- a) **Would the project result in 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?**

Short-Term Construction Impacts

Less Than Significant Impact. Construction noise and vibration are temporary occurrences. Construction noise and vibration 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 construction, distance between the noise source and receiver, and intervening structures. Noise impacts resulting from construction noise levels were calculated (refer to Appendix F for further details) at nearby sensitive receptors (i.e., residences).

Construction – Equipment Data and Description

Equipment operates in alternating cycles of full power and low power, producing noise levels less than the maximum level. The typical noise levels for various pieces of construction equipment at a distance of 50 feet are presented in Table 2.13-2.

Table 2.13-2. Typical Construction Equipment Noise Emission Levels and Usage Factors

Equipment Description	Impact Device?	Acoustical Use Factor (%)	L _{max} @ 50 Feet (dBA, Slow)
All other equipment > 5 horsepower	No	50	85
Auger drill rig	No	20	85
Backhoe	No	40	80
Bar bender	No	20	80
Compressor (air)	No	40	80
Concrete pump truck	No	20	82
Crane	No	16	85
Dozer	No	40	85
Dump truck	No	40	84
Excavator	No	40	85
Flatbed truck	No	40	84
Front-end loader	No	40	80
Generator	No	50	82
Generator (<25 kilovolt-amperes)	No	50	70
Hydra break ram	Yes	10	90
Man lift	No	20	85
Pickup truck	No	40	55
Pneumatic tools	No	50	85
Pumps	No	50	77
Roller	No	20	85
Sand blasting (single nozzle)	No	20	85
Scraper	No	40	85
Tractor	No	40	84
Welder/torch	No	40	73

Source: Appendix F

As shown in Table 2.13-2, a backhoe has a maximum sound level of 80 dBA at a distance of 50 feet; with outdoor attenuation rates, this level would be reduced to 74 dBA at 100 feet, and 68 dBA at 200 feet.

On-Site Construction Noise Assessment

With the assumed construction equipment noise sources identified in Table 2.13-3, a noise analysis of on-site construction noise was performed using the Roadway Construction Noise Model (RCNM), developed by the Federal Highway Administration (FHWA 2008). Input variables for RCNM consist of the receiver/land use types, the equipment type (e.g., backhoe, crane, truck), the number of equipment pieces, the duty cycle for each piece of equipment (i.e., percentage of each hour or reference period that the equipment typically works), and the distance from the equipment to the receiver. Refer to Appendix F for the inputs used in the RCNM model and the results.

Noise-sensitive land uses exist to the south, east and west of the Project site. The closest noise-sensitive receiver consists of a church that is as near as 10 feet from the Project site, located immediately south of the Project site. Multi-family residences exist to the south, west, and east, with the closest being approximately 60 feet from the Project site. Additionally, single-family residences exist to the west, approximately 60 feet from the Project site. These nearby land uses (and the nearest source-receiver distances) were used to assess worst-case construction noise levels. However, the above distance assumptions would not be representative of more typical construction noise, because in general the construction activities would not take place either at the nearest or at the farthest portions of the Project site, but somewhere in between. Thus, in order to provide information on typical construction noise levels, the distance from the nearest receivers to the Project’s “acoustic center” was also analyzed. The acoustic center represents the idealized point from which the energy sum of all construction activity noise, near and far, would be centered. The acoustic center is derived by taking the square root of the product of the nearest and the farthest distances. For this Project, the acoustic center for the nearest noise-sensitive land use (the church to the south) was found to be approximately 60 feet. Given the overall size of the Project site, and the relatively equal distribution of proposed development across the property, noise levels derived from the acoustic center of construction activity would provide a better representation of average noise level exposure across the entire construction process for a given off-site receiver, than using the minimum distance worst-case method.

Table 2.13-3. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Average Daily Haul Truck Trips ¹	Equipment Type	Quantity	Usage Hours
Demolition	16	0	25	Concrete/Industrial Saws	1	8
				Excavators	3	8
				Rubber Tired Dozers	2	8
Grading	20	0	78	Excavators	2	8
				Graders	1	8
				Rubber Tired Dozers	1	8
				Scrapers	2	8
				Tractors/Loaders/Backhoes	2	8
Trenching	4	0	0	Trenchers	1	8
Building construction	288	68	0	Cranes	1	7
				Forklifts	3	8
				Generator Sets	1	8
				Tractors/Loaders/Backhoes	3	8
				Welders	1	8
Architectural Coating	16	0	0	Air Compressors	1	6
Paving	58	0	0	Pavers	2	8
				Paving Equipment	2	8
				Rollers	2	8

Source: Appendix F

The noise ordinance contains a construction noise restriction which pertains specifically to sound levels at 100 feet from the construction noise sources; according to the Noise Ordinance, construction equipment must not produce noise that exceeds 85 dBA at 100 feet.

The results of the construction noise analysis using RCNM are summarized in Table 2.13-4 (see Appendix F for complete results). As shown, the highest noise levels from construction are predicted to range from approximately 88 dBA L_{eq} (during the architectural coating phase) to 95 dBA L_{eq} (during the demolition phase) at the nearest adjacent noise-sensitive receiver (i.e., church located 10 feet from the closest point of construction). These noise levels would be substantially higher than ambient noise levels in the area, and would be considered annoying or disruptive for daily activities at the closest off-site receptor (i.e., nineteen feet from the northern property line).

At the nearest residences, located approximately 60 feet away, the highest noise levels would range from approximately 72 dBA L_{eq} (during architectural coating) to 83 dBA L_{eq} (during demolition and grading). These noise levels are considered to be a peak exposure, applicable not more than 10-15% of the total construction period, only while the construction activity is taking place at the nearest boundaries of the respective off-site receivers. The typical construction noise levels (for construction taking place at a range of locations on-site and modeled at the acoustical center for analysis purposes) range from approximately 72 dBA L_{eq} (during architectural coating) to approximately 86 dBA L_{eq} (during grading) at the church to the south, and from 64 dBA L_{eq} (during architectural coating) to 78 dBA L_{eq} (during grading) at the residences, and are also shown in Table 2.13-4. These typical construction noise levels would still be considerably greater than ambient noise levels in the Project vicinity, likely resulting in annoyance.

Construction noise levels at 100 feet were also evaluated, and are shown in the bottom row of Table 2.13-4. These values are compared against the City’s 85 dBA at 100 feet criterion for construction equipment noise. As shown in Table 2.13-4, the estimated construction noise level would remain below the 85 dBA criterion, resulting in a less than significant construction noise impact.

Table 2.13-4. Construction Noise Levels at Noise-Sensitive Uses

Off-site Receptor Location	Noise Sensitive Land Use	Existing Ambient Noise Level	Distance from Construction Activity to Noise Receptor (feet)	Estimated Construction Noise Levels (dBA L_{eq})					
				Demolition	Grading	Building Construction	Paving	Architectural Coating	Trenching
South of the Project Site	Church	66	Nearest Construction Activity /Receiver Distance (10')	95	94	90	90	88	91
			Typical Construction Activity /Receiver Distance (60')	84	86	83	80	72	76

Table 2.13-4. Construction Noise Levels at Noise-Sensitive Uses

Off-site Receptor Location	Noise Sensitive Land Use	Existing Ambient Noise Level	Distance from Construction Activity to Noise Receptor (feet)	Estimated Construction Noise Levels (dBA L _{eq})					
				Demolition	Grading	Building Construction	Paving	Architectural Coating	Trenching
West of the Project Site	Single-family and multi-family residences	65	Nearest Construction Activity /Receiver Distance (60')	83	83	79	78	72	76
			Typical Construction Activity /Receiver Distance (150')	76	78	75	72	64	68
South of the Project Site	Multi-family residences	67	Nearest Construction Activity /Receiver Distance (60')	83	83	79	78	72	76
			Typical Construction Activity /Receiver Distance (150')	76	78	75	72	64	68
East of the Project Site	Multi-family residences	71	Nearest Construction Activity /Receiver Distance (60')	83	83	79	78	72	76
			Typical Construction Activity /Receiver Distance (150')	76	78	75	72	64	68
100-Foot Reference Distance	N/A	N/A	100'	79	79	76	74	68	71

Source: Appendix F

Note: Noise levels from construction activities do not take into account attenuation provided by intervening structures.

L_{eq} dBA: Energy-averaged noise level

The Project would be required to comply with the City’s Noise Ordinance by adhering to the following construction schedule (City of Pasadena 2008):

Construction activity must comply with City noise ordinance requirements, which limit construction activities to the hours between 7:00 a.m. and 7:00 p.m. on weekdays. Saturday construction can occur between 8:00 a.m. and 5:00 p.m. Construction on Sundays and holidays is prohibited.

Noise from construction activities may be annoying because levels would generally be well above typical existing ambient noise levels. However, construction noise would be temporary, and restricting construction activities to the daytime period would avoid disruption of evening relaxation and overnight sleep periods.

Moreover, as construction noise levels would be below the standards established in the City’s Noise Ordinance, construction noise impacts would be less than significant.

Off-Site Construction Noise Assessment

The proposed Project would result in temporary increases in traffic from worker vehicles and project-related truck trips. The increase in vehicles along local arterials would correspond with an incremental increase in traffic noise. Based on the air quality analysis prepared for the Project (refer to Appendix A), the Project would result in as many as 78 daily one-way truck trips (up to 39 round trips) and 288 daily one-way worker trips (144 round trips) during the various construction phases, as shown in Table 2.13-3. It should be noted that the highest numbers of truck trips and worker trips would not occur during the same construction phases.

In order to assess potential noise impacts from construction-related traffic, the FHWA’s TNM noise model (FHWA 2004) was utilized. Because the nearest City-designated truck routes are Del Mar Boulevard and Lake Avenue, Project-related trucks would likely access the Project site via either (or both) of these streets, then using either Green Street, Oak Knoll Avenue or Hudson Avenue. As a conservative measure, it was assumed that Project-related construction trips (autos and trucks) could use all of these streets. For each of the two phases for which haul truck trips and worker trips would be at their respective peaks (grading and building construction, respectively), Project-related autos and truck trips were added to all of the adjacent modeled roadways. The resulting noise levels and resulting Project-related increases are summarized in Table 2.13-5.

As shown in Table 2.13-5, temporary traffic noise increases would be 2 decibels (dB) or less. Although individual truck pass-bys would be audible, the incremental increase in hourly average (and 24-hour CNEL) vehicle noise would not be an audible change (as detailed in Appendix F, a change in noise level of 3 dB is considered to be barely audible). Therefore, off-site construction noise impacts would be less than significant.

Table 2.13-5. Construction-Related Traffic Noise

Modeled Receptor	Existing Noise Level (Peak-Hour L_{eq} dBA)	Existing plus Construction Traffic Noise Level (Peak-Hour L_{eq} dBA)	Noise Level Increase (dB)
	Grading Phase		
ST1	68	69	1
ST2	68	69	1
ST3	68	69	1
ST4	70	70	0
Building Construction Phase			
ST1	68	70	2
ST2	68	70	2
ST3	68	70	2
ST4	70	72	2

Source: Appendix F

On-Site Long-Term Operational Noise Impacts

Less Than Significant Impact. The implementation of the Project would result in changes to existing noise levels in the Project vicinity by developing new stationary sources of noise. Operational noise sources for the Project include HVAC equipment as the primary anticipated source. Noise from other sources, such as the proposed pocket park, outdoor community open space, and the proposed loading zone, would result in periodic noise; however, these noises would be relatively low because of design and location. Exterior-facing spaces (i.e., the pocket park, the garden courtyard, and the 5th-floor roof terrace) are designed for passive uses—no events or other particularly noisy activities, such as a large gatherings, would occur in these areas. Additionally, the pocket park, garden courtyard, and 5th floor roof terrace would be shielded (to varying degrees) by the buildings' structures, which further reduce the ability of sound to travel from the Project site to nearby noise receivers. For example, noise from people gathering on the 5th-floor roof terrace would be shielded at adjacent receivers by the terrace balcony walls. Similarly, the pocket park would be located along the southern side of the Project, not facing the residences to the west, which would limit the potential for on-site noise to disrupt adjacent receptors. The active recreation area is located within the central interior court and would be shielded from adjacent uses by the surrounding 4 to 5-story structure. Additionally, no amplified music systems would be permitted in the outdoor spaces.

Mechanical equipment noise was analyzed based on common residential HVAC units and distances to the property lines (refer to Appendix F). Standard acoustic distance calculations were performed to determine the attenuated noise level at the property line location for each cluster of mechanical noise sources. HVAC equipment (i.e., the condenser units) would be mounted on the rooftops. Exact specifications for the equipment are not yet available, but locations have been specified in the roof plans. General assumptions regarding the HVAC are used to analyze the potential for operational noise impacts from the HVAC equipment. Based on noise emission data (refer to Appendix F), the sound power levels would range from 68 to 71 dBA (Trane 2013).

The roof plans indicate that **52 HVAC units would be located on the roof of the north building level 3, 20 HVAC units would be located on the roof at the north building level 4, 68 HVAC units would be located on the roof at the south building level 4 roof, and 126 HVAC units would be located on the roof at the south building level 5 roof** a total of 26 HVAC units would be placed on the roof of the northwestern wing, 19 HVAC units would be placed on the roof of the northern wing, 76 units would be placed on the roof of the central wing, and 19 units would be placed on the roof of the southern wing. The elevations of the rooftop HVAC equipment would range from approximately 30 feet to 70 feet above ground level, and the plans indicate 4-foot high parapets around the roof. The parapets would provide not only visual screening, but would also act as a noise barrier. Calculations for the HVAC noise at the **northern,** western, and eastern property lines, where the closest off-site residences are located, are provided in Appendix F. Calculations were also performed at the property lines to the south, adjacent to a church and residences. The results of the HVAC noise calculations are summarized in Table 2.13-6. The maximum noise level for all HVAC units in operation, along the ~~northwestern~~ **northeastern** side of the Project boundary, was calculated to be ~~37~~ **39** dBA L_{eq} . Along the ~~southern~~ **southwestern** side of the Project site, the noise level was calculated to be ~~30~~ **34** dBA L_{eq} . The measured existing ambient levels are approximately ~~30~~ **25** dB or more above the calculated noise levels due to the mechanical equipment. Therefore, operational noise levels from the expected mechanical equipment for the Project would be less than significant.

Table 2.13-6. Summary of Mechanical Equipment Operational Noise Results

Equipment	Noise Level at Property Boundary	
	Property Line	Average Noise Level (dBA Leq)
HVAC	North, West Side	33 36
HVAC	North, East Side	37 39
HVAC	South, West Side	30 34
HVAC	South, East Side	30 32
HVAC	East, North Side	30 32
HVAC	East, Mid-Block	35 37
HVAC	West, North Side	35 38
HVAC	West, Mid-Block	33 36

Source: Appendix F

Traffic Noise Impacts

Less Than Significant Impact. The primary potential noise-related effect that most residential mixed-use projects produce is a potential for off-site increases in traffic, which in turn can produce greater traffic noise exposure levels for noise-sensitive land uses located along such roadways. The noise levels associated with roadway traffic were determined based on the Project’s Traffic Impact Analysis (City of Pasadena 2020a) and using the Federal Highway Administration TNM 2.5 Traffic Noise Model version 2.5 (FHWA 2004). TNM 2.5 was employed to compare the existing traffic noise level to the resulting traffic noise level from the addition of Project generated traffic (see Appendix F for complete traffic modelling inputs and results).

The results of the traffic modeling for the existing and existing plus Project scenarios are summarized in Table 2.13-7. As shown, the Project-related traffic would result in a noise level increase of 1 dB CNEL or less along the studied roads in the vicinity of the Project site. Increases would be below the significance threshold of 3 dB, which is the level considered to be barely audible. Therefore, traffic related to the proposed Project would not substantially increase the existing noise levels in the Project vicinity, and operational traffic-related noise impacts would be less than significant. No mitigation is required.

Table 2.13-7. Traffic Noise (Existing and Existing-with-Project)

Modeled Receptor	Existing Noise Level (dBA CNEL)	Existing plus Project Noise Level (dBA CNEL)	Noise Level Increase (dB)
ST1	68	69	1
ST2	68	69	1
ST3	68	69	1
ST4	70	70	0

Source: Appendix F

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact with Mitigation Incorporated. Operation of the Project does not include any heavy rotating equipment. Thus, significant groundborne vibration is not expected during the operational phase of the Project. However, construction activities that might expose adjacent structures or uses to excessive ground-borne vibration or ground-borne noise could cause a potentially significant impact. Ground-borne vibration information related to construction activities has been collected by the California Department of Transportation (Caltrans 2020). The heavier pieces of construction equipment, such as bulldozers, would have peak particle velocities of approximately 0.089 inches per second PPV or less at a distance of 25 feet. Lighter construction equipment, such as a small bulldozer, would have peak particle velocities of approximately 0.003 inches per second PPV at 25 feet (FTA 2018). The Project's construction activity would not include blasting or pile driving, which are the primary sources of high vibration levels associated with construction.

Ground-borne vibration is typically attenuated over short distances. The distance from the nearest buildings (the church to the south of the Project site on the Project's west side, and an office building to the south of the Project site on the Project's east side) to where demolition and construction activity would be occurring on the Project site is approximately 10 feet. At a distance of 10 feet, and with the anticipated construction equipment, the PPV vibration level would be approximately 0.352 inches per second PPV.

The major concern with regards to construction vibration is related to building damage, which could occur at vibration levels of 0.2 inches per second or greater for non-engineered timber and masonry buildings, and at vibration levels of 0.12 inches per second or greater for buildings extremely susceptible to vibration damage (FTA 2018). The church located at 128 South Oak Knoll Avenue, immediately south of the Project site on the westerly side, is approximately 100 years old (City of Pasadena 2020b), and is thus considered "potentially fragile"; the FTA damage threshold of 0.12 inches/sec PPV is therefore applied to this structure. Also, the building at 133 South Hudson Avenue, immediately south of the Project site on the easterly side, is of unknown age and is currently occupied by medical offices (including a dental office); therefore the FTA damage threshold of 0.12 inches/sec PPV is applied to this structure as a conservative measure. As discussed above, the anticipated vibration levels associated with on-site Project construction using heavy construction equipment would be approximately 0.352 inches per second PPV at the nearest structures, which is above the threshold of 0.12 inches per second. Therefore, vibration impacts would be potentially significant without mitigation. With incorporation of MM-NOI-1, potential construction vibration impacts would be reduced to less than significant.

MM-NOI-1 Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, the Project applicant shall retain a team to prepare a vibration monitoring plan. The team shall include a professional structural engineer with experience in structural vibration analysis and monitoring for historic buildings and a historical architect to perform the following tasks:

- Review the Project plans for demolition and construction;
- Survey the Project site and the property/buildings to the south (i.e., 128 South Oak Knoll Avenue and 133 South Hudson Avenue);
- Conduct geological testing if determined to be necessary, and:

- Prepare and submit a report to the Director of Planning and Community Development to include, but not be limited to, the following:
 - The information from the survey identified above;
 - Any modifications to the permissible vibration level thresholds based on the structural conditions of the adjacent properties to the south, soil conditions, and planned demolition and construction methods to ensure that vibration levels would remain below the potential for damage to the adjacent structures to the south;
 - Specific measures (such as requiring the use of lighter, less-powerful equipment when applicable – a small bulldozer rather than a large bulldozer for example - in proximity to the southern Project boundary) to be taken during demolition / construction to ensure that vibration level limits identified by the structural engineer (or 0.12 ppv in/sec in lieu of such specified limits) are not exceeded;
 - A monitoring plan to be implemented during demolition and construction that includes post-construction and post-demolition surveys of the adjacent properties to the south and documentation demonstrating that the measures identified in the report have been implemented.

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?*

No Impact. The Project site is located approximately 6.9 miles northwest of San Gabriel Airport, and approximately 12.8 miles southeast of Hollywood/Burbank Airport. The Project site is not located within the Airport Influence Areas of either of these airports, and thus would not expose people residing or working in the Project area to excessive noise levels from the airports. Similarly, no private airstrips exist in the Project vicinity. No impacts would occur.

2.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the project 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)?

Less Than Significant Impact. The proposed Project would directly induce population growth in the City by constructing 263 for-rent residential units. According to the Southern California Association of Governments (SCAG), the City of Pasadena’s population in 2018 was 144,388 people, with an average of 3.1 people per household (SCAG 2019). Using this factor of 3.1 people per household, the proposed Project could support a residential population of approximately 815 persons.

The City’s General Plan indicates goals and policies related to growth provide for community conservation and strategic growth, preserving existing neighborhoods and targeting new development to infill areas that are vacant or underutilized, and are scaled and designed to complement existing uses. As stated in Policy 1.3, the City seeks to “Regulate building intensity and population density consistently with the designations established by the Land Use Diagram” (City of Pasadena 2015b). As discussed in the introduction to Section I of this IS/MND, Existing Land Use and Zoning Designations, the General Plan land use designation for the proposed Project site is designated as Medium Mixed-Use, and the zoning designation is CD-4 (Central District, Pasadena Playhouse) zoning district. The Project is located within the Central District Specific Plan, which shall not exceed the 4,272 residential units for cumulative new development (City of Pasadena 2015b). As of November 2020, building permits have been issued for a total of 1,721 dwelling units, with a remaining total of 2,551 dwelling units. Therefore, the Project’s 222 market rate units would be within this allocation. That there is adequate allocation remaining is required to be confirmed prior to the issuance of building permits for the project. The Medium Mixed-Use designation is intended to support the development of multi-story buildings with a variety of compatible commercial (retail and office) and residential uses. The proposed base density allowed according to CD-4 zone standards is 87 dwelling units per acre, which allows for up to 203 units. With the addition of the 41 affordable housing units, and the associated 30% affordable housing density bonus, the Project proposes a total of 263 units, including 86 studio units, 126 one-bedroom units, and 51 two-bedroom units. Based on the unit count and number of bedrooms, a total of 39,450 square feet of open space is required. The Project incorporates ~~39,483~~ **39,980** square feet of open space, which includes ~~27,180~~ **27,795** square feet of common open space, ~~41,703~~ **11,585** square feet of private open space, and 600 square feet of interior common open space. Thus, the Project would be consistent with the existing land use and zoning designation and, thus, would be consistent with the City’s General Plan goals and policies related to growth.

As shown in Table 2.14-1, the SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Plan: Appendix, Demographics and Growth Forecast, estimates that the City can expect a population increase of 13,400 people by 2045, as well as an 8,800 increase in households and a 24,000 increase in employment opportunities by 2040 (SCAG 2019).

Table 2.14-1. City of Pasadena Demographics and Household Growth Forecast

Year	Population	Households	Employment
2016	142,100	56,300	116,200
2045	155,500	65,100	140,200
Total Growth	13,400	8,800	24,000

Source: SCAG 2019

The proposed Project includes the construction of a mixed-use development comprising 263 rental apartment units, approximately ~~46,481~~ **14,346** sf of ~~commercial~~ **office** development (e.g. retail, restaurant), ~~37,666~~ **39,980** sf of open space and amenities, and a ~~4,110~~ **4,033**-sf publicly accessible pocket park. Substantial population growth in any particular area is usually associated with a significant increase in available housing stock and/or employment opportunities. The proposed Project includes 263 rental units, which could result in some localized population growth in Pasadena. Although it is highly unlikely that all of the proposed units would be rented by people relocating to Pasadena, for the purpose of conservatively estimating population growth as a result of the proposed Project, this analysis assumes that all people occupying the new units would be new residents to the area. As such, in a “worst-case scenario”, the proposed Project has the potential to add approximately 815 people to the local population.¹⁷ The Project’s potential 815 new residents represents approximately 6% of the City’s projected growth from 2016 through 2045,¹⁸ which is within the population projections currently estimated by SCAG (see Table 2.14-1). As such, the proposed Project would not induce substantial unplanned population growth in the area. Furthermore, the proposed Project would not include the construction of any roads or other infrastructure, the implementation of which could result in substantial, indirect population growth.

According to SCAG’s Employment Density Report, the average square foot per employee in Los Angeles County is 424 square feet per employee for other retail (SCAG 2001). Thus, the proposed Project’s ~~46,481~~ **14,346** sf of retail would generate approximately 38 persons to the City’s employment pool. However, the proposed retail would be replacing the 5 commercial buildings, totaling approximately 34,668 sf, which generates approximately 82 persons in the employment pool. Therefore, the proposed Project would result in a potential loss of 44 employment opportunities. The Project would not generate a substantial employment population compared to the existing conditions.

For these reasons, the proposed Project would not result in substantial, unplanned population growth. Given the above, the proposed Project would have a less than significant impact on population growth and no mitigation is required.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed Project would be located on a site that is fully developed with commercial land uses under existing conditions. No housing would be demolished under the proposed Project, and, as such, no people would be displaced. Therefore, no impact would occur. No mitigation is required.

¹⁷ 263 proposed units * 3.1 average household size = 815.3 new residents.

¹⁸ 816 people / 6,312 projected population growth = 0.134 * 100 = 13.4%

2.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would 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:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) **Would 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:**

Fire protection?

Less Than Significant Impact. Fire protection services in the City are provided by the Pasadena Fire Department (PFD). There are four fire stations within a 1-mile radius of the Project site: Station 33 located at 515 N. Lake Avenue, approximately 0.7-mile north of the Project site; Station 34 located at 1360 E. Del Mar Blvd, approximately 0.7-mile southeast of the Project site; Station 809 located at 285 N. Hill Avenue, approximately 0.9-mile northeast of the Project site and Station 31 located at 135 S. Fair Oaks Avenue, approximately 0.9-mile west of the Project site. Based on proximity to the Project site, the first-in station would be PFD Station 33 and the second-in station would be PFD Station 34.

The need for new or expanded public service facilities (such as fire protection facilities) is typically associated with a population increase. As described in Section 2.14, Project employment and new residential uses would result in approximately 815 residents on the Project site. Conservatively assuming all employees become new residents within the City, the Project would result in an additional 815 residents. These 815 residents would approximately 6% of the City’s projected growth from 2016 through 2045. Due to the minor nature of the population growth that could result from development of the proposed Project and because this growth falls well within the projected population growth for the City, the population growth that could be caused by the proposed Project is not substantial and has been accounted for in local and regional population projections. As such, it is expected that the population growth associated with the Project would not outpace the existing or future service capacity of the PFD.

Furthermore, the Project site is located in an urbanized area, and is not located in a moderately, highly, or very highly susceptible area to fire (CAL FIRE 2019). Although increased intensities are proposed, the Project site is in an existing urban area with a low fire hazard. As such, implementation of the proposed Project is not likely to expose proposed structures or people to substantial fire risk. In addition, prior to

construction of the proposed Project, PFD would review the development plans to ensure Fire Code requirements are met, including Section 14.28, Fire Prevention Code, of the City's Municipal Code. As the proposed Project would not necessitate the construction of new fire facilities or expansion of existing facilities to serve the Project, impacts related to fire protection services would be less than significant.

Police protection?

Less Than Significant Impact. Police protection services in the City are provided by the Pasadena Police Department (PPD). The Project site is served by the PPD Station located at 207 Garfield Avenue, Pasadena, CA 91101. Based on the Pasadena Police Department's published monthly crime reports for March 2020, there were a total of 317 citywide service calls (Pasadena Police Department 2020). The PPD consists of 366 sworn officers and nonsworn personnel for a population of approximately 144,388 people (as of 2018) (City of Pasadena 2016a; SCAG 2019). This equates to a staffing density of 2.5 officers per 1,000 residents in the City. Considering the increase of approximately 815 new residents, the staffing density would remain 2.5 officers per 1,000 residents in the City. Although implementation of the Project would generate a demand for police protection services, the Project would not change current staffing to resident ratios. Thus, the Project would not result in the new for new or expanded Police facilities. Therefore, impacts related to police protection services would be less than significant.

Schools, Parks, Other Public Facilities?

Schools

Less Than Significant Impact. The City is served by the Pasadena Unified School District (PUSD). The need for new school facilities is typically associated with a population increase that generates an increase in enrollment large enough to cause new schools to be constructed. The Project site would be served by McKinley Elementary School (325 S Oak Knoll Avenue), Blair Middle School (1201 Marengo Avenue), and Blair High School (1201 Marengo Avenue) (PUSD 2020). The proposed Project would involve a net increase of 263 for-rent units in the City. The state has a Student Yield Factor for Unified School Districts, which is 0.7 students per dwelling unit (Office of Public School Construction 2008). Using this generation factor, the proposed project is anticipated to result in approximately 188 new students. The anticipated increase in 188 students would result in an increase in enrollment. Per California Government Code Section 65995, developer fees paid to the PUSD would mitigate all Project-related impacts to schools. As stated in Government Code Section 65996, payment of school impact fees in accordance with Government Code Section 65995 is deemed to constitute full and complete mitigation for potential impacts to schools caused by development. For these reasons, impacts related to the need for new school facilities as a result of implementing the proposed Project would be less than significant.

Parks

Less Than Significant Impact. As further detailed in Section 2.16, Recreation, according to the City's *Green Space, Recreation, and Parks Master Plan* (Master Plan), the City of Pasadena included 23 dedicated parks in 2007 (including 15 Neighborhood Parks, five Community Parks, and three Citywide Parks), totaling 338.2 acres (City of Pasadena 2007). As shown in Table 2.16-1 (see Section 2.16, Recreation), the City currently holds approximately 395 acres of dedicated parkland and 502.3 acres of open space (City of Pasadena 2015a).

According to the General Plan EIR, the City does not have an adopted minimum parkland standard for evaluating impacts on parks; rather, parkland needs are assessed under the overarching Policy GSRP 6.3 from the City's Master Plan, which states that adequate developed parkland must be acquired or developed "in sufficient quantity to meet the community demand for facilities and programs identified in the Master Plan" (City of Pasadena 2015a).

Given the above, it is important to note that the City's Master Plan identifies the Central District (i.e. where the proposed Project is located) as a unique urban core that is denser than other parts of the City and where large, traditional parks are more difficult to establish due to high land costs, intense existing urban development, and a general lack of available land for conversion to parkland and recreational open space (City of Pasadena 2007). Furthermore, the Master Plan states that, "Given the built-out condition of the City, it is very unlikely that even a fraction of this amount of acreage could be converted to parkland. A more likely scenario is that small urban open space areas might be created that could provide some of the desired amenities" (City of Pasadena 2007). As stated in Section I, Project Description, the proposed Project would include a ~~4,110~~**4,033**-sf publicly accessible pocket park, which would, in part, provide public parkland and recreational open space near downtown Pasadena, including within the Specific Plan area. Thus, the proposed Project would provide a pocket park in an area in the City where traditional parks are more difficult to establish. Additionally, given the pocket park would be located in a unique urban core that is denser than other parts of the City, the pocket park provided by the Project would increase access for residents in this portion of the City to access park spaces. Further, per the Quimby Act, or California Government Code Section 66477, local jurisdictions may require developers to dedicate land and/or pay in-lieu fees towards the conservation of parkland.

It should also be noted that the City is in the process of creating a new Playhouse District Park + Parking Lot to provide additional public parkland and recreational open space near downtown Pasadena. The City is currently collecting feedback from the public and held three community workshops in October 2019, November 2019, and December 2019.

Given that: 1) the City does not utilize a parkland standard (City of Pasadena 2015a); 2) the Master Plan acknowledges that "small urban open space areas might be created that could provide some of the desired amenities" (City of Pasadena 2007); and, 3) the developer would be required to supplement for the additional parkland not compensated for by the proposed pocket park through the payment of in-lieu fees, the proposed Project would not create the need for new or expanded park facilities. Impacts would be less than significant. No mitigation is required.

Libraries

Less Than Significant Impact. Other public facilities and services provided within the City include library services and City administrative services. Library services are provided by the Pasadena Public Library system, which includes 10 libraries. The nearest public library to the Project site is the Hill Avenue Branch Library located at 55 S Hill Avenue, approximately 0.7-mile east of the Project site. The Hill Avenue Branch Library is 4,752 sf, has a collection size of 41,859, 19 meeting room seats, and 11 parking spaces (City of Pasadena 2020c).

The proposed Project would generate approximately 38 new employees and 816 new residents. As described above under "fire protection," the population and employment growth from the Project would fall well within local and regional growth projections and would also represent a minor fraction of existing and future population and employment in the City. Conservatively assuming the proposed Project has the potential to add approximately 815 people to the local population, the new residents represents

approximately 6% of the City’s projected growth from 2016 through 2045.¹⁹ This nominal increase in library patrons is not expected to result in the need for new or expanded library facilities. Further, Section 4.109, Library Special Tax, requires residential swelling units to pay a special tax specifically for maintaining the quality of the Pasadena Public Library system. The Project would contribute to this fund. Therefore, impacts associated with libraries and other public facilities would be less than significant.

2.16 RECREATION

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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?

Less Than Significant Impact. Substantial physical deterioration of existing neighborhood and regional parks primarily occurs when population growth significantly surpasses the capacity of existing parks and recreational facilities, which deteriorate over time as a result of overuse and insufficient maintenance.

According to the City’s *Green Space, Recreation, and Parks Master Plan* (Master Plan), the City of Pasadena included 23 dedicated parks in 2007 (including 15 Neighborhood Parks, five Community Parks, and three Citywide Parks), totaling 338.2 acres (City of Pasadena 2007). According to the City’s General Plan EIR, this number has risen to 27 parks totaling 893.5 acres, as shown in Table 2.16-1 below (City of Pasadena 2015a). The City also considers urban open spaces (such as public plazas, paseos, golf courses, and museums) as significant contributors to the City’s recreational amenities (City of Pasadena 2007).

Table 2.16-1. Existing Parks and Open Space Areas in the City of Pasadena

Park Name	Address	Total Dedicated Size (acres)		Approximate Distance from Project Site (miles)
		Parks	Open Space	
Citywide Parks: <i>These parks afford contact with the natural and/or historic environment and possess a unique character or function not found in neighborhood or community parks. They contain facilities that are used by residents throughout the City for activities that cannot be accommodated in other parks.</i>				
Brookside Park	360 N. Arroyo Boulevard	61.6	--	

¹⁹ 816 people / 6,312 projected population growth = 0.134 * 100 = 13.4%

Table 2.16-1. Existing Parks and Open Space Areas in the City of Pasadena

Park Name	Address	Total Dedicated Size (acres)		Approximate Distance from Project Site (miles)
		Parks	Open Space	
Rose Bowl Area H/ Central Arroyo Seco	747 Seco Street	19	173.2	
Hahamongna Watershed Park	Southeast corner of Oak Grove Drive and Foothill Boulevard.	95	230	6 miles northwest
Lower Arroyo Park/Lower Arroyo Seco Open Space		71.1	99.1	
Community Parks:				
<i>These facilities are approximately 5 to 25 acres in size and are designed primarily for recreational activities of all age groups. They serve and attract users from a wider community than the neighborhood parks. They may be combined with or adjacent to junior high or high school sites.</i>				
Central Park	275 South Raymond Avenue.	9.2	--	1.4 miles southwest
Memorial Park	85 E Holly Street.	5.3	--	1 mile west
Robinson Park	1081 North Fair Oaks Avenue.	9.2	--	2.3 miles northwest
Victory Park	2575 Paloma Street.	26.2	--	3 miles northwest
Villa-Parke	363 East Villa Street.	10.5	--	1 mile northwest
Neighborhood Parks:				
<i>These facilities are approximately 1 to 6 acres in size and are designed primarily to provide facilities for preschool and elementary age children. They may be combined with or adjacent to elementary schools. They primarily serve the immediately surrounding residential area.</i>				
Allendale Park	1130 South Marengo Avenue.	2.9	--	2 miles southwest
Brenner Park	235 Barthe Drive.	2.7	--	2.5 miles northwest
Defenders Park	W Colorado Blvd & N Orange Grove Blvd.	1.8	--	3 miles west
Desiderio Park	10 N Arroyo Blvd	3.8	-	1.6-miles west
Eaton-Blanche Park	3100 East Del Mar Boulevard.	5.5	--	3 miles east
Sunnyslope Park	N Sunnyslope Avenue & Paloma Street.	2	--	3.5 miles northwest
Grant Park	232 S Michigan Avenue.	2.5	--	0.8-mile southeast
Floyd O. Gwinn Park	Orange Grove Blvd & N Sunnyslope Avenue.	2.7	--	3.5 miles northeast
Hamilton Park	3680 Cartwright Street.	6.4	--	4.7 miles northeast
Jefferson Park	1501 East Villa Street.	4.4	--	1.6 miles northwest
La Pintoresca Park	45 E Washington Blvd.	2.9	--	2.7 miles northwest
McDonald Park	1000 East Mountain Street.	5.1	--	1.5 miles north
San Rafael Park	Corner of Colorado Boulevard and Melrose Avenue.	0.9	--	3.5 miles southeast
Singer Park	Corner of California Boulevard and Long Beach Freeway.	3.0	--	2 miles southeast
Vina Vieja Park	3026 E Orange Grove Blvd.	8.6	--	3.5 miles northwest
Washington Park	700 E Washington Blvd.	5.5	--	2 miles north

Table 2.16-1. Existing Parks and Open Space Areas in the City of Pasadena

Park Name	Address	Total Dedicated Size (acres)		Approximate Distance from Project Site (miles)
		Parks	Open Space	
<i>Unclassified Parks:</i>				
Annandale Canyon Park		24.3	--	
Arlington Gardens		2.6	--	
Sid Tyler Park		0.3	--	
Total Approximate Acreage*		395	502.3	894 acres

Source: City of Pasadena 2019b

Notes: *2015 acreage estimates rounded, excluding facility building square-footages

As shown in Table 2.16-1, the City currently holds approximately 395 acres of dedicated parkland and 502.3 acres of open space (City of Pasadena 2015a).

According to the General Plan EIR, the City does not have an adopted minimum parkland standard; rather, parkland needs are assessed under the overarching Policy GSRP 6.3 from the City’s Master Plan, which states that adequate developed parkland must be acquired or developed “in sufficient quantity to meet the community demand for facilities and programs identified in the Master Plan” (City of Pasadena 2015a).

Given the above, it is important to note that the City’s Master Plan identifies the Central District (i.e. where the proposed Project is located) as a unique urban core that is denser than other parts of the City and where large, traditional parks are more difficult to establish due to high land costs, intense existing urban development, and a general lack of available land for conversion to parkland and recreational open space (City of Pasadena 2007). Furthermore, the Master Plan states that, “Given the built out condition of the City, it is very unlikely that even a fraction of this amount of acreage could be converted to parkland. A more likely scenario is that small urban open space areas might be created that could provide some of the desired amenities” (City of Pasadena 2007). As stated in Section I, Project Description, the proposed Project would include a 4,110-~~4,033~~-sf publicly accessible pocket park, which would, in part, alleviate the existing deficiency in public parkland and recreational open space near downtown Pasadena, including within the Specific Plan area. Thus, the proposed Project would provide a pocket park in an area in the City where traditional parks are more difficult to establish. Additionally, given the pocket park would be located in a unique urban core that is denser than other parts of the City, the pocket park provided by the Project would increase access for residents in this portion of the City to access park spaces.

Even with the inclusion of the proposed pocket park, the proposed Project would introduce a maximum of 815 new residents to Pasadena, some of whom would utilize public parks and recreational facilities. As such, the proposed 4,110-~~4,033~~-sf pocket park is not expected to significantly alleviate the existing parkland deficiency within the Central District as it would only compensate for a small portion of the expected additional use of City parks and recreational facilities associated with the proposed Project. As such, the proposed Project has the potential to add enough residents to the local population that physical deterioration of other existing parks and recreational facilities may occur.

However, per the Quimby Act, or California Government Code Section 66477, local jurisdictions may require developers to dedicate land and/or pay in-lieu fees towards the conservation of parkland. The Quimby Act was legislated to encourage the pre-emptive mitigation of developments’ impact to parks and open space with the

overarching goal of achieving a jurisdictional standard of 3.5 acres of parkland per 1,000 residents (California Department of Parks and Recreation 2002). The land dedication and/or fees required under the Quimby Act differ by project and are based upon the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park, playground, and recreational facilities or the development of public school grounds. Additionally, per Assembly Bill 1359 cities and counties may use developer paid Quimby Act fees to provide parks in neighborhoods other than the one in which the developer's subdivision is located, as long as the legislative body completes a public hearing before utilizing the applicable fees.

Further, it should be noted that the City is in the process of creating a new Playhouse District Park + Parking Lot to further alleviate the existing deficiency in public parkland and recreational open space near downtown Pasadena. The City is currently collecting feedback from the public and held three community workshops in October 2019, November 2019, and December 2019.

Given that: 1) the City does not utilize a parkland standard (City of Pasadena 2015a); 2) the Master Plan acknowledges that "small urban open space areas might be created that could provide some of the desired amenities" (City of Pasadena 2007); and, 3) the developer would be required to supplement for the additional parkland not compensated for by the proposed pocket park through the payment of in-lieu fees, the proposed Project is not anticipated to 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. Impacts would be less than significant. No mitigation is required.

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?

Less Than Significant Impact with Mitigation Incorporated. The proposed Project would include the construction of a 4,140 ~~4,033~~-sf pocket park. However, analysis of the environmental impacts of the proposed pocket park are considered under the proposed Project and, as such, are analyzed throughout this IS/MND. As stated throughout this document, the proposed Project would have a less than significant impact on the environment with mitigation incorporated. Specifically, incorporation of ~~MM-BIO-1~~, MM-CUL-1 through MM-CUL-3, MM-GEO-1, MM-HAZ-1, MM-HAZ-2, and MM-TCR-1 would reduce impacts to the environment to a less-than-significant level. As such, impacts of constructing the proposed pocket park have been considered and found to be less than significant.

2.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Pasadena Department of Transportation (DOT) reviewed a proposed project’s transportation impacts based on project size, consisting of below or equal to communitywide significance thresholds, and above communitywide significance thresholds. Communitywide significance projects are defined as 50,000 square feet of new commercial use, 50 residential units, or any combination of the two. The proposed Project is under Category 2, which requires analyses of street segment and Level of Service (LOS) outside of CEQA in addition to the CEQA analysis of 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. Therefore, the DOT prepared CEQA (Category 2) Evaluation Transportation Impact Analysis and Outside of CEQA (Category 2) Transportation Impact Analysis (TIA) on ~~April 14, 2020~~ **February 24, 2022** for the proposed Project **(included as Attachment C to the Final MND), which assumes 263 residential units and 16,229 square feet of office.**

The CEQA Evaluation TIA analyzed the impact that the proposed Project would potentially have on the City’s transportation system by estimating incremental changes in VMT per capita, VT per capita, service population proximity access to transit and bicycle facilities, and walk accessibility score. The following section summarizes and incorporates by reference the information provided in the CEQA Evaluation TIA, included as Appendix G of this document. ~~The Condition Letter for the CEQA Evaluation dated April 15, 2020 that provides CEQA mitigation measures is also included as Appendix G.~~

A) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less Than Significant Impact. As shown in the analysis below the Project’s impact to a program, plan, ordinance, or policy addressing the circulation system would be less than significant.

General Plan Mobility Element, 2015

Pasadena’s General Plan Mobility Element guides the continuing development of the transportation system to support planned growth. The Mobility Element sets forth goals and policies to improve overall transportation in Pasadena. The Mobility Element’s objective is to promote a livable community where people can circulate without cars and non-auto travel modes are emphasized in order to recognize their role in improving the City’s environment and quality of life. Consequently, performance measures related to the per capita length and number of trips associated with changes in land use have been adopted for evaluating the transportation system in lieu of levels of service measures. As discussed above, these new performance measures and CEQA thresholds are consistent with the City’s adopted General Plan.

Pasadena Transportation Impact Analysis Guidelines

On September 27, 2013, Senate Bill (SB) 743 was signed into law, which created a process to change the way that transportation impacts are analyzed under CEQA. SB 743 required the Governor’s Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to level of service (LOS) for evaluating transportation impacts. Under the new transportation guidelines, LOS, or vehicle delay, can no longer be considered an environmental impact under CEQA. In response to SB 743, the City of Pasadena adopted the Transportation Impact Analysis Current Practice and Guidelines (City of Pasadena Department of Transportation 2015).

The City’s TIA Guidelines promote an “integrated and multimodal transportation system that provides choices and accessibility for everyone living and working in the City” through public transit services, parking strategies, bicycle facilities, and pedestrian components that are connected with the larger transportation system. The TIA Guidelines identify projects that may have transportation impacts and provide instructions for preparing transportation impact analyses for these projects. As described above, the TIA Guidelines differentiates between analyses to be conducted pursuant to CEQA and analyses to be evaluated outside the CEQA process. CEQA and non-CEQA transportation analyses have been prepared for the Project.

Pasadena Municipal Code

Section 10.64.020 of the Pasadena Municipal Code requires that development projects that meet the following criteria incorporate a Transportation Demand Management (TDM) program:

- Multi-family residential developments that are 100 or more units;
- Mixed-use developments with 50 more residential units; or 50,000 square feet or more of non-residential development; or
- Nonresidential projects which exceed 75,000 square feet.

The purpose of this chapter of the code is to implement the requirements of Metro’s CMP, in accordance with California Government Code Sections 65089 and 65089.3 and with the provisions of Metro’s model trip reduction ordinance (TRO), and to be consistent with environmental compliance and sustainability efforts. The TDM Program Plans must be approved by the Director of Transportation prior to the issuance of a building permit, and are required to be reviewed and approved annually thereafter. In compliance

with the Pasadena Municipal Code Section 10.64.020, the Project would develop a TDM program meeting the criteria addressed above.

For these reasons, the Project would not conflict with the City’s policies related to circulation

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact with Mitigation Incorporated. CEQA Guidelines Section 15064.3, subdivision (b), focuses on newly adopted criteria (VMT) adopted pursuant to SB 743 for determining the significance of transportation impacts. On November 3, 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 SB 743, and include VMT per capita, vehicle trips (VT) per capita, proximity and quality of bicycle network, proximity and quality of transit network, and 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 assist in determining how to balance travel modes as well as understanding the mobility needs of the community. Table 2.17-1 summarizes the City’s thresholds for determining the significance of project-related transportation impacts under CEQA.

Table 2.17-1. Transportation Performance Metrics for CEQA Thresholds of Significance

Metric		Description	CEQA Impact Threshold
1.	VMT Per Capita	Vehicle Miles Traveled (VMT) in the City of Pasadena per service population (population + jobs).	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).	An increase over existing Citywide $\frac{VT}{VMT}$ per Capita of 2.8 $\frac{VT}{VMT}$
3.	Proximity and Quality of Bicycle Network	Percent of service population (population + jobs) within a quarter mile of bicycle facility types.	31.7% Any decrease in existing citywide of service population (population + jobs) within a quarter mile of levels 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.	66.6% Any decrease in existing citywide service population (population + jobs) within a quarter mile of levels 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	Any decrease in the Citywide Pedestrian Accessibility Score

Source: Pasadena Department of Transportation 2015

Notes:

Service population = population + jobs

Level 1 bicycle facility types (advanced facilities) consist of bicycle paths, multipurpose paths, and cycle tracks/protected bicycle lanes

Level 2 bicycle facility types (dedicated facilities) consist of buffered bicycle lanes, bicycle lanes, and bicycle boulevards

In the CEQA Evaluation TIA, the Project's impacts analyses are based on the City's calibrated travel demand forecasting model (TDF), which was built on SCAG's regional model. The City's TDF model simulates traffic levels and travel patterns for the City. The model 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 number of trips generated, the beginning and ending location of each trip, and the route taken by the trip.

The following analyses are findings 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 using TransCAD software. **Moreover, the findings are based on the assumptions presented in Attachment B to the Final MND.**

VMT per Capita Analysis

Considering the demolition of the existing commercial office structures on the site and constructing 263 residential units, 46,481–**16,229** square feet of ~~commercial~~–**office** space with a pocket park and subterranean parking, the TDF model calculation results determined that the Project's population would increase while number of employees would decrease. The TDF model calculations determined the Project's net capita (population + employment) is ~~340~~–**332** and the Project's VMT is ~~5,744~~–**3,418**. As such, the incremental VMT per capita change is ~~48.5~~–**10.3**²⁰, which does not exceed the adopted threshold of significance under the VMT per capita of 22.6. Therefore, impacts related to VMT would be less than significant.

VT Analysis

The TDF model calculation results determined that the Project's net capita is ~~340~~–**332** (population + employment) and the Project's VT is ~~4,187~~–**917**. As such, the incremental VT per capita change is ~~3.8~~–**2.8**²¹, which indicates that the Project's incremental VT per capita change would **not** exceed the adopted threshold of significance of 2.8 VT per capita. Therefore, impacts related to VT would be ~~potentially significant, before mitigation~~–**less than significant**.

MM TRA-1 is ~~required~~–**designed** to reduce the Project's VT per capita and requires the Project Applicant to develop and implement a TDM Plan that results in a reduction of the project's vehicle trips by a minimum of 27% **or implements a mix of uses that achieves a minimum of 27% reduction of VT as the Project described in the Revised IS/MND does.** Implementation of MM-TRA-1, would ensure that the proposed Project would not conflict with the City's policies related to circulation.

Proximity and Quality of Bicycle Network Analysis

As shown in Table 2.17-2, any decrease in the existing citywide service population percentage of 31.7% within a quarter mile of bicycle facilities would be a significant impact. Currently, a Level 3 bike route along Cordova Street is the only marked bike facility in the vicinity of the Project, as mentioned in description of existing transportation network in the TIA. There is a future cycle track proposed along Union Street and bikes lanes as part of future road diet proposed along Cordova Street. The TDF model

²⁰ VMT per capita is calculated by dividing the Project's VMT (~~5,744~~–**3,418**) by the Project's net capita (~~340~~–**332**)

²¹ VT per capita is calculated by dividing the Project's VT (~~4,187~~–**917**) by the Project's net capita (~~340~~–**332**)

results indicated that the citywide service population with access to Level 1 and 2 bicycle facilities would be 31.7% after implementation of the Project. Therefore, impacts to the existing bicycle network would be less than significant.

Proximity and Quality of Transit Network Analysis

As shown in Table 2.17-2, any decrease in the existing citywide service population percentage of 66.6% within a quarter mile of transit facilities would indicate a significant impact. With the Metro Gold Line station at Lake Avenue near I-210, and various bus stations (i.e., Metro, Foothill Transit, and Pasadena Transit) in close proximity to the Project site, the TDF model results indicated that the citywide service population with access to transit facilities would be 66.8% after implementation of the Project. Therefore, impacts related to the proximity and quality of the transit network would be less than significant.

Pedestrian Accessibility Analysis

The Pedestrian Accessibility Score is a count of the number of land use types accessible to a Pasadena resident or worker in a given Transportation Analysis Zone (TAZ) within a five-minute walk. As shown in Table 2.17-2, any decrease in the calculated citywide Pedestrian Accessibility Score of greater than 3.9 would indicate a significant impact. The TDF model results indicated that the citywide Pedestrian Accessibility Score would be 3.88 with the addition of the Project. Therefore, impacts related to pedestrian accessibility would be less than significant.

The results of the above analysis are demonstrated in Table 2.17-2.

Table 2.17-2 Transportation Performance Metrics for the Project

	Metric	Significant Impact Cap	Incremental change (Existing +Project)	Significant Impact Before Mitigation
1.	VMT Per Capita	>22.6	48.5 10.3	No
2.	VT Per Capita	>2.8	3.8 2.8	Yes No
3.	Proximity and Quality of Bicycle Network	<31.7%	31.7	No
4.	Proximity and Quality of Transit Network	<66.6%	66.8	No
5.	Pedestrian Accessibility	<3.9	3.9	No

Source: Appendix G ~~Attachment B~~ of the Final MND

The proposed Project is **not** expected to exceed the VT per capita CEQA threshold causing a potentially significant impact. Therefore, the following mitigation is ~~proposed~~ **required** to reduce the Project’s vehicle trips impact to a less than significant level. With the implementation of MM-TRA-1, the Project’s impacts related to CEQA Guidelines section 15064.3, would be less than significant.

MM-TRA-1 To reduce the original Project’s VT per capita, the Project Applicant/Developer shall **either** develop and implement a Transportation Demand Management (**TDM**) Plan that includes strategies to reduce the Project’s vehicle trips by a minimum of 27% or implement a mix of uses that achieves a minimum of 27% reduction of VT as the Project described in the Revised IS/MND does. If the TDM Plan approach is undertaken as a result of the original Project, then ~~Programmatic~~ **programmatic**

strategies to reduce VT per capita shall complement City's Trip Reduction Ordinance minimum requirements and shall include, but not necessarily be limited to, the following:

- Unbundled parking for the residential use;
- The Project Applicant/Developer shall purchase 121 Metro passes and offer them to interested residents at 50% discount for five consecutive years from the issuance of Certificate of Occupancy.
- The Project Applicant/Developer shall provide an Annual TDM Survey beginning one year after the issuance of Certificate of Occupancy to demonstrate the minimum 27% reduction of Project vehicular trips per capita is maintained.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. The proposed Project and its impact on vehicle circulation has been evaluated by the City's Department of Transportation. The proposed Project would involve new driveways and curb/gutter construction to accommodate the driveway on South Oak Knoll Avenue and the driveway and loading/unloading dock on South Hudson Avenue. The new driveways would be used by the residents and patrons of the ~~commercial~~ office/retail uses, and loading/unloading dock users. Without adequate sight distances, the new driveway could pose a hazard to pedestrians walking along the sidewalk in front of the driveway. However, a number of conditions of approval would be imposed on the Project that would minimize safety hazards to the extent feasible. Conditions would include design requirements related to safety along roadways surrounding the Project, such as loading/unloading location requirements, driveway width, minimum distance from driveway to intersection, and/or other measures to ensure that the Project circulation design would not be hazardous to traffic circulation either within the Project site or the Project vicinity. 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. The Project's impact due to increase in hazards due to geometric design feature would be less than significant.

d) Would the project result in inadequate emergency access?

Less Than Significant Impact. During construction of the proposed Project, it is anticipated that some of the construction activities may require short-term partial or full road closures of travel lanes along Oak Knoll Avenue or Hudson Avenue. As discussed in the Memorandum from the City of Pasadena Department of Public Works (DPW) (Appendix H-1), as part of the Project, the Project applicant would submit a Construction Staging and Traffic Management Plan (CSTMP) to DPW that would show the impact of various construction stages on the public right-of-way, including all street occupations, lane closures, detours, staging areas, and routes of construction vehicles entering and exiting the construction site. An occupancy permit would be obtained from the DPW for the occupation of any traffic lane, parking lane, parkway, or any other public right-of-way. All lane closures would be done in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) and California Supplement and other requirements specified by DPW in the Project's conditions of approval. With implementation of the CSTMP, impacts to emergency access during construction of the Project would be less than significant.

Once operational, vehicular access to the Project would be via a driveway along Oak Knoll Avenue that would lead to the subterranean parking garage. The driveway would operate as a full-access providing

entry and exit to the Project. The parking garage entrance, if gated, must be at least 20 feet back from property line to accommodate queuing space for one car length. Project ingress and egress would comply with all building, fire, and safety codes and final plans would be subject to review and approval by the City's Public Works and Transportation Departments, the Building Division, and the Fire Department. No permanent lane closures or obstructions that could impede emergency response to or from the Project site from surrounding streets would occur as a result of the proposed Project during operation. Impacts to emergency access would be less than significant.

2.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) 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:

i) 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)?

Less Than Significant Impact. No previously recorded archaeological resources of Native American origin or Tribal Cultural Resources (TCR) listed in the California Register of Historical Resources or a local register were identified within the Project site through searches of the CHRIS records. Although the NAHC’s review of the SLF was positive, no resource-specific information was provided regarding eligibility in the CRHR or local register. Further, no TCRs have been identified by California Native American tribes as part of the City’s AB 52 notification and consultation process. Therefore, the proposed Project would not adversely affect tribal cultural resources that are listed or eligible for listing in the state or local register. Therefore, impacts would be less than significant.

- ii) **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?**

Less Than Significant Impact with Mitigation Incorporated. There are no resources in 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. Further, no specific TCRs were identified in the Project site by the NAHC, by California Native American tribes, or by the City as part of the AB 52 notification and consultation process. On January 2, 2020, the City sent notification of the proposed Project to all California Native American tribal representatives that have requested notifications from the City pursuant to AB 52. The Gabrieleno Band of Mission Indians, Kizh Nation, responded on January 7, 2020, affirming the Project lies within their Ancestral Tribal Territory and provided a list of mitigation measures. During subsequent communication, the City and Kizh Nation had scheduled a meeting for consultation on October 15, 2020. On September 4, 2020, the City sent an email to Kizh Nation indicating the Project Applicant would abide by the mitigation measures previously provided on January 7, 2020. The City received email correspondence from Kizh Nation on September 4, 2020 indicating that since the Project Applicant had agreed to abide by the proposed mitigation measures, there would be no need for consultation and AB 52 consultation is considered to be completed.

Due to the absence of previously recorded tribal cultural resources within the Project site and because no specific tribal cultural resources have been identified by California Native American tribes through the AB 52 consultation process, the City has determined that no known tribal cultural resources are present in the Project site. However, the correspondence from Kizh Nation suggests that there is some potential for unknown subsurface tribal cultural resources to be impacted by the project. In the event that unknown subsurface tribal cultural resources are uncovered during construction ground disturbance, and such resources are not identified and avoided or properly treated, a potentially significant impact could result. As such, along with MM-CR-1 for WEAP training, mitigation measure MM-TCR-1 through MM-TCR-8 have been set forth to protect tribal cultural resources, in the event that any are discovered during Project construction. Upon implementation of MM-TCR-1 through MM-TCR-8, impacts would be less than significant with mitigation incorporated.

MM-TCR-1 The Project Applicant shall be required to retain and compensate for the services of a tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the Native American Heritage Commission's (NAHC's) Tribal Contact List for the area of the Project location. This list is provided by the NAHC. The monitor/consultant will only be present on site during the construction phases that involve ground-disturbing activities. Ground-disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the Project area. The tribal monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the Project site grading and excavation activities are completed, or when the tribal representatives and

monitor/consultant have indicated that the site has a low potential for impacting tribal cultural resources.

MM-TCR-2 Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by Project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians – Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians – Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the Project while evaluation and, if necessary, mitigation takes place (California Environmental Quality Act [CEQA] Guidelines Section 15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a “historical resource” or “unique archaeological resource,” time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and for unique archaeological resources.

MM-TCR-3 Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.

MM-TCR-4 Native American human remains are defined in Public Resources Code (PRC) 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and PRC 5097.98 shall be followed.

MM-TCR-5 Upon discovery of human remains, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the

Native American Heritage Commission as mandated by state law who will then appoint a Most Likely Descendant.

MM-TCR-6 If the Gabrieleño Band of Mission Indians – Kizh Nation is designated as the Most Likely Descendant, the following treatment measures shall be implemented. To the tribe, the term “human remains” encompasses more than human bones. In ancient as well as historic times, tribal traditions included, but were not limited to, the burial of funerary objects with the deceased and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

MM-TCR-7 Prior to the continuation of ground-disturbing activities, the land owner shall arrange a designated site location within the footprint of the Project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery, and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the tribe and the Native American Heritage Commission. The tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains.

Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects, and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within 6 months of recovery. The site of reburial/repatriation shall be on the Project site but at a location agreed upon between the tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

MM-TCR-8 Professional Standards: Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel

must meet the Secretary of the Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in Southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

2.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the project 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?

Less Than Significant Impact.

Water. Water in the City is provided by the Pasadena Water and Power (PWP) Department. According to the City's 2015 UWMP, local water supplies include local water from the Raymond Basin (approximately 40%) and purchased imported water (approximately 60%) from the Metropolitan Water District (MWD) of Southern California, who sources water from the State Water Project (SWP) and the Colorado River Aqueduct (UWMP 2015).

The proposed Project would connect to the existing water utility infrastructure, the environmental impacts of which are assessed throughout this IS/MND. Additionally, the proposed Project would be subject to standard connection fees, as legislated by the Pasadena Municipal Code, Section 13.20.080, Water Main Charge. Per Section 13.20.080, the proposed Project would either be charged to tie-in to the existing water mains, or, if/where new water mains are required, would be charged the total cost (either directly or through an in-lieu fee) of installing the required new water mains). PWP has indicated it can serve the Project (Appendix H-2). Additionally, PWP has stated, if it is determined that a water main must be upgraded due to size, age, pressure deficiencies, and/or the integrity of the existing water main; the upgrade will be paid for by the owner/developer. A deposit will be requested for the water main design and a cost estimate will be provided to the Project Applicant for the new water service installations, main design, and main construction (Appendix H-2). With payment of these connection fees, water needs of the proposed Project could be met by existing water utility infrastructure and is not anticipated to require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be less than significant. No mitigation is required.

Wastewater. The City's Sewer System Management Plan serves as the foundational planning document, through which the City manages and operates sewer system demand, supply, and associated infrastructure. Sewer lines in the City convey wastewater into trunk lines that are maintained by the Los Angeles County Sanitation District (LACSD), which provides much of the primary sewer trunk line system and treats local wastewater (City of Pasadena 2006). According to the Pasadena Sewer Maps database, the proposed project is served by existing 8-inch, Vitrified Clay Pipe (VCP) sewer lines within the Green Street ROW, as well as an 18-inch, VCP sewer trunk line within the Oak Knoll Avenue ROW (City of Pasadena 2019c). **Wastewater would then flow to the LACSD Chapel Avenue Trunk Sewer Section 2, located in Los Robles Avenues north of Mission Street (LACSD 2020). The LACSD 15-inch diameter trunk sewer has a capacity of 8.1 million gallons per day and conveyed a peak flow of 0.2 million gallons per day when last measured in 2015 (LACSD 2020). Therefore, this trunk sewer line has adequate capacity to accommodate the Project's wastewater flows.**

The proposed Project would tie-in to the existing 8-inch and 18-inch VCP sewer lines in Green Street and Oak Knoll Avenue, the environmental impacts of which are assessed throughout this IS/MND. Per Section 4.53, Sewer Facility Charge, of the Pasadena Municipal Code, the Applicant would be required to pay into the 'Sewer Facility Charge Fund,' which expends the sewer facility connection charges required by new development towards sewer infrastructural improvements. **Additionally, per the California Health and Safety Code, LACSD may require the Applicant to pay a connection fee for the use of LACSD's Sewerage System prior to project approval.** With adherence to the Pasadena Municipal Code, Section 4.53, the proposed Project would have paid its fair share contribution towards any necessary sewer infrastructure upgrades, including those required as a result of the proposed Project. Any separate sewer system upgrades undertaken by the City using these fees would be subject to independent environmental review, and, as such, the proposed Project would have a less than significant impact to wastewater infrastructure.

Stormwater. The proposed Project is not expected to generate increased stormwater runoff. As described under Section 2.10, the drainage patterns of the Project site would not substantially change relative to existing conditions. As previously discussed under Section 2.10, all development and redevelopment projects must comply with the latest LID Standards Manual, which complies with the

requirements of the NPDES 2012 MS4 Permit. The LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges (LADPW 2014). Project design, construction, and operation would be completed in accordance with the LID Standards Manual, which mandates completion of a LID Plan, as does the City of Pasadena. The LID Plan would use site design and stormwater management in order to maintain the site's pre-development runoff rates and volumes. The goal of the LID Plan would be to mimic the site's pre-development hydrology by using design techniques that filter, store, evaporate, and detain runoff close to the source of rainfall. Compliance with state and local regulations would reduce the peak volume of stormwater runoff discharged into the City's storm drain system and would ensure that stormwater is retained on-site, to the extent feasible. As such, the proposed Project would not require the construction or expansion of off-site storm water drainage facilities, as the project would not contribute a substantial amount of new stormwater runoff relative to existing conditions.

Solid Waste. The California Solid Waste Reuse and Recycling Access Act of 1991 (AB 341) declared that cities and counties must divert 50% of all solid waste by 2000 and aims to reduce 75% of all solid waste by 2020, through source reduction, recycling and composting activities, as well as, provide adequate areas for collecting and loading recyclable materials. Under the California Solid Waste Reuse and Recycling Access Act of 1991, each local agency must adopt an ordinance for collecting and loading recyclable materials. The City of Pasadena reached a 73% reduction in solid waste as early as 2010 and is moving towards zero waste as implemented by the *Zero Waste Strategic Plan*, which is anticipated to accomplish a Citywide minimum of 87% solid waste diversion by 2040 (City of Pasadena 2019d). Additionally, the Pasadena Municipal Code requires that 75% of construction and demolition debris be recycled.

Based on the CalEEMod solid waste generation rates, the proposed Project would generate approximately 222.76 tons/year (602.86 cubic yards/year²²) (Appendix A).²³ Solid waste generated by the proposed Project would be collected by and transported to a local or regional landfill. The City primarily disposes of solid waste at four landfills, including Scholl Canyon Landfill, Sunshine Canyon Landfill, El Sobrante Landfill, and Chiquita Canyon Landfill. As of 2015, these landfills had a combined remaining capacity of 297,000,000 cubic yards, of which the proposed Project would represent a nominal contribution (City of Pasadena 2015a). For instance, assuming the Project has a lifespan of 100 years, the solid waste generation would be 60,286, which would represent only 0.02% of the remaining capacity of the four landfills serving the City. Additionally, required compliance with Chapter 8.62 of the Pasadena Municipal Code would reduce the project's solid waste generation during construction and demolition activities. As such, the proposed Project would not require or result in the need for new or expanded solid waste treatment facilities, the construction or relocation of which could cause significant environmental effects.

Electricity and Natural Gas. PWP provides electricity to the City, and operates one power plant, Glenarm Power Plant, within the City's SOI. Both underground and overhead electrical distribution lines are present within the City streets and yard easements. According to the *2018 Pasadena Water and*

²² This assumes landfill waste has a density of 739 pounds. per cubic yard (Waste 360 2020). Using a conversion rate of 2,000 pounds = 1 ton, the 222 tons/ year is equivalent to 444,000445,520 pounds./year. Thus, 445,520 pounds/year ÷ 739 pounds per cubic yard = 602.86 cubic yards per year.

²³ **The analysis in this IS/MND represents a conservative analysis since the revisions to the Project Description, as shown in Section I of this document, include a decrease of approximately 2,000 square feet of office use, which would result in an incremental decrease in operational impacts accordingly.**

Power Integrated Resource Plan (IRP), PWP delivers about 1.1 million megawatt-hours (MWh) of energy annually to 65,000 retail customers, with an historical peak load of about 320 MW. To serve these customers, over time PWP has assembled a portfolio of generating resources, including gas-fired, large and small hydro, coal, nuclear, solar, wind, geothermal, and landfill gas (City of Pasadena 2018b). In addition to the Glenarm Power Plant, the City receives power from numerous other sources, including the Magnolia Power Plant (Burbank, CA), the Intermountain Power Plant (Lynndyl, UT), the Antelope Big Sky Ranch Solar Project (Lancaster, CA), the Summer Solar Project (Lancaster, CA), the Columbia II Solar Project (Mojave, CA), the Kingbird Solar Project (Rosamond, CA), the Windsor Reservoir Solar project (Pasadena, CA), the Milford Wind Corridor (Milford, UT), the Azusa Hydroelectric Plant (Azusa, CA), the Hoover Uprating Hydroelectric Project (Black Canyon, NV), and several landfill gas-to-energy plants (City of Pasadena 2019e). Although the City currently receives electric power from a variety of sources, the IRP establishes the City's conformance with SB 250, whereby the City aims to acquire 33 percent of its energy for retail loads from renewable resources by 2020, and 50 percent by 2030 (City of Pasadena 2018).

According to the IRP, the City has a total resource of Capacity of 423 MW (i.e. 103 MW remaining; City of Pasadena 2018)). Although some electricity would be needed for construction of the proposed Project, power consumption would be minimal and would be both short-term and temporary in nature. Upon Project implementation, electricity demand at the Project site would increase by 1,155,868 kBTU per year. (Appendix A)²⁴ For comparison, in 2018 the total residential and nonresidential electricity use in Pasadena Water and Power's service area was 1,040,640,000 kilowatt-hours (CEC 2020). The Project's electricity consumption would represent a 0.13% of the PWP's existing demand (2018) and therefore represent a less than significant impact to electrical energy resources. Thus, the Project would not require expansion of existing facilities. PWP has indicated the existing electrical service would need to be demolished prior to construction and would require coordination (Appendix H-3). However, the impacts associated with the demolition of existing facilities within the Project site have been analyzed throughout this IS/MND and would not result in significant environmental impacts. As such, the proposed Project would not require or result in of the need for new or expanded electric power infrastructure, the construction or relocation of which could cause significant environmental effects.

Southern California Gas Company (SoCalGas) provides natural gas to the City via distribution lines and laterals within the City streets and easements. Existing gas lines would be protected in place during construction-related activities, and the proposed Project would tie-in to existing natural gas utility. The City's General Plan EIR estimates that SoCalGas has sufficient planned natural gas supplies to accommodate the buildout of the City's General Plan, which is expected to add approximately 9.6 million therms of demand on natural gas resources (City of Pasadena 2015a). As such, no off-site improvements for natural gas infrastructure are anticipated with the implementation of the proposed Project, which falls well within the parameters of the General Plan.

Telecommunication Facilities. Services within the City are provided by AT&T, Charter Communications, and satellite television services. The proposed Project would not require new or expanded telecommunication facilities.

²⁴ The analysis in this IS/MND represents a conservative analysis since the revisions to the Project Description, as shown in Section I of this document, include a decrease of approximately 2,000 square feet of office use, which would result in an incremental decrease in operational impacts accordingly.

In summary, the proposed Project would adhere to state and local legislation pertaining to the payment of impact fees to accommodate the Project’s fair-share contribution to increased demand for utility infrastructure and services. Moreover, the Project would not result in the need for new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities. Therefore, impacts in this regard are less than significant and no mitigation is required.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Less Than Significant Impact. Water in the City is provided by PWP. According to the City’s 2015 UWMP, local water supplies include local water from the Raymond Basin (approximately 40%) and purchased imported water (approximately 60%) from the Metropolitan Water District (MWD) of Southern California, who sources water from the State Water Project (SWP) and the Colorado River Aqueduct (UWMP 2015). The 2015 UWMP projects a total available water supply of 38,291 acre-feet per year (AFY) in the planning horizon of 2040 as shown below in Table 2.19-1.

Table 2.19-1. Projected Water Supply to the PWP through 2040

Water Supply	Detail	Reasonably Available Volumes				
		2020	2025	2030	2035	2040
Purchased (Imported Water)	Available from the MWD	20,934	20,986	21,237	21,529	21,617
Groundwater	Decreed groundwater and spreading credits	12,684	12,684	12,684	12,684	12,684
Recycled Water	Groundwater Recharge	0	0	930	930	930
Total Potable Supplies		33,618	33,670	34,851	35,143	35,231
Recycled Water	Includes non-potable sources such as tunnel water	700	1,100	2,280	2,670	3,060
Total Potable and Non-Potable Supplies		34,318	34,770	37,813	37,813	38,291

Source: City of Pasadena 2016b

The 2015 UWMP also considers water supply constraints (i.e. climate change, facility constraints, etc.) that have the potential to impact the volume of water available in normal, single-dry, and multiple-dry year scenarios. Table 2.19-2 below shows the normal year, single-dry year, and multiple-dry year supply and demand comparisons through the planning horizon year of 2040.

Table 2.19-2. Normal Year, Single Dry Year, and Multiple Dry Year Supply and Demand Comparisons through 2040 (AFY)

	2020	2025	2030	2035	2040
Normal Year					
Groundwater for Pumping	12,684	12,684	12,684	12,684	12,684
Imported Water	20,934	20,986	21,237	21,529	21,617
Recycled Water	700	1,100	3,210	3,600	3,990
Supply Totals	34,318	34,770	37,131	37,813	38,291
Demand Totals	32,586	32,611	32,719	32,891	33,000
Difference (Placed in Storage)	1,732	2,159	4,412	4,922	5,291
Single Dry Year					
Groundwater for Pumping	10,964	10,964	10,964	10,964	10,964

Table 2.19-2. Normal Year, Single Dry Year, and Multiple Dry Year Supply and Demand Comparisons through 2040 (AFY)

	2020	2025	2030	2035	2040
Imported Water	20,934	20,986	21,237	21,529	21,617
Recycled Water	700	1,100	3,210	3,600	3,990
Supply Totals	32,598	33,050	35,411	36,093	36,571
Demand Totals	32,586	32,611	32,719	32,891	33,000
Difference (Placed in Storage)	12	439	2,692	3,202	3,571
<i>Multiple Dry Years (Year 1)</i>					
Groundwater for Pumping	10,964	10,964	10,964	10,964	10,964
Imported Water	20,934	20,986	21,237	21,529	21,617
Recycled Water	700	1,100	3,210	3,600	3,990
Supply Totals	32,598	33,050	35,411	36,093	36,571
Demand Totals	32,586	32,611	32,719	32,891	33,000
Difference (Placed in Storage)	12	439	2,692	3,202	3,571

Table 2.19-2. Normal Year, Single Dry Year, and Multiple Dry Year Supply and Demand Comparisons through 2040 (AFY)

	2020	2025	2030	2035	2040
<i>Multiple Dry Years (Year 2)</i>					
Groundwater for Pumping	10,964	10,964	10,964	10,964	10,964
Imported Water	20,934	20,986	21,237	21,529	21,617
Recycled Water	700	1,100	3,210	3,600	3,990
Supply Totals	32,598	33,050	35,411	36,093	36,571
Demand Totals	32,586	32,611	32,719	32,891	33,000
Difference (Placed in Storage)	12	439	2,692	3,202	3,571

Source: City of Pasadena 2016b
 AFY = acre feet per year

As shown in Table 2.19-2, the PWP projects having adequate water supplies to meet projected water demand in the City through the year 2040 (City of Pasadena 2016b). The proposed Project would connect to the existing water utility infrastructure. According to the CalEEMod estimates (see Section 2.3 and Appendix A for details), the proposed Project is anticipated to use approximately 21.24 million gallons per year, compared to the existing uses onsite which use approximately 12.34 million gallons per year. The Project would represent an increase in approximate 8.9 million gallons year (27 acre-feet per year).²⁵ As previously described in Table 1-2, Project construction would be completed in the Year 2025. The UWMP shows that the 2025 excess water supply is 439 acre-feet per year under the single dry year and multiple dry years scenarios, which is larger than the Project’s net increase of 27 acre-feet per year. Additionally, the proposed Project is within the growth projections assumed in the UWMP; therefore, the forecasted 439 acre-feet per year excess remains after accounting for cumulative growth within the City, including development of the proposed Project. Further, while the proposed Project would result in an increase in water demand from increased on-site residential and ~~commercial~~ **office** use compared to existing conditions, the proposed Project would be required to comply with Pasadena Municipal Code water conservation measures which would further reduce water demand associated with the proposed Project. As such, the proposed Project’s water demand can be met by existing water supplies. Impacts would be less than significant. No mitigation is required.

- c) **Would the project 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?**

Less Than Significant Impact. Sewer lines in the City convey wastewater into trunk lines that are maintained by the LACSD, which provides much of the primary sewer trunk line system and treats local wastewater (City of Pasadena 2006). The sewer system in Pasadena totals approximately 350 miles of sewer pipelines (City of Pasadena 2015a). According to the Pasadena Sewer Maps database, the proposed project is served by existing 8-inch, VCP sewer lines within the Green Street ROW, as well as an 18-inch, VCP sewer trunk line within Oak Knoll Avenue ROW (City of Pasadena 2019c). The majority

²⁵ The analysis in this IS/MND represents a conservative analysis since the revisions to the Project Description, as shown in Section I of this document, include a decrease of approximately 2,000 square feet of office use, which would result in an incremental decrease in operational impacts accordingly.

(99.3%) of the City's wastewater is treated at three different facilities, namely: **proposed Project's wastewater would be treated at one of the following plants:**

- ~~The Whittier Narrows Water Reclamation Plant (WRP), located near the City of South El Monte, with a design capacity of 15 million gallons per day (mgd) and an average flow of 8.6 mgd, resulting in a remaining capacity of approximately 6.4 mgd (City of Pasadena 2015a).~~
- ~~The San Jose Creek WRP, located adjacent to the City of Industry, with a design capacity of 100 mgd and an average flow of 63 mgd, resulting in a remaining capacity of approximately 37 mgd (City of Pasadena 2015a).~~
- **The Joint Water Pollution Control Plant, located in the City of Carson, with a design capacity of 400 million gallons per day (mgd) and an average flow of 261.1 mgd (LACSD 2020), resulting in a remaining capacity of 138.9 mgd.**
- The Los Coyotes WRP, located in the City of Cerritos, with a design capacity of 37.5 mgd and an average flow of 21 mgd (LACSD 2012-2020), resulting in a remaining capacity of approximately **16.5-15.8** mgd (City of Pasadena 2015a).

According to the CalEEMod estimations, the proposed Project would produce approximately 21.24 million gallons per year (0.58 million gallons per day) of wastewater. Based on the remaining capacities of the ~~San Jose Creek WRP, the Whittier Narrows WRP,~~ **Joint Water Pollution Control Plant** and the Los Coyotes WRP, which total approximately ~~60-154.7~~ mgd, the wastewater generated by the proposed Project would represent a nominal (~~0.09-0.022~~) percentage of the facilities' remaining daily capacity. As such, the proposed Project is not anticipated to exceed current capacities of the wastewater treatment system and would not significantly impact existing wastewater treatment systems such that new facilities would be required. Impacts would be less than significant and no mitigation is required.

d) Would the project 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?

Less Than Significant Impact. The City's non-residential solid waste is disposed of through contracts with private haulers. These waste management services offer waste and recycling collection, green waste recycling programs, organics waste composting, special waste transportation, and transfer and materials recovery services to the City as well as many other areas in Southern California. As stated above in Section 2.19(a), the City adheres to the State's Solid Waste Reuse and Recycling Access Act of 1991 (AB 341), which declares that cities and counties must divert 50% of all solid waste by 2000 and 75% of all solid waste by 2020, through source reduction, recycling and composting. The City of Pasadena reached a 73% reduction in solid waste as early as 2010 and is moving towards zero waste as implemented by the *Zero Waste Strategic Plan*, which is anticipated to accomplish a Citywide minimum of 87% solid waste diversion by 2040 (City of Pasadena 2019d). Additionally, the Pasadena Municipal Code requires that 75% of construction and demolition debris be recycled.

Based on the CalEEMod solid waste generation rates, the proposed Project would generate approximately 222.76 tons/year (602.86 cubic yards/year) (Appendix A).²⁶ Solid waste generated by the proposed Project would be collected and transported to a local or regional landfill. The City primarily disposes of solid waste at four landfills, including Scholl Canyon Landfill, Sunshine Canyon Landfill, El Sobrante Landfill, and Chiquita Canyon Landfill. With adherence to the abovementioned regulations, the increase in solid waste generation from implementation of the proposed Project would be minimal, and, as of 2015, the above-mentioned landfills had a combined remaining capacity of 297,000,000 cubic yards, of which the proposed Project would represent a nominal contribution (City of Pasadena 2015a). Additionally, required compliance with Chapter 8.62 of the Pasadena Municipal Code would reduce the project’s solid waste generation during construction and demolition activities. For these reasons, solid waste impacts resulting from the construction and operation of the proposed Project would be considered less than significant. No mitigation is required.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. As stated above in Section 2.19(a), the City adheres to the states Solid Waste Reuse and Recycling Access Act of 1991 (AB 341), which declares that cities and counties must divert 50% of all solid waste by 2000 and 75% of all solid waste by 2020, through source reduction, recycling and composting. The City of Pasadena reached a 73% reduction in solid waste as early as 2010 and is moving towards zero waste as implemented by the *Zero Waste Strategic Plan*, which is anticipated to accomplish a Citywide minimum of 87% solid waste diversion by 2040 (City of Pasadena 2019d). Additionally, the Pasadena Municipal Code requires that 75% of construction and demolition debris be recycled. The proposed Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. No impact would occur.

2.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

²⁶ The analysis in this IS/MND represents a conservative analysis since the revisions to the Project Description, as shown in Section I of this document, include a decrease of approximately 2,000 square feet of office use, which would result in an incremental decrease in operational impacts accordingly.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. According to the General Plan EIR, the City has incorporated two emergency preparedness plans, namely: the Los Angeles County Operational Area Emergency Response Plan and the City’s Emergency Operations Plan (EOP; City of Pasadena 2015a). Both plans provide the framework for emergency preparedness and response; although the EOP specifically provides a plan for the residents of Pasadena to respond to major emergencies or disasters. Additionally, the Pasadena Fire Department provides emergency response services, including hazardous materials emergency response (City of Pasadena 2015a).

According to the LADPW, Colorado Boulevard, which runs in an east-west direction approximately 500 feet north of the Project site, is an emergency disaster route and the I-210, which runs in an east-west direction approximately 0.5 mile north of the Project site, is a freeway disaster route (County of Los Angeles Department of Public Works 2008).

In the event of a major disaster or emergency, the Los Angeles County Operational Area Emergency Response Plan and the City’s EOP would improve the efficiency of the City’s disaster response. The proposed Project would not include the construction of any buildings or infrastructure that would preclude the City’s ability to implement an adopted emergency response plan or emergency evacuation plan. During construction of the proposed Project, it is anticipated that some of the construction activities may require short-term partial or full road closures of travel lanes along Oak Knoll Avenue or Hudson Avenue. As further detailed in Section 2.17, Transportation, the Project applicant would submit a Construction Staging and Traffic Management Plan (CSTMP) to the Pasadena Department of Public Works (DPW) that shall show the impact of various construction stages on the public right-of-way (Appendix H-1). The CSTMP would require coordination with agencies and City departments to obtain necessary occupancy permits in the event of road closures to identify any detour or alternate routes. With implementation of the CSTMP, impacts to emergency access during construction of the Project would be less than significant. Upon operation of the proposed Project, emergency access would be provided via Green Street, Oak Knoll Avenue, and Hudson Avenue. As such, the proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant. No mitigation is required.

- b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

No Impact. The Project site is located within an urban setting and is surrounded by developed land uses, which are predominantly commercial and residential in nature. According to the CALFIRE Very High Fire Hazard Severity Zone (VHFHSZ) Map, the Project site is not located within a VHFHSZ (CAL FIRE 2011). The nearest fire hazard areas are the undeveloped, wildland areas of the Arroyo Seco, approximately 1.8 miles west of the Project site. The probability of a wildfire spreading across the urban development in the downtown area to the Project site is negligible. The proposed Project would be constructed in adherence to the requirements set forth in the Fire Code (Title 24, Part 9 of the California Building Code) and would not include the construction of any buildings or infrastructure that would exacerbate wildfire risks or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

- c) Would the project 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?**

No Impact. As stated above, the Project site is located within an urban setting and is surrounded by developed land uses, which are predominantly commercial and residential in nature. According to the CALFIRE VHFHSZ Map, the Project site is not located within a VHFHSZ (CAL FIRE 2011). The proposed Project would not include or 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.

- d) Would the project 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?**

No Impact. The proposed Project is located within a fully developed, urban area and is located on flat terrain. The site is not located adjacent to hillside areas where post-fire slope instability or flooding due to drainage changes could occur, and the proposed Project would not exacerbate any existing conditions related to wildfire risks.

2.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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?

Less Than Significant Impact with Mitigation Incorporated. The Project site is entirely paved and surrounded by urban development under existing conditions. As described in Section 2.4, Biological Resources, the Project site does not support any naturally vegetated areas or green spaces that could contribute to habitat or habitat linkages for candidate, sensitive, or special-status species. The nearest protected open space which provides support for a number of native plant and wildlife communities is the Arroyo Seco, located approximately 1.8 miles west of the Project site (City of Pasadena 2015a). The Arroyo Seco is separated from the Project site by land uses that are predominantly urban in nature and as such, preclude the movement of wildlife in the direction of the Project site. However, the existing ornamental trees on and around the Project site could be utilized by migratory bird species for nesting during the breeding season. Migratory birds are protected under the MBTA and CFGC. Construction-related activities, including the removal of some of these trees (see Figure 12) and construction noise, could disturb nesting birds protected under the MBTA. Compliance with MBTA would protect migratory birds, and further, compliance with Sections 3503, 3503.5, and 3513 – Native Bird Protection of the CFGC

would avoid impacts to nesting birds. As such, in compliance with the MBTA and the CFGC, the proposed Project would have less than significant impact on the movement of native resident or migratory fish or wildlife species and established native resident or migratory wildlife corridors, and would not impede the use of native wildlife nursery sites.

Additionally, as addressed in Section 2.5, Cultural Resources, the proposed Project would not have the potential to eliminate important examples of the major periods of California history or prehistory. If unanticipated discoveries of archaeological resources were encountered, impacts to encountered resources could be potentially significant. However, with the implementation of a WEAP training under MM-CUL-1 and implementation of MM-CUL-2 for the inadvertent discovery of archaeological resources, potentially significant impacts to archaeological resources would be reduced to less-than-significant levels. Therefore, impacts would be less than significant with MM-CUL-1 and MM-CUL-2 incorporated. The proposed Project would not eliminate important examples of the major periods of California history. Therefore, implementation of the proposed Project would result in less than significant impacts with mitigation incorporated to protect nesting birds and any archaeological resources inadvertently discovered during construction.

- 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 when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

Less Than Significant Impact with Mitigation Incorporated. The proposed Project would result in potentially significant Project-level impacts involving, biological resources, cultural resources, geology and soils, hazards and hazardous materials, ~~transportation~~, and tribal cultural resources. However, in all cases, mitigation measures have been identified that would reduce these impacts to a less-than-significant level. As addressed throughout this IS/MND, the proposed Project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated with respect to all environmental impact areas. Cumulative impacts of several resource areas have already been addressed in several individual resource sections, including Section 2.3, Air Quality; Section .8, Greenhouse Gas Emissions; Section 2.13, Noise; and Section 2.17, Transportation. CalEEMod was used to assess the air quality and GHG emissions impacts resulting from the proposed Project, concluding less than significant impacts.

The proposed Project would not contribute to cumulative exceedances of noise standards, and its incremental effect would not be cumulatively considerable. Traffic assessments conducted as part of this IS/MND considered cumulative increases in traffic and concluded that cumulative impacts would be less than significant with incorporation of MM-TRA-1. Some of the other resource areas (i.e., Section 2.1, Aesthetics; Section 2.2, Agricultural and Forestry Resources; Section 2.10, Hydrology and Water Quality; Section 2.11, Land Use and Planning; Section 2.12, Mineral Resources; Section 2.14, Population and Housing; Section 2.15, Public Services; Section 2.16, Recreation; and Section 2.19, Utilities and Services Systems) were determined to have a less than significant or no impact when compared to existing conditions, and thus, the proposed Project would not contribute to cumulative impacts related to these environmental topics. Other issues areas (i.e., Section 2.5, Cultural Resources; Section 2.7, Geology and Soils; Section 2.9, Hazards and Hazardous Materials; Section 2.18, Tribal Cultural Resources; and

Section 2.20, Wildfire) are by their nature site-specific, and impacts at one location do not add to impacts at other locations or create additive impacts.

The proposed Project includes the construction of a mixed-use development comprising 263 rental apartment units, approximately ~~16,481~~**14,346** sf of ~~commercial~~**office** development (e.g. retail, restaurant), ~~37,666~~**39,980** sf of open space and amenities, and a ~~4,110~~**4,033**-sf publicly accessible pocket park. Substantial population growth in any particular area is usually associated with a significant increase in available housing stock and/or employment opportunities. Existing residents are more likely to utilize the new housing stock proposed under the Project. Irrespective, the proposed Project could be accommodated by the population projections currently estimated by SCAG (see Table 2.14-1), and, as such, the proposed Project would not induce substantial unplanned population growth in the area. Furthermore, the proposed Project would not include the construction of any roads or other infrastructure, the implementation of which would result in substantial, indirect population growth. Therefore, the proposed Project would not considerably contribute to population-driven impacts (such as population and housing, utilities, public recreation facilities, and public services). All reasonably foreseeable future development in the City would be subject to the same land use and environmental regulations that have been described throughout this document.

Furthermore, all development projects are guided by the policies identified in the City's General Plan and by the regulations established in the City's Municipal Code. Therefore, compliance with applicable land use and environmental regulations would ensure that environmental effects associated with the proposed Project do not combine with effects from reasonably foreseeable future development in the City to cause cumulatively considerable significant impacts. Therefore, with mitigation incorporated, the Project would not result in a mandatory finding of significance due to a considerable contribution to any cumulative impacts.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact with Mitigation Incorporated. As evaluated throughout this document, with the incorporation of mitigation associated with biological resources, cultural resources, geology and soils, hazards and hazardous materials, transportation, and tribal cultural resources, environmental impacts associated with the proposed Project would be reduced to less than significant levels. Specifically, mitigation measures related to hazards and hazardous materials (MM-HAZ-1 and MM-HAZ-2) would reduce potential hazardous effects to human beings through a HMCP and a hazardous building materials survey prior to construction. Therefore, the proposed Project would not directly or indirectly cause substantial adverse effects on human beings.

SECTION III. References and Preparers

3.1 REFERENCES CITED

- CALFIRE (California Department of Forestry and Fire Protections Services). 2011. Very High Fire Hazard Severity Zones in LRA- Los Angeles [map]. Accessed, September 16, 2019. <https://osfm.fire.ca.gov/media/5836/pasadena.pdf>.
- California Department of Parks and Recreation. 2002. Quimby Act. Accessed, September 11, 2019. <https://www.parks.ca.gov/pages/795/files/quimby101.pdf>.
- California Department of Transportation (Caltrans). 2020. Transportation and Construction Vibration Guidance Manual. Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. Sacramento, CA. April 2020.
- Caltrans. 2020 “Scenic Highways; Scenic Highways System Lists; List of eligible and officially designated State Scenic Highways (XLSX)” Accessed July 22, 2020. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>.
- CAPCOA (California Air Pollution Control Officers Association). 2008. CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. January 2008.
- CARB (California Air Resources Board). 2014. First Update to the Climate Change Scoping Plan Building on the Framework Pursuant to AB 32 – The California Global Warming Solutions Act of 2006. May 2014. http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.
- CARB (California Air Resources Board). 2018. “Area Designation Maps/State and National.” Last reviewed December 28, 2018. <http://www.arb.ca.gov/design/adm/adm.htm>.
- CARB. 2017. The 2017 Climate Change Scoping Plan Update. January 20. Accessed January 2017. https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.
- CARB. 2019. “Common Air Pollutants.” <https://ww2.arb.ca.gov/resources/common-air-pollutants>
- CDFW (California Department of Fish and Wildlife). 2019. California Natural Community Conservation Plans [map]. Accessed, September 9, 2019. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>.
- CEC (California Energy Commission). 2018. 2019 Building Energy Efficiency Standards. March 2018. Accessed April 2020. https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf.
- CEC. 2021. 2022 Building Energy Efficiency Standards Summary. August 2021. Accessed May 2023. https://www.energy.ca.gov/sites/default/files/2021-08/CEC_2022_EnergyCodeUpdateSummary_ADA.pdf.**

- CGS (California Geological Survey). 2015. CGS Information Warehouse: Tsunami [Esri database]. Accessed, September 10, 2019. <https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=tsunami>.
- CGS (California Geological Survey). 2019. Earthquake Zones of Required Investigation [Esri database]. Accessed, September 10, 2019. <https://maps.conservation.ca.gov/cgs/EQZApp/app/>.
- City of Pasadena. 2002. Safety Element of the General Plan. Accessed, September 10, 2019. <https://ww5.cityofpasadena.net/planning/wp-content/uploads/sites/56/2017/07/General-Plan-Safety-Element.pdf>.
- City of Pasadena. 2004. Central District Specific Plan. Accessed, September 5, 2019. <https://ww5.cityofpasadena.net/planning/planning-division/community-planning/specific-plans/central-district/>.
- City of Pasadena. 2006. Sewer System Management Plan. Accessed, September 12, 2019. <https://www.cityofpasadena.net/wp-content/uploads/sites/29/Sewer-System-Management-Plan-SSMP-Final-Report.pdf>.
- City of Pasadena. 2007. City of Pasadena Green Space, Recreation, and Parks Master Plan. Accessed, September 11, 2019. <https://ww5.cityofpasadena.net/planning/wp-content/uploads/sites/56/2017/07/Section-4-Needs-Analysis.pdf>.
- City of Pasadena. 2008. Pasadena Municipal Code. Chapter 9.36 – Noise Restrictions. Accessed April 2020. https://library.municode.com/ca/pasadena/codes/code_of_ordinances?nodeId=TIT9PUPEMOWE_ARTIVOFAGPUPE_CH9.36NORE_9.36.050GENOSO.
- City of Pasadena Department of Transportation 2015. Transportation Impact Analysis Current Practice & Guidelines. Accessed May 2020. <https://ww5.cityofpasadena.net/transportation/wp-content/uploads/sites/6/2015/12/Current-Practice-and-Guidelines.pdf>.
- City of Pasadena. 2015a. Pasadena General Plan Draft EIR. Accessed, September 5, 2019. https://ww5.cityofpasadena.net/planning/wp-content/uploads/sites/56/2015/09/General-Plan_Draft-EIR_2015-01.pdf.
- City of Pasadena 2015b. Land Use Element of the General Plan. Accessed January 1, 2019. Adopted August 18, 2015. <https://ww5.cityofpasadena.net/planning/wp-content/uploads/sites/56/2017/07/Land-Use-Element-2016-01-25.pdf>.
- City of Pasadena. 2016a. Follow-Up Summary from June 6-20, 2016 Special Finance Committee/City Council Meetings. June 27, 2016. Accessed May 6, 2020. ww2.cityofpasadena.net/councilagendas/2016%20Agendas/Jun_27_16/AR%209%20SUMMARY%20FOLLOW-UP%20RESPONSES.pdf.
- City of Pasadena. 2016b. 2015 Urban Water Management Plan. Accessed, September 10, 2019. https://ww5.cityofpasadena.net/water-and-power/wp-content/uploads/sites/54/2017/08/2015_Final_UWMP.pdf.

- City of Pasadena. 2018a. *Climate Action Plan*. March 5, 2018. Accessed March 2020. https://www.cityofpasadena.net/wp-content/uploads/sites/30/Final-Pasadena-Climate-Action-Plan_3.5.2018.pdf?v=1583948428778.
- City of Pasadena. 2018b. 2018 Pasadena Water and Power Integrated Resource Plan. Accessed, September 13, 2019. <https://ww5.cityofpasadena.net/water-and-power/wp-content/uploads/sites/54/2018/12/Pasadena-Water-and-Power-2018-IRP-Final.pdf>.
- City of Pasadena. 2019a. Low Impact Development [webpage]. Accessed, September 10, 2019. <https://ww5.cityofpasadena.net/planning/building-and-safety/low-impact-development/>.
- City of Pasadena. 2019b. Human Services and Recreation Department [Parks and Facilities webpage]. Accessed, September 11, 2019. <https://www.cityofpasadena.net/human-services/parks>.
- City of Pasadena. 2019c. Pasadena Sewer Map Viewer [Esri database]. Accessed, September 12, 2019. <http://pasgis.maps.arcgis.com/apps/webappviewer/index.html?id=0f6f9010fe0340f0b5f832e805d3acd9>.
- City of Pasadena. 2019d. Zero Waste Pasadena 2040 [webpage]. Accessed, September 12, 2019. <https://www.cityofpasadena.net/public-works/recycling-resources/zero-waste-recycling/zero-waste-pasadena-2040/>.
- City of Pasadena. 2019e. PWP Power Projects [webpage]. Accessed, September 13, 2019. <https://ww5.cityofpasadena.net/water-and-power/pwppowersources/>.
- City of Pasadena. 2020a. *Transportation Impact Analysis, CEQA Evaluation, Category 2*. April 2020.
- City of Pasadena. 2020b. California Historical Resources Inventory Database. Accessed August 4, 2020. https://pasadena.cfwebtools.com/search.cfm?res_id=5956&display=resource
- City of Pasadena. 2020c. "Library Branches" [webpage]. Accessed January 10, 2020. <https://www.cityofpasadena.net/library/branches/>.
- CNRA (California Natural Resources Agency). 2009. "Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97." Sacramento, California: CNRA. December 2009. http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf.
- County of Los Angeles Fire Department. 2020. "Our Services, Health HazMat/CUPA." Accessed March 18, 2020. <https://www.fire.lacounty.gov/hhmd-2/>.
- Department of Toxic Substances Control. 2020. "Managing Hazardous Waste." Accessed March 18, 2020. <https://dtsc.ca.gov/universalwaste/household-hazardous-waste/>.
- Dibblee, T.W. and H.E. Ehrenspeck, ed. 1989. Geologic map of the Pasadena quadrangle, Los Angeles County, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-23, scale 1:24,000.

- DOC (California Department of Conservation). 1982. Generalized Aggregate Resource Classification Map [map; Plate 4-1]. Accessed, September 9, 2019. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_143/PartIV/.
- DOC (California Department of Conservation). 2016. Los Angeles County Williamson Act FY 2015/2016 [map]. Accessed, September 6, 2019. <ftp://ftp.consrv.ca.gov/pub/dlrp/wa/2015/2016> [map]. Accessed, September 6, 2019.
- DOC (California Department of Conservation). 2019. California Important Farmland Finder [Esri database]. Accessed, September 5, 2019. <https://maps.conservation.ca.gov/dlrp/ciftimeseries/>.
- DOGGR (California Department of Conservation, Division of Oil, Gas, and Geothermal Resources). 2005. Report of Property and Well Transfer. Accessed, September 9, 2019. <ftp://ftp.consrv.ca.gov/pub/oil/WellRecord/037/03706338>.
- DWR (California Department of Water Resources). 2019. SGMA Basin Prioritization Dashboard [Esri database]. Accessed, September 10, 2019. <https://gis.water.ca.gov/app/bp-dashboard/p2/>.
- EPA (United States Environmental Protection Agency). 2016. "Health and Environmental Effects of Particulate Matter (PM)" Last updated July 1, 2016. <https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm>.
- EPA. 2017. "EPA Green Book." Last updated September, 2017. <https://www.epa.gov/green-book>.
- EPA. 2018. "Region 9: Air Quality Analysis, Air Quality Maps." Last updated September 28, 2018. <http://www.epa.gov/region9/air/maps/>.
- Federal Highway Administration (FHWA). 2004. FHWA Traffic Noise Model, Version 2.5. Office of Environment and Planning. Washington, DC. February.
- FEMA (Federal Emergency Management Agency). 2008. Flood Map Service [database]. Accessed, September 10, 2019. <https://msc.fema.gov/portal/firmette?latitude=34.14451652120739&longitude=-118.13486005536963>.
- FHWA. 2008. Roadway Construction Noise Model (RCNM).
- FTA (Federal Transit Administration). 2018. *Transit Noise and Vibration Impact Assessment Manual*. Federal Transit Administration. September 2018.
- IPCC (Intergovernmental Panel on Climate Change). 2007. *IPCC Fourth Assessment Synthesis of Scientific-Technical Information Relevant to Interpreting Article 2 of the U.N. Framework Convention on Climate Change*.
- LACSD (Los Angeles County Sanitation District). 2012. Clearwater Program Final Facilities Master Plan. Accessed, September 12, 2019. <https://clearwater.lacsd.org/pdf/Final%20Clearwater%20Program%20Master%20Facilities%20Plan.pdf>.

LACSD (Los Angeles County Sanitation Districts). 2020. NOI Response for Planned Development No. 37. Prepared by Adriana Raza, Customer Service Specialist, Facilities Planning Department. December 28, 2020. Included as Comment Letter 1.

LADPW (County of Los Angeles Department of Public Works). 2008. City of Pasadena Disaster Routes Map [map]. Accessed, September 16, 2019. <https://dpw.lacounty.gov/dsg/DisasterRoutes/map/Pasadena.pdf>

LADPW (County of Los Angeles Department of Public Works). 2014. Low Impact Development Standards Manual. Accessed, September 13, 2019. <https://dpw.lacounty.gov/idd/lib/fp/Hydrology/Low%20Impact%20Development%20Standards%20Manual.pdf>

LARWQCB (Los Angeles Regional Water Quality Control Board). 2019. Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. Accessed, September 10, 2019. https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.html.

McLeod, S.A. 2019. Vertebrate Paleontology Records Check for Paleontological Resources for the Proposed 740-760 Green Street Mixed-Use Project, Dudek Project # 12101, in the City of Pasadena, Los Angeles County, Project Area. Unpublished Records Search Results Letter from the Natural History Museum of Los Angeles County, Los Angeles, California.

Miller, L.H. 1942. A New Fossil Bird Locality. *Condor*, 44(6):283- 284.

NWI (United State Fish and Wildlife Service, National Wetlands Inventory). 2019. Wetlands Mapper [Esri database]. Accessed, September 9, 2019. <https://www.fws.gov/wetlands/data/Mapper.html>.

OEHHA (Office of Environmental Health Hazard Assessment). 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments*. Accessed February 2015. <https://oehha.ca.gov/air/crnrl/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>

Office of Public School Construction. 2008. “State of California enrollment Certification/Projection School Facility Program SAB 50-01. Revised June 2008. Accessed May 6, 2020. <https://www.dgsapps.dgs.ca.gov/OPSC/ab1014/sab50-01instructions.pdf>.

Pasadena Department of Transportation. 2020. *740 – 790 East Green Street Traffic Impact Analysis*. April 14, 2020.

Pasadena Fire Department. 2020. “Hazardous Materials.” Accessed March 18, 2020. <https://www.cityofpasadena.net/fire/fire-prevention/hazardous-materials/#hazmat-disclosure>.

Pasadena Police Department. 2020. “Preliminary Monthly Statistical Report March 2020.” Accessed May 6, 2020. Updated April 2, 2020. <https://www.cityofpasadena.net/police/wp-content/uploads/sites/28/2020-03-March-Crime-Statistics.pdf>.

- PUSD. 2020. "Pasadena Unified School District 2020-21." Accessed May 6, 2020.
https://app.guidek12.com/pasadenaca/school_search/2020/.
- Roth, V.L. 1984. How Elephants Grow: Heterochrony and the Calibration of Developmental Stages in Some Living and Fossil Species. *Journal of Vertebrate Paleontology*, 4(1):126-145.
- SCAG (Southern California Association of Governments). 2001. Employment Density Study Summary Report. October 31, 2001. Prepared for SCAG by the Natelson Company, Inc.
- SCAG (Southern California Association of Governments). 2016. *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy*. Adopted April 7, 2016. Accessed March 2017.
<http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx>.
- SCAG. 2019. *Draft Connect SoCal Plan: The 2020–2045 RTP/SCS, Demographics and Growth Forecast Appendix*. Approved November 2019. https://www.connectsocial.org/Documents/Draft/dConnectSoCal_Demographics-And-Growth-Forecast.pdf
- SCAG. 2020. *The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, Connect SoCal*. <https://www.connectsocial.org/Documents/Adopted/fConnectSoCal-Plan.pdf>.
- SCAQMD (South Coast Air Quality Management District). 1993. *CEQA Air Quality Handbook*.
- SCAQMD (South Coast Air Quality Management District). 2008. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. October 2008.
- SCAQMD. 1989. *Rule 1403: Asbestos Emissions from Demolition/Renovation Activities*. Accessed May 2107. <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1403.pdf>.
- SCAQMD. 2003. *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*. August 2003. <http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf?sfvrsn=2>.
- SCAQMD. 2005. Rule 403: Fugitive Dust. Adopted May 7, 1976. Amended June 3, 2005.
- SCAQMD. 2009. *Final Localized Significance Threshold Methodology*. June 2003; revised July 2008; Appendix C "Mass Rate LST Look-up Tables" revised October 2009. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2>.
- SCAQMD. 2010. Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15. September 28, 2010. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2)
- SCAQMD. 2011. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>.

- SCAQMD. 2015. "SCAQMD Air Quality Significance Thresholds." Originally published in *CEQA Air Quality Handbook*, Table A9-11-A. Revised March 2015. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>
- SCAQMD. 2017. *Final 2016 Air Quality Management Plan*. March 16, 2017. Accessed October 2017. <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>.
- Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. 11 p. Available: http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx.
- The Climate Registry. 2020. *The Climate Registry's 2020 Default Emission Factors*. April. Accessed November 2020. <https://www.theclimateregistry.org/wp-content/uploads/2020/04/The-Climate-Registry-2020-Default-Emission-Factor-Document.pdf>.
- Trane. 2013. *Product Data: 4DCY4024 through 4DCY4060 Single Packaged Convertible Dual Fuel 14 SEER*.
- USGS (United States Geological Survey). 2019a. California Scenic Highways [Esri database]. Accessed, September 5, 2019. <https://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=f0259b1ad0fe4093a5604c9b838a486a>.
- USGS (United States Geological Survey). 2019a. California Scenic Highways [Esri database]. Accessed, September 5, 2019. <https://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=f0259b1ad0fe4093a5604c9b838a486a>.
- USGS (United States Geological Survey). 2019b. California Scenic Highways [Esri database]. Accessed, September 5, 2019. <https://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=f0259b1ad0fe4093a5604c9b838a486a>.
- Waste 360. 2020. "Municipal Solid Waste." Accessed August 3, 2020. https://www.waste360.com/mag/waste_municipal_solid_waste#:~:text=Glass%20bottles%20and%20food%20waste%20have%20the%20highest,landfill%20density%20of%20739%20pounds%20per%20cubic%20yard.

3.2 LIST OF PREPARERS

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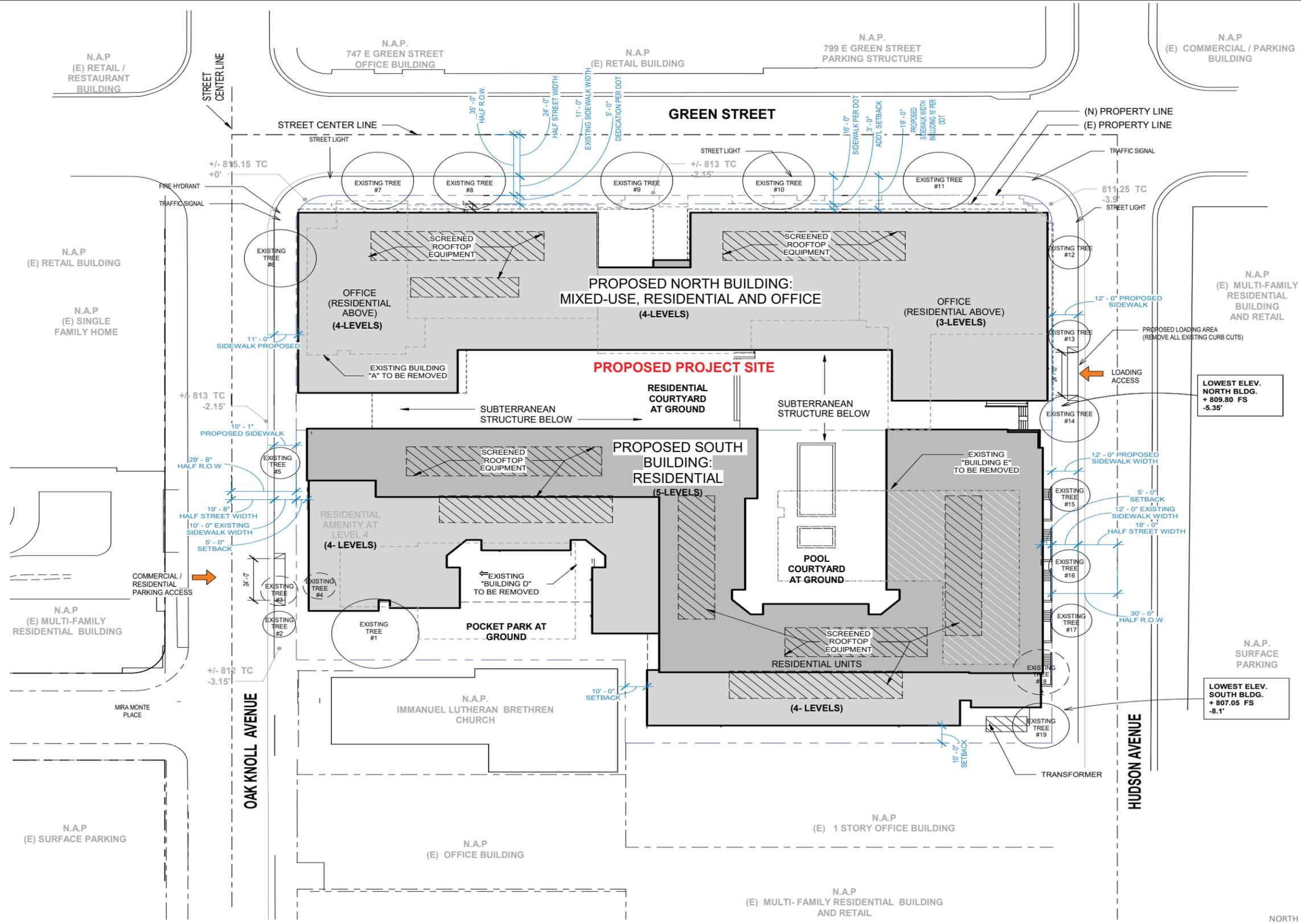
SOURCE: LAR-IAC 2014, Open Street Map 2019

FIGURE 2

Existing Site Conditions

740-790 East Green Street Mixed-Use Project

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① Site
1" = 30'-0"



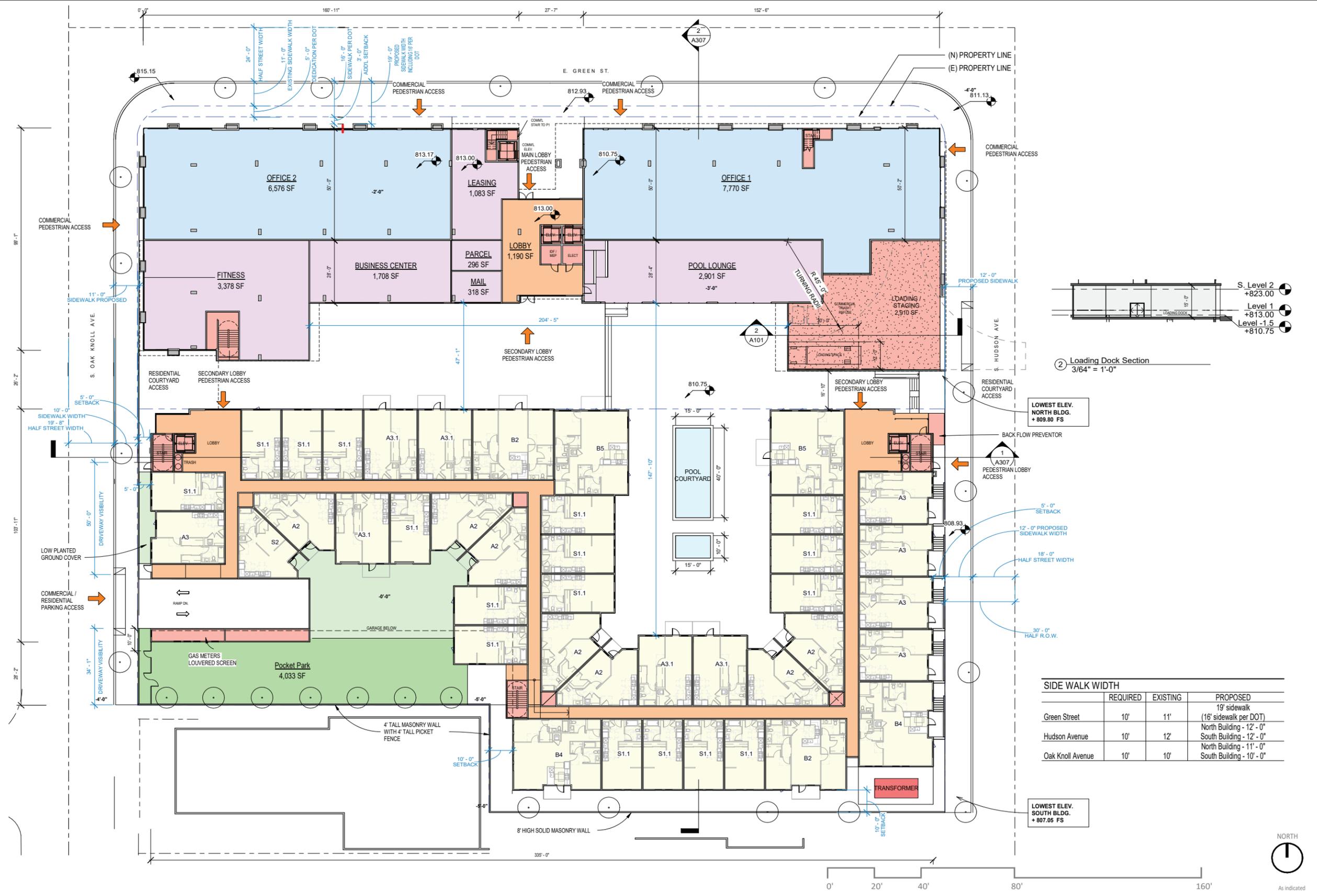
SOURCE: MVE + Partners 2022

DUDEK

FIGURE 3
Site Plan

740-790 East Green Street Mixed-Use Project

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SOURCE: MVE + Partners 2023

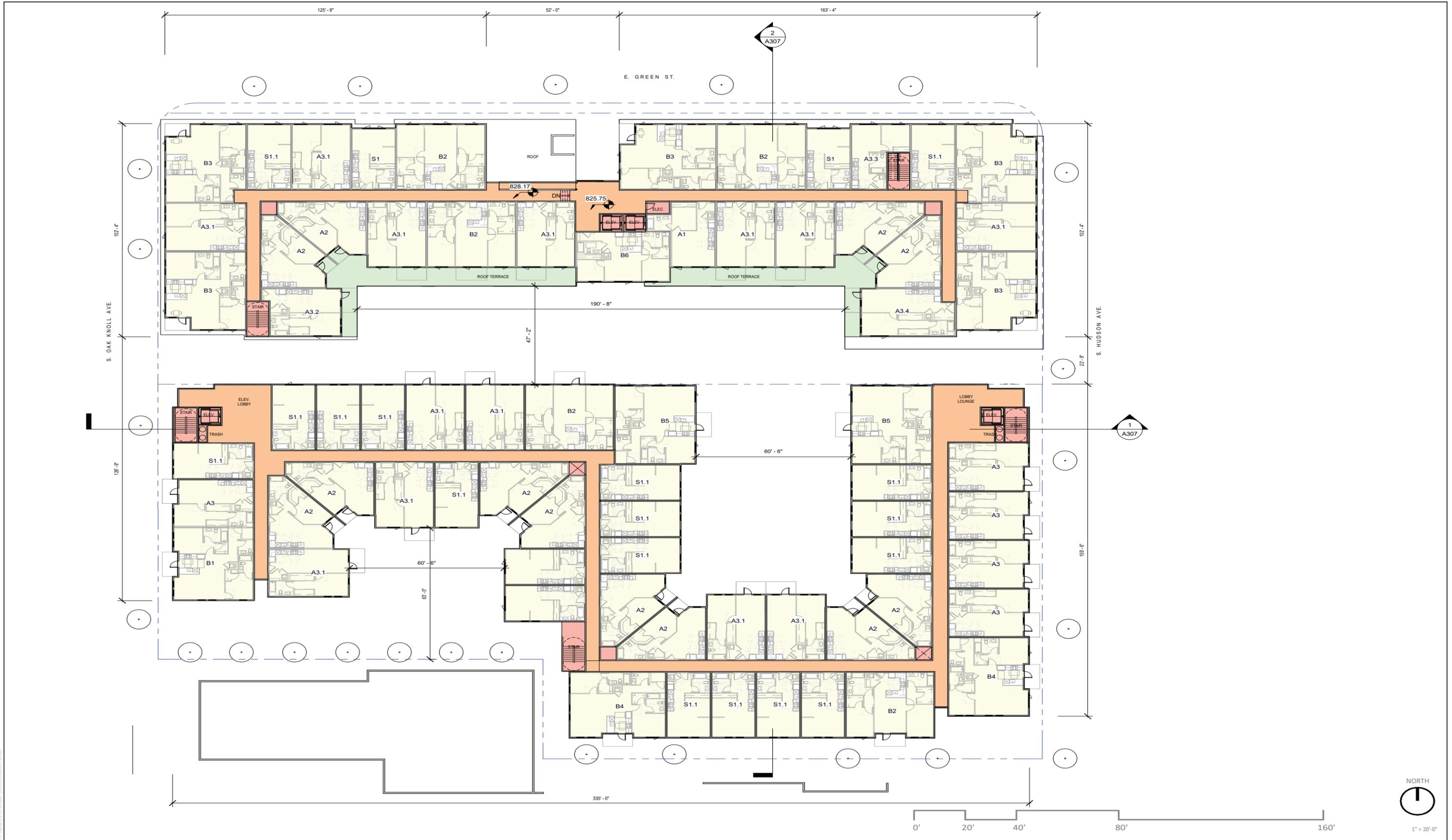


FIGURE 4

Level One Floor Plan

740-790 East Green Street Mixed-Use Project

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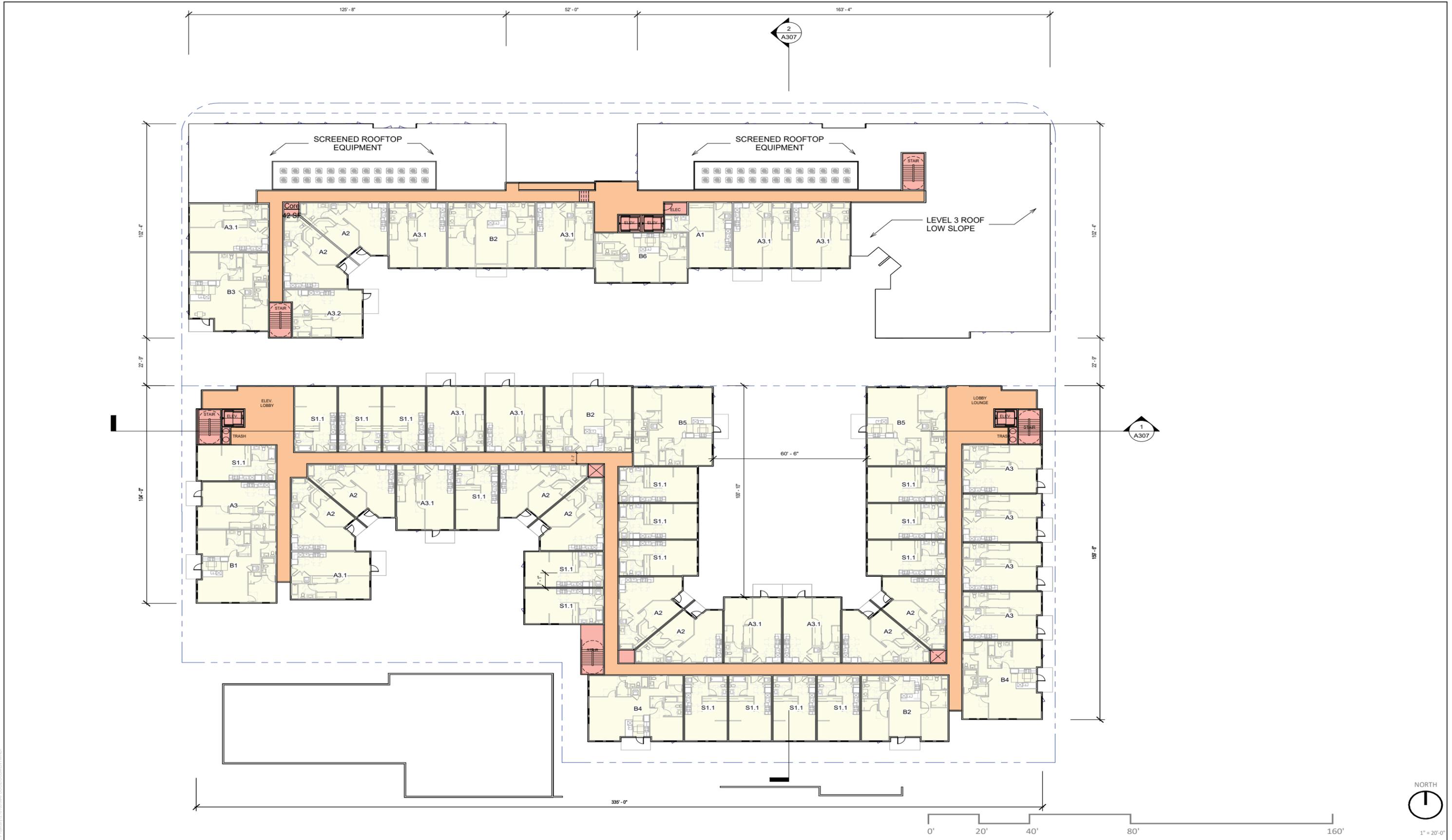
SOURCE: MVE + Partners 2023

FIGURE 5

Level Two Floor Plan

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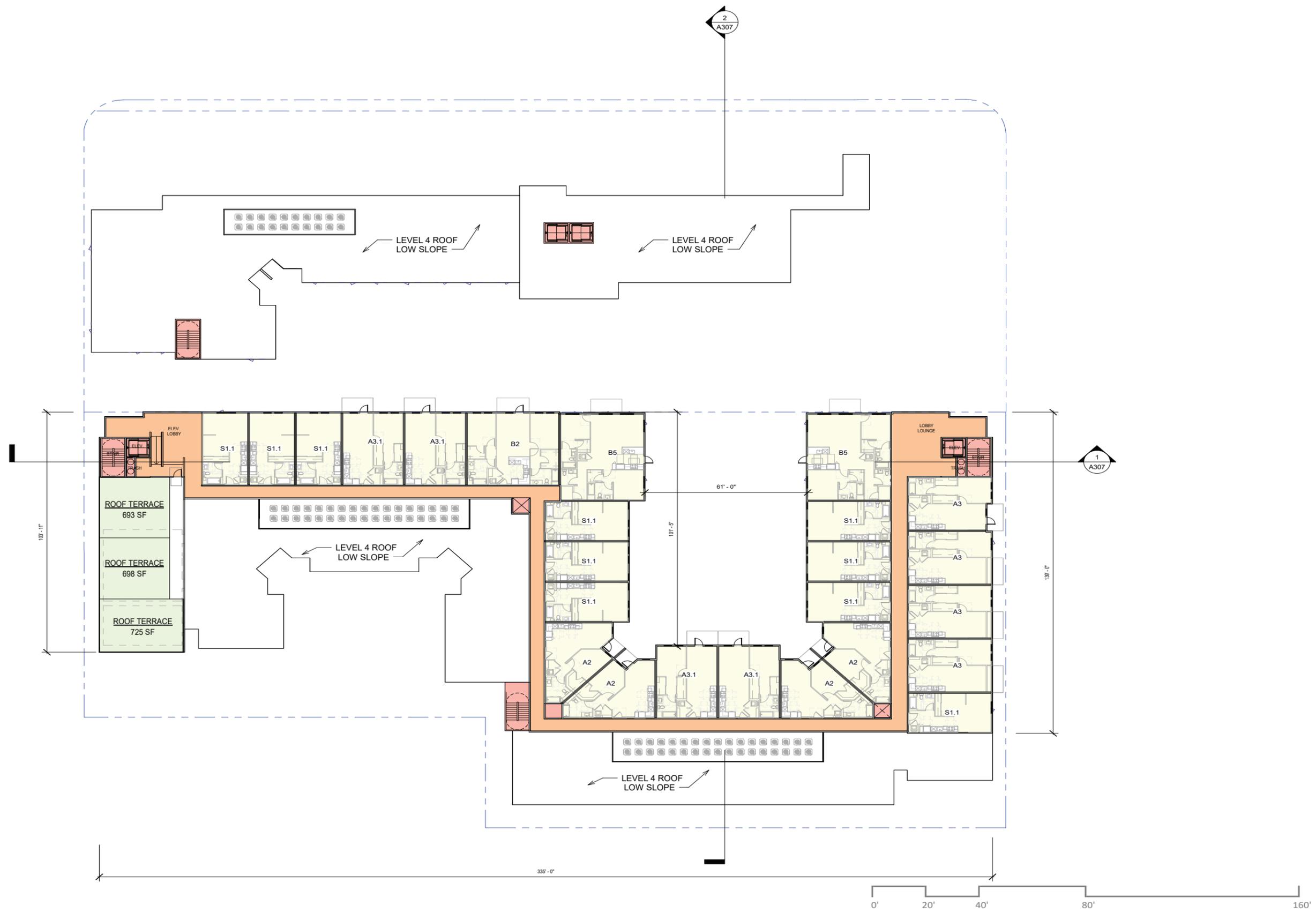


SOURCE: MVE + Partners 2023

FIGURE 7

Level Four Floor Plan

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SOURCE: MVE + Partners 2023

FIGURE 8

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Total Parking Schedule	
Type	Count
Level P1	
Guest	
Guest ADA 9'-0" X 18'-0"	1
Guest ADA Van 12'-0" X 18'-0"	1
Guest Standard 8'-6" X 18'-0"	24
	26
Office	
Office ADA 9'-0" X 18'-0"	1
Office ADA Van 12'-0" X 18'-0"	1
Office Standard 8'-6" X 18'-0"	33
	35
Resident	
Resident ADA 9'-0" X 18'-0"	6
Resident ADA Van 12'-0" X 18'-0"	1
Resident Standard 8'-6" X 18'-0"	99
Resident Standard 9'-0" X 18'-0"	19
Resident Tandem 9'-0" X 18'-0"	16
	141
	202

Level P2	
Resident	
Resident Standard 8'-6" X 18'-0"	210
Resident Standard 9'-0" X 18'-0"	4
	214
	214

Grand Total	
	416

Total Residential Spaces	
Type	Count
Resident	
Resident ADA 9'-0" X 18'-0"	6
Resident ADA Van 12'-0" X 18'-0"	1
Resident Standard 8'-6" X 18'-0"	309
Resident Standard 9'-0" X 18'-0"	23
Resident Tandem 9'-0" X 18'-0"	16
	355

*Total Tandem Residential stalls less than 30% of Total Residential Stalls. (355 Stalls x 30% = 106 Stalls)

TYPICAL PARKING STALL / STRIPING DIAGRAM

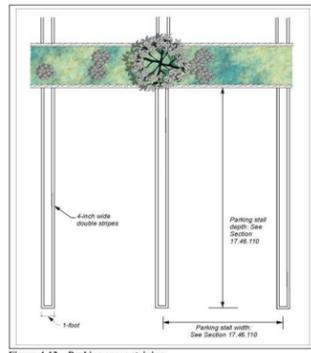
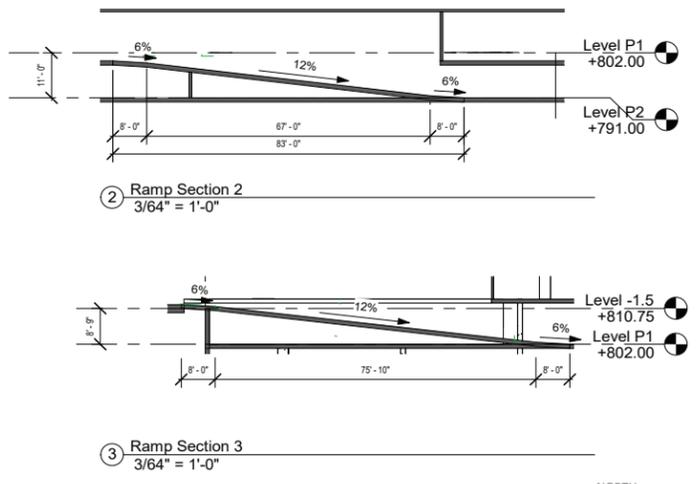


Figure 4-12 - Parking space striping



1 Level P1
1" = 20'-0"



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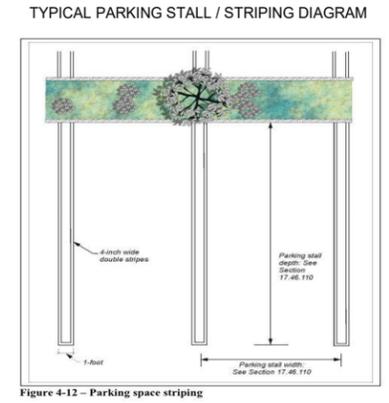
Total Parking Schedule	
Type	Count
Level P1	
Commercial	
Commercial ADA 9'-0" X 18'-0"	1
Commercial ADA Van 12'-0" X 18'-0"	1
Commercial Standard 8'-6" X 18'-0"	33
	35
Guest	
Guest ADA 9'-0" X 18'-0"	1
Guest ADA Van 12'-0" X 18'-0"	1
Guest Standard 8'-6" X 18'-0"	24
	26
Resident	
Resident ADA 9'-0" X 18'-0"	6
Resident ADA Van 12'-0" X 18'-0"	1
Resident Standard 8'-6" X 18'-0"	99
Resident Standard 9'-0" X 18'-0"	19
Resident Tandem 9'-0" X 18'-0"	16
	141
	202
Level P2	
Resident	
Resident Standard 8'-6" X 18'-0"	210
Resident Standard 9'-0" X 18'-0"	4
	214
	214
Grand Total	416

Total Residential Spaces	
Type	Count
Resident	
Resident ADA 9'-0" X 18'-0"	6
Resident ADA Van 12'-0" X 18'-0"	1
Resident Standard 8'-6" X 18'-0"	309
Resident Standard 9'-0" X 18'-0"	23
Resident Tandem 9'-0" X 18'-0"	16
	355

Total Residential Spaces	
Type	Count
Resident	
Resident ADA 9'-0" X 18'-0"	6
Resident ADA Van 12'-0" X 18'-0"	1
Resident Standard 8'-6" X 18'-0"	309
Resident Standard 9'-0" X 18'-0"	23
Resident Tandem 9'-0" X 18'-0"	16
	355

Total Residential Spaces	
Type	Count
Resident	
Resident ADA 9'-0" X 18'-0"	6
Resident ADA Van 12'-0" X 18'-0"	1
Resident Standard 8'-6" X 18'-0"	309
Resident Standard 9'-0" X 18'-0"	23
Resident Tandem 9'-0" X 18'-0"	16
	355

*Total Tandem Residential stalls less than 30% of Total Residential Stalls. (355 Stalls x 30% = 106 Stalls)



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SOURCE: MVE + Partners 2023

FIGURE 10a

East and West Elevations

740-790 East Green Street Mixed-Use Project

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① North Elevation (Green St.)
1/16" = 1'-0"



② South Elevation
1/16" = 1'-0"



SOURCE: MVE + Partners 2023

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SOURCE: MVE + Partners 2023

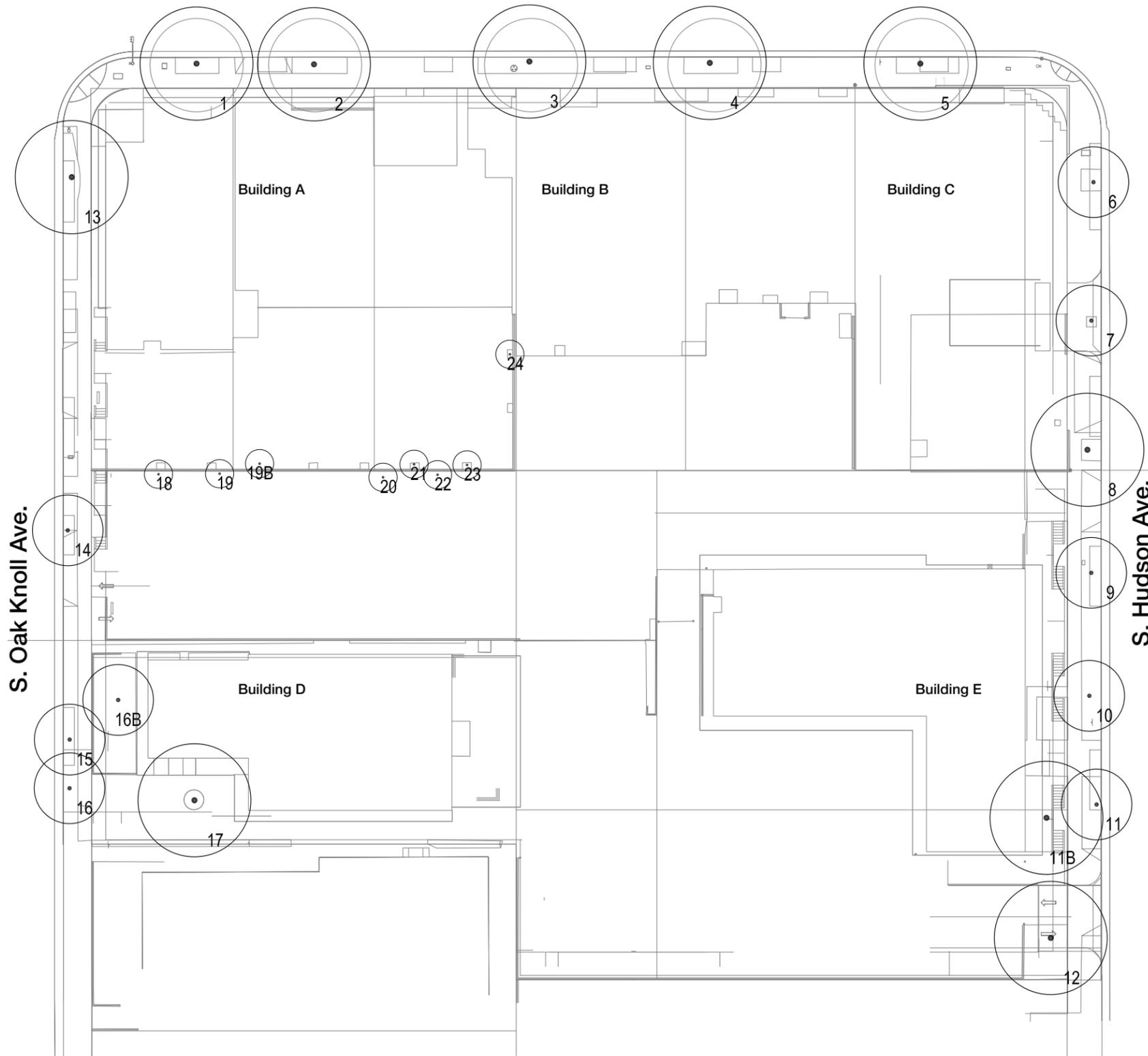
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Figure 11 — Open Space Concept

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E. Green St.



TREE INVENTORY							
TREE #	SCIENTIFIC NAME	DBH	HEIGHT	SPREAD	PROPOSED STATUS X REMOVE R REMAIN L RELOCATE	STREET / PUBLIC	FORM / HEALTH
1	FICUS MICROCARPA NITIDA CHINESE BANYON / FICUS TREE	+/- 60 IN	+/- 40 FT	+/- 40 FT	R	Y	FAIR
2	FICUS MICROCARPA NITIDA CHINESE BANYON / FICUS TREE	+/- 60 IN	+/- 40 FT	+/- 40 FT	R	Y	FAIR
3	FICUS MICROCARPA NITIDA CHINESE BANYON / FICUS TREE	+/- 60 IN	+/- 40 FT	+/- 40 FT	R	Y	FAIR
4	FICUS MICROCARPA NITIDA CHINESE BANYON / FICUS TREE	+/- 60 IN	+/- 40 FT	+/- 40 FT	R	Y	FAIR
5	FICUS MICROCARPA NITIDA CHINESE BANYON / FICUS TREE	+/- 60 IN	+/- 40 FT	+/- 40 FT	R	Y	FAIR
6	QUERCUS ILEX HOLLY OAK	+/- 13.8 IN	+/- 25 FT	+/- 28 FT	R	Y	FAIR
7	QUERCUS ILEX HOLLY OAK	+/- 11.8 IN	+/- 20 FT	+/- 20 FT	X	Y	POOR
8	QUERCUS ILEX HOLLY OAK	+/- 21.7 IN	+/- 32 FT	+/- 45 FT	R	Y	GOOD
9	QUERCUS ILEX HOLLY OAK	+/- 15.2 IN	+/- 25 FT	+/- 23 FT	R	Y	FAIR, PRUNED
10	QUERCUS ILEX HOLLY OAK	+/- 15 IN	+/- 25 FT	+/- 28 FT	X	Y	POOR
11	QUERCUS ILEX HOLLY OAK	+/- 11.2 IN	+/- 25 FT	+/- 20 FT	R	Y	INTERFERE WITH FICUS, 11B
11B	FICUS MICROCARPA INDIAN LAUREL FIG	+/- 23 IN	+/- 35 FT	+/- 40 FT	X	N	FAIR
12	FICUS MICROCARPA INDIAN LAUREL FIG	+/- 27 IN	+/- 40 FT	+/- 45 FT	X	N	FAIR
13	CINNAMOMUM CAMPHORA CAMPHOR	+/- 20 IN	+/- 32 FT	+/- 35 FT	X	Y	POOR
14	CINNAMOMUM CAMPHORA CAMPHOR	+/- 23 IN	+/- 25 FT	+/- 30 FT	X	Y	POOR
15	BRACHYCHITON POPULNEUS KURRAJONG BOTTLETREE	+/- 17.2 IN	+/- 25 FT	+/- 25 FT	R	Y	GOOD
16	BRACHYCHITON POPULNEUS KURRAJONG BOTTLETREE	+/- 10 IN	+/- 25 FT	+/- 25 FT	R	Y	GOOD
16B	CUPANIOPSIS ANACARDIODES CARROTWOOD	+/- 8.4 IN	+/- 25 FT	+/- 23 FT	X	N	FAIR
17	ULMUS PARVIFOLIA EVERGREEN ELM	+/- 20 IN	+/- 40 FT	+/- 50 FT	X	N	FAIR
18	CALLISTEMON CITRINUS LEMON BOTTLEBRUSH	+/- 8 IN	+/- 13 FT	+/- 10 FT	X	N	POOR
19	CALLISTEMON CITRINUS LEMON BOTTLEBRUSH	+/- 18.4 IN	+/- 18 FT	+/- 16 FT	X	N	FAIR / GOOD
19B	WASHINGTONIA ROBUSTA MEXICAN FAN PALM	+/- 19 IN	+/- 35 FT	+/- 9 FT	X	N	GOOD
20	CALLISTEMON CITRINUS LEMON BOTTLEBRUSH	+/- 8 IN	+/- 16 FT	+/- 15 FT	X	N	INCLINED
21	CALLISTEMON CITRINUS LEMON BOTTLEBRUSH	+/- 7 IN	+/- 16 FT	+/- 16 FT	X	N	POOR / THIN
22	CALLISTEMON CITRINUS LEMON BOTTLEBRUSH	+/- 11.7 IN	+/- 16 FT	+/- 15 FT	X	N	GOOD
23	CALLISTEMON CITRINUS LEMON BOTTLEBRUSH	+/- 8.5 IN	+/- 13 FT	+/- 15 FT	X	N	FAIR
24	CALLISTEMON CITRINUS LEMON BOTTLEBRUSH	+/- 9.5 IN	+/- 15 FT	+/- 15 FT	X	N	GOOD

SOURCE: MVE + Partners 2019

FIGURE 12

Tree Inventory

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