ATTACHMENT K TECHNICAL MEMORANDUM – TRAFFIC NOISE ANALYSIS



Analyzed Roadway Segments

technical memorandum

| date | July 10, 2019 |
|---------|---|
| to | Talyn Mirzakhanian, Zoning Administrator, City of Pasadena |
| from | Alan Sako, Senior Managing Associate, ESA |
| subject | 253 S. Los Robles Project: Traffic Noise Analysis with Additional Analyzed Roadway Segme and Supplemental General Plan Noise Element and Land Use Element Consistency Analysis |

Introduction

Environmental Science Associates (ESA) has prepared this technical memorandum to provide additional information in response to the appeal of the Board of Zoning Appeals Decision for the Multi-Family 253 S Los Robles Project. This technical memorandum expands upon the operational traffic noise analysis for the Project for additional roadway segments in the Project vicinity for the following scenarios: Existing; Existing plus Project; and Existing plus Project plus Related Projects. This expanded analysis incorporates traffic data supplied from the City's Department of Transportation. This technical memorandum also provides an expanded analysis of the Project's conformance with applicable and relevant goals, policies, objectives, and standards of the City's General Plan Noise Element and Land Use Element.

Traffic Noise Analysis with Additional Analyzed Roadway Segments

In response to the appeal of the Board of Zoning Appeals Decision, traffic noise levels have been evaluated for additional roadway segments that would be traveled upon by Project-related vehicles. These roadway segments include portions of Los Robles Avenue (from Colorado Boulevard to south of California Boulevard), Del Mar Boulevard (east and west of Los Robles Avenue), and California Boulevard (east and west of Los Robles Avenue).

Roadway noise impacts were evaluated based on the Federal Highway Administration (FHWA) Traffic Noise Model (TNM) method as described in the FHWA Traffic Noise Model Technical Manual¹ and based on traffic data for these roadway segments provided by the City's Transportation Department. The traffic data for the "Additional Analyzed Roadway Segments" are based on year 2018 traffic volumes. Roadway noise attributable to Project development was calculated and compared to baseline noise levels that would occur under the "Existing" condition (i.e., the "Without Project" condition), which accounts for the existing conditions in the Project Site area.

¹ Federal Highway Administration, Traffic Noise Model, https://www.fhwa.dot.gov/environment/noise/traffic noise model/. Accessed July 2019.

The increase in traffic noise levels from the Project are shown in **Table 1**, *Estimated Project Operational Traffic Noise Levels*. As indicated, operation of the Project would not result in a substantial increase in Project-related traffic noise levels over existing traffic noise levels. The increase in noise level would be 0.1 dBA CNEL, which would be less than the significance threshold of a 5 dBA CNEL increase or the most stringent significance threshold of a 3 dBA CNEL increase to or within the "normally unacceptable" community noise and land use noise compatibility category.² A noise level increase of 0.1 dBA is not perceptible by human hearing. In a controlled laboratory environment, a change in sound level of 1 dBA is "barely perceptible." In a non-controlled environment, such as in a typical suburban or urban environment, a change in sound level of 3 dBA is "just perceptible," a change in sound level of 5 dBA is "clearly noticeable," and a change in 10 dBA is perceived as a doubling of sound volume.³ Therefore, as Project-related traffic would result in a maximum noise level increase of 0.1 dBA, which would not be a perceptible change, Project-related traffic noise would be less than significant.

| De la companya | | Calculate | Calculated Traffic Noise Levels at 1 Roadway ^a (dBA CNEL) | | | | |
|-----------------|--|-----------------|--|---------------------------------|----------------------|--|--|
| Roadway Segment | | Existing (A) | Existing + Project (B) | Project Increment (B - A) | Exceed Threshold? | | |
| Cordova St | Between Marengo Ave & Euclid Ave | 61.2 | 61.2 | 0.0 | No | | |
| Cordova St | Between Euclid Ave & Los Robles Ave | 61.5 | 61.6 | 0.1 | No | | |
| Cordova St | Between Los Robles Ave & Oakland Ave | 62.1 | 62.2 | 0.1 | No | | |
| Marengo Ave | Between Del Mar Blvd & California Blvd | 62.9 | 62.9 | 0.0 | No | | |
| Los Robles Ave | Between Del Mar Blvd & California Blvd | 61.9 | 61.9 | 0.0 | No | | |
| | Additional Analyzed Road | way Segments | S | | | | |
| Los Robles Ave | Between Colorado Blvd & Green St | 62.8 | 62.8 | 0.0 | No | | |
| Los Robles Ave | Between Green St & Cordova St | 61.7 | 61.8 | 0.1 | No | | |
| Los Robles Ave | Between Cordova St & Del Mar Blvd | 62.2 | 62.3 | 0.1 | No | | |
| Los Robles Ave | South of California Blvd | 60.9 | 60.9 | 0.0 | No | | |
| Del Mar Blvd | West of Los Robles Ave | 63.1 | 63.1 | 0.0 | No | | |
| Del Mar Blvd | East of Los Robles Ave | 62.8 | 62.8 | 0.0 | No | | |
| California Blvd | West of Los Robles Ave | 63.7 | 63.7 | 0.0 | No | | |
| California Blvd | East of Los Robles Ave | 63.5 | 63.5 | 0.0 | No | | |

TABLE 1 ESTIMATED PROJECT OPERATIONAL TRAFFIC NOISE LEVELS

NOTES:

^a The noise levels are modeled at 100 feet from the centerline of these roadway segments consistent with the same distance used for the roadway noise calculations provided in the City's General Plan Noise Element. Traffic Noise calculations are provided in Exhibit A of this Technical Memorandum.

SOURCE: ESA 2019.

² Refer to Table 5.9-3 of the City's General Plan EIR (2015) for a discussion of the Community Noise and Land Use Compatibility categories.

³ Engineering Noise Control, Bies & Hansen, 1988.

Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to operation of the Project and cumulative projects,⁴ as traffic is the greatest source of operational noise in the Project area. The trip generation from the Project is not anticipated to result in a measurable or an audible noise increase. As shown in **Table 2**, *Estimated Cumulative Operational Traffic Noise Levels*, when considering cumulative related projects, the Project plus related projects would generate an increase in roadway noise levels much less than 1 dBA. As shown, the maximum noise level increase or the most stringent significance threshold of a 5 dBA CNEL increase or the most stringent significance threshold of a 3 dBA CNEL increase to or within the "normally unacceptable" community noise and land use noise compatibility category.⁵ Therefore, as Project-related traffic, when added to cumulative related projects, would result in a maximum noise level increase of 0.2 dBA, which would not be a perceptible change, cumulative Project-related traffic noise would be less than significant.

| | | Calculated 100 fe | | | |
|-----------------|--|----------------------|---|---------------------------------|----------------------|
| Roadway Segment | | Existing (A) | Existing + Project + Related Projects (B) | Project Increment (B - A) | Exceed Threshold? |
| Cordova St | Between Marengo Ave & Euclid Ave | 61.2 | 61.4 | 0.2 | No |
| Cordova St | Between Euclid Ave & Los Robles Ave | 61.5 | 61.7 | 0.2 | No |
| Cordova St | Between Los Robles Ave & Oakland Ave | 62.1 | 62.3 | 0.2 | No |
| Marengo Ave | Between Del Mar Blvd & California Blvd | 62.9 | 63.0 | 0.1 | No |
| Los Robles Ave | Between Del Mar Blvd & California Blvd | 61.9 | 62.0 | 0.1 | No |
| | Additional Analyzed Road | way Segments | 5 | | |
| Los Robles Ave | Between Colorado Blvd & Green St | 62.8 | 62.8 | 0.0 | No |
| Los Robles Ave | Between Green St & Cordova St | 61.7 | 61.8 | 0.1 | No |
| Los Robles Ave | Between Cordova St & Del Mar Blvd | 62.2 | 62.3 | 0.1 | No |
| Los Robles Ave | South of California Blvd | 60.9 | 60.9 | 0.0 | No |
| Del Mar Blvd | West of Los Robles Ave | 63.1 | 63.2 | 0.1 | No |
| Del Mar Blvd | East of Los Robles Ave | 62.8 | 62.8 | 0.0 | No |
| California Blvd | West of Los Robles Ave | 63.7 | 63.7 | 0.0 | No |
| California Blvd | East of Los Robles Ave | 63.5 | 63.5 | 0.0 | No |

 TABLE 2

 ESTIMATED CUMULATIVE OPERATIONAL TRAFFIC NOISE LEVELS

NOTES:

^a The noise levels are modeled at 100 feet from the centerline of these roadway segments consistent with the same distance used for the roadway noise calculations provided in the City's General Plan Noise Element. Traffic Noise calculations are provided in Exhibit A of this Technical Memorandum.

SOURCE: ESA 2019.

⁴ The cumulative projects include the 245 South Los Robles Avenue project and the 399 East Del Mar Boulevard project, which were considered in the Noise Technical Study prepared for the project (ESA, 253 South Los Robles Avenue Multi-Family Project, Noise Technical Study, 2018).

⁵ Refer to Figure 1 in the City General Plan Noise Element (2002), and also Table 5.9-3 of the City's General Plan EIR (2015) for a discussion of the Community Noise and Land Use Compatibility categories.

General Plan Noise Element

The City of Pasadena Noise Element of the General Plan is primarily used by the Planning and Community Development Department as a guideline for siting noise sensitive land uses in the vicinity of preemptive noise sources unless adequate noise abatement is incorporated into the encroaching development. The Noise Element contains a noise compatibility matrix that shows acceptable and unacceptable ranges of noise for various land uses.⁶ The CNEL guidelines for specific land uses are classified into four categories: (1) "clearly acceptable," (2) "normally acceptable," (3) "conditionally acceptable," and (4) "normally unacceptable." As shown in Noise Element, a CNEL value of 70 dBA is the upper limits of what is considered a "normally acceptable" noise environment for residential uses. CNEL values of 75 dBA and 80 dBA are the upper limits of what is considered a "conditionally acceptable" noise environment for residential uses. As shown in Table 1 and Table 2 above, the Project and Cumulative Plus Project traffic noise levels fall within the "normally acceptable" noise environment and below the limits of what is considered a "conditionally acceptable" noise environment for residential uses.

The City's Noise Element also include objectives and policies for community noise levels. The following is a list of the objectives and policies found in the adopted Noise Element that are relevant and applicable to the Project:

Objective 2. The City will work to reduce the effects of traffic-generated noise from major roadways on residential and other sensitive land uses.

Policy 2a. The City will encourage noise-compatible land uses along major roadways.

Policy 2b. The City will encourage site planning and traffic control measures that minimize the effects of traffic noise in residential zones.

Policy 2c. The City will encourage the use of alternative transportation modes as stipulated in the Mobility Element (walking, bicycling, transit use, electric vehicles) to minimize traffic noise in the City.

Objective 7. The City will minimize the effects of nuisance noise on sensitive land uses as defined in Figure 1 [of the Noise Element] to the degree feasible.

Policy 7b. The City will encourage limitations on construction activities adjacent to sensitive noise receptors as defined in Figure 1 [of the Noise Element].

Policy 7c. The City will encourage construction and landscaping activities that employ techniques to minimize noise.

Policy 7d. The City will enforce noise level restrictions contained in the City of Pasadena Noise Regulations (Chapter 9.36 of the Municipal Code), except during federal, State, or local emergencies (such as power generators required for energy emergencies).

The Project would not conflict with these General Plan Noise Element objectives and policies for the reasons described below:

• The Project is a multi-family residential use. The current zoning designation on the Project Site is CD-2 (Central District, Civic Center/Mid-town sub-district) and multi-family housing is a permitted use pursuant to Section 17.30.030 of the City's Zoning Code. The Project is requesting a density bonus to provide affordable

⁶ Refer to Figure 1 in the City General Plan Noise Element (2002), and also Table 5.9-3 of the City's General Plan EIR (2015) for a discussion of the Community Noise and Land Use Compatibility categories.

housing, which is allowed by State law. Furthermore, as shown in Table 1 and Table 2 above, the Project and Cumulative Plus Project traffic noise levels, which is the dominant noise source in the area, fall within the "normally acceptable" noise environment and below the limits of what is considered a "conditionally acceptable" noise environment for residential uses. In addition, the Project would result in less than significant Project-level and cumulative noise impacts, inclusive of traffic noise. Therefore, the Project does not conflict with noise-compatible land uses on major roadways.

- The Project would provide residential uses in Pasadena's Central District, which serves as the symbolic and governmental center of the City. Within the Central District, the City's General Plan encourages the presence of civic, cultural and public service institutions, while augmenting the character of the area with a supportive mixture of uses. The Project would support the goals of the General Plan for the Central District by increasing the mixture of uses in the area with residential development, including affordable housing units, that would enable future residents live near places of employment and to walk to nearby public transit and to the civic, business, financial, retail, entertainment, and cultural amenities of Pasadena's Central District. The Project's location would encourage non-automotive modes of transportation. In addition, the City of Pasadena Department of Transportation prepared a Transportation Impact Analysis for the Project and determined the Project would have a less than significant impact on traffic and the City's transportation system. In addition, the Project would result in less than significant Project-level and cumulative noise impacts, inclusive of traffic noise. Therefore, the Project does not conflict with site planning and traffic control measures that minimize the effects of traffic noise in residential zones.
- The Project Site is located near high-quality and frequent public transportation options including bus stops approximately 50 feet east of the Project Site at the intersection of South Los Robles Ave/Cordova Street, 220 feet northeast of the Project Site along Cordova Street, and 310 feet north of the Project Site along South Los Robles Ave, and the Metro Gold Line Del Mar Station is located approximately 0.35 miles aerial distance (or approximately 0.6 miles walking distance) west of the Project Site. In particular, the Metro Gold Line Del Mar Station provides access to destinations in the Greater Los Angeles area including east Pasadena, downtown Los Angeles and Little Tokyo, and direct connections to the Metro Red Line and Purple Line from Union Station, and secondary connections to the Metro Blue Line and Expo Line from the 7th Street Metro Center (via the Red Line and Purple Line). Therefore, the Project encourage the use of alternative transportation modes as stipulated in the Mobility Element.
- The Project will incorporate industry best practices to minimize noise and vibration impacts, which are incorporated into the Project as Project Design Feature (PDF)-NOISE-1, which includes a list of practices for minimizing construction noise. Therefore, the Project would incorporate measures and techniques that limit construction activities and minimize noise.
- The Project would remove an existing Canary Pine tree from the Project Site. While landscaping may help to reduce community noise levels, the removal of a tree has little to no effect on noise transference in the community. The noise reduction from a tree is extremely limited to situations where a person is located directly behind a tree, relative to the noise source, blocking the line-of-sight to the noise source. However, a tree would not block the line-of-sight to an entire roadway segment or community. Therefore, the removal of a tree would have little to no effect on community noise levels. Additionally, the Project would comply with the City's Tree Protection Ordinance for replacement trees on the Project Site. Furthermore, the Project will incorporate industry best practices to minimize noise and vibration impacts, which are incorporated into the Project as PDF-NOISE-1, which includes a list of practices for minimizing construction noise. Therefore, the Project would not conflict with construction and landscaping activities that employ techniques to minimize noise.
- Project construction related activity would occur during the hours of 7:00 a.m. to 7:00 p.m. in compliance with the City's Noise Ordinance (Section 9.36.070). In addition, construction noise generated by the Project

would not exceed 85 dBA when measured within a radius of 100 feet from such equipment in compliance with the City's Noise Ordinance (Section 9.36.080). The Project would incorporate PDF-NOISE-2 to minimize and control stationary equipment noise in compliance with City's Noise Ordinance (Section 9.36.090). Therefore, the Project will comply with applicable provisions of the City Noise Ordinance.

General Plan Land Use Element

The City's Land Use Element of the General Plan includes the following list of goals and policies that are relevant and applicable to the Project:

GOAL 1. Sustainable Growth. Sustainable growth and change in orderly and well-planned developments within targeted areas that allow for higher density development in an urban core setting and in close proximity to transit that provides for the needs of existing and future residents and businesses, ensures the effective provision of public services, and makes efficient use of land, energy, and infrastructure.

1.1 Basic Growth Policy. Accommodate growth that is consistent with community values and that complements the scale and character of Pasadena's unique residential neighborhoods, business districts, and open spaces.

1.2 Targeted Growth. Target growth and new construction in infill areas and away from Pasadena's residential neighborhoods and open spaces by redeveloping underutilized commercial and industrial properties, especially within the Central District, Transit Villages, Neighborhood Villages, and along selected corridors.

1.7 Coordination of Capital Facilities, Infrastructure, Land Use, and Economic Development. Development of capital facilities and infrastructure shall be closely coordinated with growth to ensure high levels of service to existing and new development. Targeted growth areas shall have highest priority for capital improvements that induce and support development.

GOAL 3. Compatible Land Uses. A mix and distribution of land uses characterized by their compatibility.

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.

GOAL 4. Elements Contributing to Urban Form. A safe, well-designed, accessible City with a diversity of uses and forms. These diverse forms include distinct, walkable districts, corridors, and transit and neighborhood villages and cohesive, unique single and multi-family residential neighborhoods and open spaces where people of all ages can live, work, shop and recreate.

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.

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.

GOAL 6. Character and Scale of Pasadena. A built environment that evolves while maintaining Pasadena's unique sense of place, character, and the urban fabric.

6.2 Established Neighborhoods. Preserve, protect, and enhance established residential neighborhoods by providing appropriate transitions between these and adjoining areas. Require new development to complement and respond to the existing physical characteristics that contribute to the overall character and livability of the neighborhood.

GOAL 8. Historic Preservation. Preservation and enhancement of Pasadena's cultural and historic buildings, landscapes, streets and districts as valued assets and important representations of its past and a source of community identity, and social, ecological, and economic vitality.

8.1 Identify and Protect Historic Resources. Identify and protect historic resources that represent significant examples of the City's history.

GOAL 18. Land Use/Transportation Relationship. Pasadena will be a City where there are effective and convenient alternatives to using cars and the relationship of land use and transportation is acknowledged through transit-oriented development, multimodal design features, and pedestrian and bicycle amenities in coordination with and accordance with the Mobility Element.

18.5 Land Use-Mobility Compatibility. Manage vehicle traffic volumes and speeds to improve their compatibility with the character of the adjacent land uses, the function of the street(s), and bicycle and pedestrian traffic.

The Project would not conflict with these General Plan Land Use Element goals and policies for the reasons described below:

- The Project is a multi-family residential use. The current zoning designation on the Project Site is CD-2 (Central District, Civic Center/Mid-town sub-district) and multi-family housing is a permitted use pursuant to Section 17.30.030 of the City's Zoning Code. The Project is requesting a density bonus to provide affordable housing, which is allowed by State law. The Project transitions from taller buildings to the north at the intersection of Cordova Street and Los Robles Avenue and other multi-family buildings to the south. The Project would support the goals of the General Plan for the Central District by increasing the mixture of uses in the area with residential development, including affordable housing units, that would enable future residents live near places of employment and to walk to nearby public transit and to the civic, business, financial, retail, entertainment, and cultural amenities of Pasadena's Central District. The Project's location would encourage non-automotive modes of transportation. Therefore, the Project would not conflict with the City's basic growth policy
- The Project is located in the Central District and is currently developed with an office building. The Project Site is surrounded by existing urban uses including multi-family uses and offices. As such, the Project is located in an existing infill location within an urban area. The existing office building on the Project is vacant; therefore, the Project site is underutilized. Therefore, the Project would redevelop an underutilized commercial property in an urban infill location with in the Central District and would not conflict with the City's targeted growth policy.
- The Project would be located in an infill urban area served by existing public utilities and services. The City of Pasadena Department of Water and Power provides electricity and water, and the City of Pasadena Department of Public Works provides solid waste collection and sewer services. Southern California Gas Company provides natural gas services to the City of Pasadena and would serve the Project. High-quality and frequent public transportation options in the Project area include bus stops approximately 50 feet east of the Project Site at the intersection of South Los Robles Ave/Cordova Street, 220 feet northeast of the Project Site along Cordova Street, and 310 feet north of the Project Site along South Los Robles Ave, and the Metro Gold Line Del Mar Station is located approximately 0.35 miles aerial distance (or approximately 0.6 miles

walking distance) west of the Project Site. In particular, the Metro Gold Line Del Mar Station provides access to destinations in the Greater Los Angeles area including east Pasadena, downtown Los Angeles and Little Tokyo, and direct connections to the Metro Red Line and Purple Line from Union Station, and secondary connections to the Metro Blue Line and Expo Line from the 7th Street Metro Center (via the Red Line and Purple Line). In addition, the City of Pasadena Department of Transportation prepared a Transportation Impact Analysis for the Project and determined the Project would have a less than significant impact on traffic and the City's transportation system. The Project would also support the goals of the General Plan for the Central District by increasing the mixture of uses in the area with residential development, including affordable housing units, that would enable future residents live near places of employment and to walk to nearby public transit and to the civic, business, financial, retail, entertainment, and cultural amenities of Pasadena's Central District. Given the infill location of the Project Site near businesses stimulating the local economy. Thus, the Project would not conflict with the City's policy for the coordination of capital facilities, infrastructure, land use, and economic development.

- The Project is a multi-family residential use, where the current zoning designation of CD-2 (Central District, Civic Center/Mid-town sub-district) permits multi-family housing pursuant to Section 17.30.030 of the City's Zoning Code. The Project is requesting a density bonus to provide affordable housing, which is allowed by State law. The Project transitions from taller buildings to the north at the intersection of Cordova Street and Los Robles Avenue and other multi-family buildings to the south. As discussed previously, the Project's location would encourage non-automotive modes of transportation. In addition, the City of Pasadena Department of Transportation prepared a Transportation Impact Analysis for the Project and determined the Project would have a less than significant impact on traffic and the City's transportation system. In addition, the Project would result in less than significant Project-level and cumulative impacts for noise (inclusive of traffic noise), air quality, and cultural resource impacts. Therefore, the Project does not conflict with the City's policy for high-impact uses.
- As discussed previously, the Project transitions from taller buildings to the north at the intersection of Cordova Street and Los Robles Avenue and other multi-family buildings to the south. The Project would be oriented towards Los Robles Avenue with a landscaped courtyard with trees provided on the southeastern portion of the Project Site along Los Robles Avenue. The Project would remove an existing Canary Pine tree from the Project Site; however, the Project would comply with the City's Tree Protection Ordinance for replacement trees on the Project Site. Perimeter landscaping along Los Robles would also be provided to buffer the Project building from the pedestrian sidewalk. Parking would be provided in a subterranean parking garage eliminating poor aesthetics often associated with parking structures that have parked cars visible from the street level. Furthermore, the City of Pasadena Department of Transportation prepared a Transportation Impact Analysis for the Project and determined the Project would have a less than significant impact on traffic and the City's transportation system. As discussed previously, the Project would result in less than significant Project-level and cumulative impacts for noise (inclusive of traffic noise). Therefore, the Project does not conflict with the City's policy for compatible development.
- The Project Site is located within the Central District Specific Plan area, which operates as the city's urban core and encourages urban villages, work-live spaces, in-town housing, and cultural and entertainment opportunities. The Central District Specific Plan area encompasses 960 acres corresponding to the areas recognized by Pasadena residents as "Downtown." With respect to building heights and bulk, the Project transitions from taller buildings to the north at the intersection of Cordova Street and Los Robles Avenue and other multi-family buildings to the south. The developer is requesting a height of 80'-0", exceeding the provisions of height averaging; however, this is allowed by State law because the Project includes affordable housing units. Nonetheless, the Project building height is within the scale found in the immediate vicinity at the intersection of Cordova and Los Robles and generally within the Central District, and appropriately

transitions to lower height buildings to the south. Therefore, the Project does not conflict with the City's policy for transitions in scale.

- As discussed above, the Project transitions from taller buildings to the north at the intersection of Cordova Street and Los Robles Avenue and other multi-family buildings to the south. While the developer is requesting a height of 80'-0", exceeding the provisions of height averaging, this is allowed by State law because the Project includes affordable housing units. Nonetheless, the Project building height is within the scale found in the immediate vicinity at the intersection of Cordova and Los Robles and generally within the Central District, and appropriately transitions to lower height buildings to the south. The nearest single-family residential neighborhood is approximately 0.4 miles (2,100 feet) to the south of the Project Site. Therefore, the Project does not conflict with the City's policy for established neighborhoods.
- The Project would not result in a substantial adverse change in the significance of a historic resource. ESA prepared a Historical Resources Assessment in July 2019 to provide additional information that supports the finding that the Project would result in a less than significant impact on historical resources. As detailed in the Historical Resources Assessment, the commercial building situated on the subject property was evaluated under the following historical and architectural themes: Corporate Modernism: Late Modernism (1969-1990). Based on the analysis presented in the Assessment including the subject property's historical association, architectural style, and property type, ESA concluded that the subject property is not individually significant under the applicable federal, state, and local criteria nor is it eligible as a contributor to a potential historic district. Therefore, the property is not considered a historical resource pursuant to the California Environmental Quality Act (CEQA). The Assessment also supports the finding that the commercial building currently located at 253 South Los Robles does not have sufficient architectural merit, historical significance, or integrity to qualify as a historical resource under CEOA. It does not meet the eligibility criteria for listing in the National Register of Historic Places (National Register), California Register of Historical Resources (California Register), or any of Pasadena's criteria for designation of historic resources. Therefore, since the subject building is ineligible as a historical resource, the Project would have no direct impact to historical resources on the Project Site. In addition, the Project Site is not located in a historic district and the Project would have no impact on a historic district. Furthermore, the Project would not alter any historical resources or materially impair the eligibility of any historical resources in the surrounding vicinity. Redevelopment of the Project Site and surrounding parcels in the 1970s-1980s removed the earlier low-scale residential improvements formerly located there and constructed the existing large-scale commercial and multi-family improvements and associated parking lot. The scale and massing of the proposed Project is compatible with the current built environment and would not substantially change the overall character of the existing setting. The proposed Project would not materially impair the eligibility of any historical resources in the project vicinity, and thus would have no adverse impact on historical resources.
- The Project would be located in an infill urban area served by high-quality and frequent public transportation options in the Project area include bus stops approximately 50 feet east of the Project Site at the intersection of South Los Robles Ave/Cordova Street, 220 feet northeast of the Project Site along Cordova Street, and 310 feet north of the Project Site along South Los Robles Ave, and the Metro Gold Line Del Mar Station is located approximately 0.35 miles aerial distance (or approximately 0.6 miles walking distance) west of the Project Site. In particular, the Metro Gold Line Del Mar Station provides access to destinations in the Greater Los Angeles area including east Pasadena, downtown Los Angeles and Little Tokyo, and direct connections to the Metro Red Line and Purple Line from Union Station, and secondary connections to the Metro Blue Line and Expo Line from the 7th Street Metro Center (via the Red Line and Purple Line). In addition, the City of Pasadena Department of Transportation prepared a Transportation Impact Analysis for the Project and determined the Project would also support the goals of the General Plan for the Central District by increasing the mixture of uses in the area with residential development, including affordable housing units, that would enable future residents live near places of employment and to walk to nearby public transit and to the civic,

business, financial, retail, entertainment, and cultural amenities of Pasadena's Central District. The Project would also provide perimeter landscaping along Los Robles, which would buffer the Project building from the pedestrian sidewalk. Thus, the Project would not conflict with the City's policy for land use mobility compatibility.

Exhibit A Traffic Noise Calculations



TRAFFIC NOISE ANALYSIS TOOL

Project Name: 253 Los Robles

Project Number:

Analysis Scenario: Existing - Additional Roadway Segments Analyzed

Source of Traffic Volumes:

| Roadway Segment | Ground | Distance from Roadway to | Speed (mph) | | Peak | k Hour Volume | | Peak Hour Noise Level | Noise Level | |
|---|--------|-----------------------------|-------------|----|------|---------------|----|--------------------------|--------------|----------|
| | Туре | Receiver (feet) | Auto | MT | HT | Auto | MT | HT | (Leq(h) dBA) | dBA CNEL |
| Cordova St between Marengo Ave & Euclid Ave | Hard | 100 | 35 | 35 | 35 | 777 | 16 | 8 | 60.9 | 61.2 |
| Cordova St between Euclid Ave & Los Robles Ave | Hard | 100 | 35 | 35 | 35 | 843 | 17 | 9 | 61.2 | 61.5 |
| Cordova St between Los Robles Ave & Oakland Ave | Hard | 100 | 35 | 35 | 35 | 964 | 20 | 10 | 61.8 | 62.1 |
| Marengo Ave between Del Mar Blvd & California Blvd | Hard | 100 | 35 | 35 | 35 | 1155 | 24 | 12 | 62.6 | 62.9 |
| Los Robles Ave between Del Mar Blvd & California Blvd | Hard | 100 | 35 | 35 | 35 | 914 | 19 | 9 | 61.6 | 61.9 |
| dditional Analyzed Roadway Segments: | | | | | | | | | | |
| Los Robles Ave between Colorado Blvd & Greet St | Hard | 100 | 35 | 35 | 35 | 1501 | 0 | 0 | 62.5 | 62.8 |
| Los Robles Ave between Greet St & Cordova St | Hard | 100 | 35 | 35 | 35 | 1178 | 0 | 0 | 61.4 | 61.7 |
| Los Robles Ave between Cordova St & Del Mar Blvd | Hard | 100 | 35 | 35 | 35 | 1324 | 0 | 0 | 61.9 | 62.2 |
| Los Robles Ave south of California Blvd | Hard | 100 | 35 | 35 | 35 | 973 | 0 | 0 | 60.6 | 60.9 |
| Del Mar Blvd west of Los Robles Avenue | Hard | 100 | 35 | 35 | 35 | 1615 | 0 | 0 | 62.8 | 63.1 |
| Del Mar Blvd east of Los Robles Avenue | Hard | 100 | 35 | 35 | 35 | 1502 | 0 | 0 | 62.5 | 62.8 |
| California Blvd west of Los Robles Avenue | Hard | 100 | 35 | 35 | 35 | 1838 | 0 | 0 | 63.4 | 63.7 |
| California Blvd east of Los Robles Avenue | Hard | 100 | 35 | 35 | 35 | 1777 | 0 | 0 | 63.2 | 63.5 |

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).

The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.

Accuracy of the calculation is within ± 0.1 dB when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance. For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.

Roadway grade is less than 1.5%.

CNEL levels were obtained based on Figure 2-19, on page 2-58 Caltran's TeNS 2013.

TRAFFIC NOISE ANALYSIS TOOL

Project Name: 253 Los Robles

Project Number:

Analysis Scenario: Existing Plus Project - Additional Roadway Segments Analyzed

Source of Traffic Volumes:

| Roadway Segment | Ground | Distance from Roadway to | Speed (mph) | | Peak | k Hour Volume | | Peak Hour Noise Level | Noise Level | |
|---|--------|-----------------------------|-------------|----|------|---------------|----|--------------------------|--------------|----------|
| | Туре | Receiver (feet) | Auto | MT | HT | Auto | MT | HT | (Leq(h) dBA) | dBA CNEL |
| Cordova St between Marengo Ave & Euclid Ave | Hard | 100 | 35 | 35 | 35 | 789 | 16 | 8 | 60.9 | 61.2 |
| Cordova St between Euclid Ave & Los Robles Ave | Hard | 100 | 35 | 35 | 35 | 855 | 18 | 9 | 61.3 | 61.6 |
| Cordova St between Los Robles Ave & Oakland Ave | Hard | 100 | 35 | 35 | 35 | 976 | 20 | 10 | 61.9 | 62.2 |
| Marengo Ave between Del Mar Blvd & California Blvd | Hard | 100 | 35 | 35 | 35 | 1161 | 24 | 12 | 62.6 | 62.9 |
| Los Robles Ave between Del Mar Blvd & California Blvd | Hard | 100 | 35 | 35 | 35 | 924 | 19 | 10 | 61.6 | 61.9 |
| ditional Analyzed Roadway Segments: | | | | | | | | | | |
| Los Robles Ave between Colorado Blvd & Greet St | Hard | 100 | 35 | 35 | 35 | 1511 | 0 | 0 | 62.5 | 62.8 |
| Los Robles Ave between Greet St & Cordova St | Hard | 100 | 35 | 35 | 35 | 1190 | 0 | 0 | 61.5 | 61.8 |
| Los Robles Ave between Cordova St & Del Mar Blvd | Hard | 100 | 35 | 35 | 35 | 1346 | 0 | 0 | 62.0 | 62.3 |
| Los Robles Ave south of California Blvd | Hard | 100 | 35 | 35 | 35 | 980 | 0 | 0 | 60.6 | 60.9 |
| Del Mar Blvd west of Los Robles Avenue | Hard | 100 | 35 | 35 | 35 | 1626 | 0 | 0 | 62.8 | 63.1 |
| Del Mar Blvd east of Los Robles Avenue | Hard | 100 | 35 | 35 | 35 | 1507 | 0 | 0 | 62.5 | 62.8 |
| California Blvd west of Los Robles Avenue | Hard | 100 | 35 | 35 | 35 | 1839 | 0 | 0 | 63.4 | 63.7 |
| California Blvd east of Los Robles Avenue | Hard | 100 | 35 | 35 | 35 | 1778 | 0 | 0 | 63.2 | 63.5 |

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).

The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.

Accuracy of the calculation is within ± 0.1 dB when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance. For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.

Roadway grade is less than 1.5%.

CNEL levels were obtained based on Figure 2-19, on page 2-58 Caltran's TeNS 2013.

TRAFFIC NOISE ANALYSIS TOOL

Project Name: 253 Los Robles

Project Number:

Analysis Scenario: Existing Plus Project Plus Related Projects - Additional Roadway Segments Analyzed Source of Traffic Volumes:

| Roadway Segment | Ground | Distance from Roadway to | Speed (mph) | | Peak | k Hour Volume | | Peak Hour Noise Level | Noise Level | |
|---|--------|-----------------------------|-------------|----|------|---------------|----|--------------------------|--------------|----------|
| | Туре | Receiver (feet) | Auto | MT | HT | Auto | MT | HT | (Leq(h) dBA) | dBA CNEL |
| Cordova St between Marengo Ave & Euclid Ave | Hard | 100 | 35 | 35 | 35 | 813 | 17 | 8 | 61.1 | 61.4 |
| Cordova St between Euclid Ave & Los Robles Ave | Hard | 100 | 35 | 35 | 35 | 879 | 18 | 9 | 61.4 | 61.7 |
| Cordova St between Los Robles Ave & Oakland Ave | Hard | 100 | 35 | 35 | 35 | 1002 | 21 | 10 | 62.0 | 62.3 |
| Marengo Ave between Del Mar Blvd & California Blvd | Hard | 100 | 35 | 35 | 35 | 1175 | 24 | 12 | 62.7 | 63.0 |
| Los Robles Ave between Del Mar Blvd & California Blvd | Hard | 100 | 35 | 35 | 35 | 944 | 19 | 10 | 61.7 | 62.0 |
| ditional Analyzed Roadway Segments: | | | | | | | | | | |
| Los Robles Ave between Colorado Blvd & Greet St | Hard | 100 | 35 | 35 | 35 | 1512 | 0 | 0 | 62.5 | 62.8 |
| Los Robles Ave between Greet St & Cordova St | Hard | 100 | 35 | 35 | 35 | 1194 | 0 | 0 | 61.5 | 61.8 |
| Los Robles Ave between Cordova St & Del Mar Blvd | Hard | 100 | 35 | 35 | 35 | 1352 | 0 | 0 | 62.0 | 62.3 |
| Los Robles Ave south of California Blvd | Hard | 100 | 35 | 35 | 35 | 981 | 0 | 0 | 60.6 | 60.9 |
| Del Mar Blvd west of Los Robles Avenue | Hard | 100 | 35 | 35 | 35 | 1638 | 0 | 0 | 62.9 | 63.2 |
| Del Mar Blvd east of Los Robles Avenue | Hard | 100 | 35 | 35 | 35 | 1509 | 0 | 0 | 62.5 | 62.8 |
| California Blvd west of Los Robles Avenue | Hard | 100 | 35 | 35 | 35 | 1840 | 0 | 0 | 63.4 | 63.7 |
| California Blvd east of Los Robles Avenue | Hard | 100 | 35 | 35 | 35 | 1779 | 0 | 0 | 63.2 | 63.5 |

Model Notes:

The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).

The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.

Accuracy of the calculation is within ± 0.1 dB when comparing to TNM results.

Noise propagation greater than 50 feet is based on the following assumptions:

For hard ground, the propagation rate is 3 dB per doubling the distance. For soft ground, the propagation rate is 4.5 dB per doubling the distance.

Vehicles are assumed to be on a long straight roadway with cruise speed.

Roadway grade is less than 1.5%.

CNEL levels were obtained based on Figure 2-19, on page 2-58 Caltran's TeNS 2013.