PACIFIC SQUARE SAN GABRIEL MIXED-USE PROJECT

Draft Environmental Impact Report

Prepared for
City of San Gabriel
Community Development Department
425 South Mission Drive
San Gabriel, CA 91776

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ESA



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EXECUTIVE SUMMARY

This Draft Environmental Impact Report (EIR) has been prepared pursuant to the California Environmental Quality Act (CEQA) for the proposed "Pacific Square San Gabriel Mixed-Use Development Project". The City of San Gabriel (City), as the Lead Agency, has prepared this Draft EIR to inform the surrounding cities, responsible agencies and the public of the proposed Project's environmental effects. The City has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment (CEQA Guidelines Section 21067). The Draft EIR is therefore intended to disclose those impacts that may be significant and adverse, identify measures that would mitigate or eliminate such impacts, and describe a range of alternatives to the proposed Project that have the potential to avoid or substantially lessen impacts.

In accordance with CEQA Guidelines Section 15123, this chapter provides a brief description of the Project; identifies significant effects and proposed mitigation measures or alternatives that would reduce or avoid those effects; describes areas of controversy known to the Lead Agency; and presents issues to be resolved.

ES.1 Project Location

The Project Site is located at 700-800 S. San Gabriel Boulevard within the City of San Gabriel, California, 91776 in Los Angeles County. The property is located in the east/central part of the City and is bound by E. Grand Avenue on the south, S. Gladys Avenue on the east, E. El Monte Boulevard on the north, and S. San Gabriel Boulevard on the west. The northern part of the Project Site fronting E. El Monte Street is identified as the 700 Plaza, while the southern part of the Project Site fronting on E. Grand Avenue is identified as the 800 Plaza. The Project Site encompasses 49 parcels. It is located approximately 0.7 miles east of the City of San Gabriel's Mission District Core. The Project Site was previously occupied by the San Gabriel Nursery & Florist, which continues to operate just north of the Project Site as a 2-acre retail garden and florist shop. The Project Site is currently vacant with no existing structures. All previously existing greenhouses and associated structures have been removed due to an act of arson on February 14, 2018.

ES.2 Proposed Project

The applicant proposes the construction of a mixed-use development on an approximately 5.85-acre Project Site of a total of approximately 495,544 square feet of residential and commercial uses, as well as open space publicly accessible areas. The 700 Plaza would include 102 residential units, 4 live/work units, and 36,352 square feet of ground floor commercial space including restaurant, retail, commercial live-work space, and a fitness center. The 800 Plaza would include 141 residential units, 4 live/work units, and 39,694 square feet of ground floor commercial space

including restaurant, retail, café, commercial live-work space, and a market. In total, there would be 243 residential units (413,238 square feet), 8 live/work units (13,026 square feet), and 76,046 square feet of commercial uses. In between the two plazas would be a 33,543 square feet central park area (23,218 square feet central park and 10,325 square feet central plaza) with expansive landscaping and outdoor seating areas. A 24,280 square feet secondary plaza with landscaped and hardscape areas would surround the perimeter of the entire Project Site. A total of 983 vehicular parking spaces would be provided by two three-level concrete parking garages. The parking garages would include one subterranean basement level (with a maximum depth of 12 feet below grade), one level at grade (ground floor), and one level at mezzanine (with a maximum height of 21.5 feet above grade). Vehicular and pedestrian access would be provided from all sides of the Project Site.

The Project would include a traffic signal at the intersection of S. San Gabriel Boulevard and Pearl Street to direct commercial use patrons onto the Project Site. The Project would also include striping and vertical delineation at the intersection of S. San Gabriel Boulevard and E. Grand Avenue as traffic calming measures. The Project would also convert the existing two-way stop to an all-way stop control at the intersection of S. Gladys Avenue and E. Grand Avenue. Necessary supporting utility infrastructure would be developed as part of the Project.

The entire 5.85-acre Project Site is zoned Retail Commercial (C-1) and is designated General Commercial in the San Gabriel General Plan. The Project would require the following entitlements: Planned Development (PD), Zone Map Amendment to change the zoning of Project Site to PD, Development Agreement, Tentative Tract Map, Precise Plan of Design, Master Sign Program, and Certification of an EIR pursuant to CEQA.

ES.3 Public Review Process

The City prepared a Notice of Preparation (NOP) for the proposed Project to solicit input regarding the scope and content of the EIR from all interested parties; City, County, regional, and State agencies; and utility and public service providers. The NOP public comment period began on August 29, 2018, and concluded on September 28, 2018, providing a 31-day comment period. The City also convened a public scoping meeting on Wednesday, September 19, 2018 at the San Gabriel City Hall Council Chambers. Nineteen people attended the scoping meeting. The City and CEQA consultant ESA gave an approximately 15-minute presentation of the Project and the EIR/CEQA process. Following the presentation, the City gave meeting attendees an opportunity to provide verbal comments. Approximately seven people spoke during the public comment portion of the scoping meeting. A copy of the NOP is provided in Appendix A-1 of the Draft EIR. All comments received by the City are included in Appendix A-2 of the Draft EIR.

In accordance with CEQA Guidelines Sections 15087 and 15105, this Draft EIR will be circulated for a 45-day public review period. The public is invited to comment in writing on the information contained in this document. All comments received will be responded to in writing, and the comment letters, together with the responses to those comments, will be included in the Final EIR.

Comments should be sent to:

Matt Chang
Senior Planner
City of San Gabriel Planning Division

425 South Mission Drive
San Gabriel, CA 91776
mchang@sgch.org

ES.4 Areas of Controversy/Issues to be Resolved

This Draft EIR discusses environmental impacts that would occur as a result of implementing the proposed Project. This Draft EIR also includes proposed mitigation measures that have been identified to reduce or avoid significant effects that would result from the construction and operation of the proposed on-site uses. CEQA Guidelines Section 15123(b)(2) requires that areas of controversy known to the Lead Agency (City of San Gabriel) be stated in the EIR summary. The following discussion identifies issues raised by other agencies and the public during the 31-day public comment period of the NOP, as well as comments received during the public scoping meeting that was held for the proposed Project.

The following issues were raised during the commenting period of the NOP. These issues will be examined in the cited sections of this Draft EIR.

- Project-related traffic causing congestion on local roads, such as S. Gladys Avenue, as well as intersections, and possibly freeway ramps plus cumulative impacts and the potential overlap of Project's traffic with current City of San Gabriel General Plan. Traffic impacts and metrics for assessing those impacts is discussed in Section 3.14, *Transportation*, of this Draft EIR;
- Proposed change in the established General Plan and zoning designations. This issue is discussed in Section 3.9, *Land Use and Planning*, of this Draft EIR;
- Potential discovery of cultural (archaeological, paleontological, human remains, etc.) resources by grading and development of the site are discussed in Section 3.3, *Cultural Resources*, of this Draft EIR.
- Potential geology and soil-related impacts (soil contamination from previous use as a nursery that used pesticides) are addressed in Section 3.5, *Geology and Soils*, of this Draft EIR.

ES.5 Significant and Unavoidable Environmental Impacts

Based on the analysis contained in Chapter 3, *Environmental Impact Analysis*, of this Draft EIR, the Project would not result in any significant and unavoidable impacts and would not result in any cumulatively considerable impacts.

ES.6 Alternatives to Reduce Significant Impacts

CEQA Guidelines Section 15126.6(a) require an EIR to "describe the range of reasonable alternatives to the, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project but will avoid or substantially lessen any of the significant effects of the Project, and evaluate the comparative merits of the alternatives." The CEQA Guidelines emphasize that the selection of project alternatives be based primarily on the ability to reduce significant impacts relative to the proposed Project, "even if these alternatives would impede to some degree the attainment of the Project objectives, or would be more costly." The CEQA Guidelines further direct that the range of alternatives be guided by a "rule of reason," such that only those alternatives necessary to permit a reasoned choice are analyzed. Based on an analysis of these alternatives, an environmentally superior alternative is identified.

ES.6.1 Alternative 1: No Project Alternative

The No Project Alternative consists of the circumstance under which the Project would not proceed, pursuant to Section 15126.6(e)(3)(B) of the CEQA Guidelines. The No Project Alternative assumes that no new development would occur within the Project Site. As mentioned in Chapter 2, *Project Description*, of this Draft EIR, the Project Site is currently composed entirely of vacant land that formerly operated as the San Gabriel Nursery. Existing physical conditions would remain unchanged at the Project Site under the No Project Alternative, and no lot assembly would occur. The vacant site would not be redeveloped with a mixed-use project.

ES.6.2 Alternative 2: Code-Compliant Alternative

The Code-Compliant Alternative consists of the circumstance under which the multi-family residential uses that are included as part of the proposed Project would only be permitted on the second and third floors above ground floor commercial or office uses, consistent with Section 153.164 of the San Gabriel Municipal Code (SGMC). The Code-Compliant Alternative would have a maximum height of three stories or 45 feet and a maximum FAR of 1:1, as compared with the proposed Project, which would have a height of six stories (65 feet) and a FAR of 1.95:1. The Code-Compliant Alternative would develop 124,950 square feet of residential uses, including 22 one-bedroom units, 70 two-unit units, 20 three-bedroom units, and 130,050 square feet of commercial uses, including a 20,330 square feet market, a 25,233 square feet fitness center, and 84,487 square feet of restaurant, retail, or office uses in two plazas, similar to the Project (700 and 800 plazas). There would be no central park included as part of the Code-Compliant, including the pavilion. The Code-Compliant would include a minimum of 100 square feet of adjoining open space area (publicly accessible open space) for each residential unit, for a total of 11,200 square feet of open space, that would comprise either a pedestrian plaza, a community garden, or other open space area, sufficient to meet SGMC requirements. The Code-Compliant Alternative would be required to provide 1,262 vehicle parking spaces pursuant to SGMC Section 153.164. As the Code-Compliant Alternative can only have a maximum of three stories, the parking for the Code-Compliant will be provided in two subterranean levels, as compared to the one subterranean level under the proposed Project.

ES.6.3 Alternative 3: Reduced Density Alternative

The Reduced Density Alternative would reduce all residential and commercial uses on the Project Site by 50 percent. This Alternative would develop a total of 121 residential units, 4 live/work units, and 38,023 square feet of commercial uses, including restaurant uses, fitness uses, bakery uses, café uses, and market uses in two plazas, similar to the Project (700 and 800 plazas). The Reduced Density Alternative would have a maximum height of three stories or 45 feet (two stories of residential units atop the ground floor commercial uses). Under this Alternative, the central plaza would be developed, as well as additional open space areas subject to CUP approval, but the central park would not. Accordingly, the pavilion/art piece or community gathering/event space would not be developed. The central plaza would include a minimum of 100 square feet of adjoining open space area for each residential unit, for a total of 12,500 sf, sufficient to meet SGMC requirements. The Reduced Density Alternative would be required to provide 614 vehicle parking spaces pursuant to SGMC Section 153.164. One subterranean level for parking would be required for the Alternative, similar to under the proposed Project.

ES.6.4 Alternative 4: Reduced Commercial Alternative

The Reduced Commercial Alternative would develop the same amount of residential uses as under the proposed Project, but would remove the bakery and café from the Project Site. The Reduced Commercial Alternative would still develop 243 residential units, 8 live/work units, and 63,243 square feet of commercial uses in two plazas, similar to the Project (700 and 800 plazas). As there would only be a reduction in the commercial uses, the Reduced Commercial Alternative be the same height as the proposed Project. The Reduced Commercial Alternative would still develop the same central park area and plaza between the two buildings as under the proposed Project. With the removal of the bakery and café, the Alternative would be required to provide 857 vehicle parking spaces. Based on the amount of spaces required for the bakery and café pursuant to SGMC Section 153.164, the Alternative would provide 922 spaces and would therefore still require the one subterranean level of parking, similar to the proposed Project.

ES.6.5 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR, and that if the "no project" alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives.

With respect to identifying an Environmentally Superior Alternative among those analyzed in this Draft EIR, the range of feasible Alternatives includes the No Project Alternative, Code-Compliant Alternative, Reduced Density Alternative, and Reduced Commercial Alternative. A comparative summary of the environmental impacts anticipated under each Alternative to the environmental impacts associated with the Project is provided in **Table 4-4** in Chapter 4, *Alternatives*, based on the detailed evaluation of the potential impacts associated with each Alternative provided in the previous sections.

Of the alternatives analyzed in this Draft EIR, the No Project Alternative would avoid all of the proposed Project's significant environmental effects. However, the No Project Alternative would not achieve any of the proposed Project's objectives. Furthermore, as there are no significant and unavoidable impacts under the proposed Project, the Code-Compliant Alternative, the Reduced Density Alternative, and the Reduced Commercial Alternative would similarly avoid any potentially significant impacts through the implementation of mitigation measures as proposed under the Project. As discussed above, the Code-Compliant Alternative, the Reduced Density Alternative, and the Reduced Commercial Alternative, would meet all of the Project objectives, but to a lesser extent than the proposed Project, due to the various reductions in development intensity and provided uses.

In accordance with the CEQA Guidelines requirement to identify an Environmentally Superior Alternative other than the No Project Alternative, a comparative evaluation of the remaining alternatives indicates that the Reduced Density Alternative would be the Environmentally Superior Alternative. The Reduced Density Alternative would reduce environmental impacts when compared to the proposed Project and the other Alternatives. While the Code-Compliant Alternative and the Reduced Commercial Alternative would also reduce impacts, it would not be to the same extent as the Reduced Density Project Alternative. Overall, the Reduced Density Project Alternative, when compared to the Code-Compliant Alternative and the Reduced Commercial Alternative, would be the Environmentally Superior Alternative. However, the Reduced Density Alternative would not satisfy a portion of the Project Objectives and would meet other Objectives to lesser extent than the Project. The Reduced Commercial Alternative would meet the most Project Objectives compared to the other Alternatives, though still to a lesser extent than the proposed Project.

ES.7 Summary of Environmental Impacts

This section provides a summary of impacts, mitigation measures, and level of impact after implementation of mitigation measures associated with Project. The summary is provided by environmental issue area below in **Table ES-1**. The table is intended to provide an overview; narrative discussions for the issue areas that are included in the corresponding section of this EIR.

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PACIFIC SQUARE SAN GABRIEL MIXED-USE PROJECT

Impacts	Mitigation Measures	Significance after Mitigation
Aesthetics		
Impact AES-1: The proposed Project would not have a substantial adverse effect on a scenic vista. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact AES-2: The proposed Project would not substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway. (No Impact.)	No mitigation needed.	N/A
Impact AES-3: The proposed Project would not conflict with applicable zoning and other regulations governing scenic quality. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact AES-4: The proposed Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. (Less than Significant Impact.)	No mitigation needed.	N/A
Air Quality		
Impact AIR-1: The proposed Project would not conflict with implementation of the applicable AQMP. (Potentially Significant Construction Impact. Less than Significant Operational Impact.)	Mitigation Measure MM-AQ-1.	Project construction would be Less than Significant with Mitigation. Project operation would be Less than Significant.
Impact AIR-2: The proposed Project would not 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. (Potentially Significant Construction Impact. Less than Significant Operational Impact.)	Mitigation Measure MM-AQ-1.	Project construction would be Less than Significant with Mitigation. Project operation would be Less than Significant.
Impact AIR-3: The proposed Project would not expose sensitive receptors to substantial pollutant concentrations. (Potentially Significant Construction Impact. Less than Significant Operational Impact.)	Mitigation Measures MM-AQ-1 and MM-AQ-2.	Project construction would be Less than Significant with Mitigation. Project operation would be Less than Significant.
Impact AIR-4: The proposed Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. (Less than Significant Impact.)	No mitigation needed.	N/A
Cultural Resources		
Impact CUL-1: The proposed Project could cause a substantial adverse change in the significance of a historic resource pursuant to Section 15064.5. (Potentially Significant Construction Impact. No Operational Impact.)	Mitigation Measures MM-CUL-1, MM-CUL-2, MM-CUL-3, MM-CUL-4 and MM-CUL-5.	Project construction would be Less than Significant with Mitigation. Project operation would be No Impact.

Impacts	Mitigation Measures	Significance after Mitigation
Impact CUL-2: The proposed Project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. (Potentially Significant Construction Impact. Less than Significant Operational Impact.)	Mitigation Measures MM-CUL-1 through MM-CUL-5.	Project construction would be Less than Significant with Mitigation. Project operation would be No Impact.
Impact CUL-3: The proposed Project could disturb human remains, including those interred outside of formal cemeteries. (Potentially Significant Construction Impact. No Operational Impact.)	Mitigation Measure MM-CUL-6	Project construction would be Less than Significant. Project operation would be No Impact.
Energy		
Impact ENERGY-1: The proposed Project would not 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.)	No mitigation needed.	N/A
Impact ENERGY-2: The proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Less than Significant Impact.)	No mitigation needed.	N/A
Geology and Soils		
Impact GEO-1: The proposed Project would not 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 issues by the State Geologist for the area based on other substantial evidence of a known fault. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact GEO-1: The proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: ii. Strong seismic shaking. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact GEO-1: The proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: iii. Seismic-related ground failure, including liquefaction. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact GEO-1: The proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: iv. Landslides. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact GEO-2: The proposed Project would not result in substantial soil erosion or the loss of topsoil. (Less than Significant Impact.)	No mitigation needed.	N/A

Impacts	Mitigation Measures	Significance after Mitigation
Impact GEO-3: The proposed Project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, potentially resulting in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact GEO-4: The proposed Project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact GEO-5: The proposed Project would not 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 wastewater. (No Impact.)	No mitigation needed.	N/A
Impact GEO-6: The proposed Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Potentially Significant Construction Impact. No Operational Impact.)	Mitigation Measures MM-GEO-1, MM-GEO-2, MM-GEO-3, and MM-GEO-4.	Project construction would be Less than Significant with Mitigation. Project operation would be No Impact.
Greenhouse Gas Emissions		
Impact GHG-1: The proposed Project would not conflict with any applicable plan, policy, regulation, or recommendation of an agency adopted for the purpose of reducing the emissions of GHGs. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact GHG-2: The proposed Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. (Less than Significant Impact.)	No mitigation needed.	N/A
Hazards and Hazardous Materials		
Impact HAZ-1 and HAZ-2: The proposed Project could create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. (Potentially Significant Construction Impact. Less than Significant Operational Impact.)	Mitigation Measures MM-HAZ-1, MM-HAZ-2 and MM-HAZ-3.	Project construction would be Less than Significant with Mitigation. Project operation would be Less than Significant.
Impact HAZ-3: The proposed Project would not 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.)	No mitigation needed.	N/A
Impact HAZ-4: The proposed Project could 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, could create a significant hazard to the public or the environment. (Potentially Significant Impact.)	Mitigation Measures MM-HAZ-1, MM-HAZ-2 and MM-HAZ-3.	Project construction would be Less than Significant with Mitigation. Project operation would be Less than Significant.
Impact HAZ-5 and HAZ-6: The proposed Project would not be located within two miles of a public airport, public use airport, or private airstrip which would result in a safety hazard or excessive noise for people residing or working in the project area. (No Impact.)	No mitigation needed.	N/A

Impacts	Mitigation Measures	Significance after Mitigation
Impact HAZ-7: The proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact HAZ-8: The proposed Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. (Less than Significant Impact.)	No mitigation needed.	N/A
Hydrology and Water Quality		
Impact HYDRO-1: The proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact HYDRO-2: The proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed Project may impede sustainable groundwater management of the basin. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact HYDRO-3: The proposed Project would not 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 that would: i. Result in substantial erosion or siltation on- or off-site. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact HYDRO-3: The proposed Project would not 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 that would: ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact HYDRO-3: The proposed Project would not 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 that would: 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. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact HYDRO-3: The proposed Project would not 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 that would: iv. impede or redirect flood flows. (Less than Significant Impact.)	No mitigation needed.	N/A

Impacts	Mitigation Measures	Significance after Mitigation
Impact HYDRO-4: The proposed Project would not risk release of pollutants due to project inundation within flood hazard, tsunami, or seiche zones. (No Impact.)	No mitigation needed.	N/A
Impact HYDRO-5: The proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (Less than Significant Impact.)	No mitigation needed.	N/A
Land Use		
Impact LUP-1: The proposed Project would not physically divide an established community. (Less than Significant Impact.)	No mitigation needed.	N/A
Impact LUP-2: The proposed Project would not cause a significant effect 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.)	No mitigation needed.	N/A
Noise		
Impact NOI-1: The proposed Project would not generate 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. (Potentially Significant Impact.)	Mitigation Measures MM-NOI-1 and MM-NOI-2.	Project construction and operation would be Less than Significant with Mitigation.
Impact NOI-2: The proposed Project would not generate excessive groundborne vibration or groundborne noise levels. (Less than Significant Impact.)	No mitigation needed.	N/A
Population and Housing		
Impact POP-1: The proposed Project would not 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.)	No mitigation needed.	N/A
Impact POP-2: The proposed Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. (No Impact.)	No mitigation needed.	N/A
Public Services		
Impact PS-1: The proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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. (Less than Significant Impact.)	No mitigation needed.	N/A
Recreation		
Impact REC-1: The proposed Project would not 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.)	No mitigation needed.	N/A

Impacts	Mitigation Measures	Significance after Mitigation
Impact REC-2: The proposed Project would not 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.)	No mitigation needed.	N/A
Impact REC-3: The proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. (Less than Significant Impact.)	No mitigation needed.	N/A
Transportation		
Impact TRA-1: The proposed Project would conflict with a program, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. (Potentially Significant Impact.)	Mitigation Measures MM-TRA-1 and MM-TRA-2.	Project construction and operation would be Less than Significant with Mitigation.
Impact TRA-2: The proposed Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). (Less than Significant Impact.)	No mitigation needed.	N/A
Impact TRA-3: The proposed Project would not 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.)	No mitigation needed.	N/A
Impact TRA-4: The proposed Project would not result in inadequate emergency access. (Potentially Significant Construction Impact. Less than Significant Operational Impact.)	Mitigation Measure MM-TRA-1.	Project construction would be Less than Significant with Mitigation.
Tribal Cultural Resources		
Impact TCR-1: The proposed Project would not result in 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)? (Potentially Significant Impact.) 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 Section 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe? (Potentially Significant Impact.)	Mitigation Measures MM-CUL-1 through MM-CUL-5	Less than Significant with Mitigation.

Impacts	Mitigation Measures	Significance after Mitigation
Utilities and Service Systems		
Impact UTL-1: The proposed Project would not 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.)	No mitigation needed.	N/A
Impact UTL-2: The Project would 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.)	No mitigation needed.	N/A
Impact UTL-3: The Project would 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.)	No mitigation needed.	N/A
Impact UTL-4: The Project would/would not 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.)	No mitigation needed.	N/A
Impact UTL-5: The Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste (Less than Significant Impact.)	No mitigation needed.	N/A

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CHAPTER 1
Introduction

1.1 Purpose of the EIR

This Draft Environmental Impact Report (EIR) has been prepared by the City of San Gabriel (City) to assess the direct and indirect environmental impacts of the Pacific Square San Gabriel Mixed-Use Project (proposed Project). The California Environmental Quality Act (CEQA) Guidelines identify the lead agency as the public agency with the principal responsibility for carrying out or approving a project (CEQA Guidelines Section 15367). The City will consider the information in this Draft EIR, along with other information that may be presented during the CEQA process, including the Final EIR.

1.1.1 Intended Use of the EIR

An EIR is an informational document that is intended to inform regulatory agency decision makers and the public of the significant environmental effects of a project and any feasible mitigation measures that may substantially reduce or avoid the significant impacts. It also discusses alternatives to the project that could accomplish most of the primary objectives while substantially reducing or avoiding significant environmental impacts.

This Draft EIR is prepared under the direction of the City for the following reasons:

- To satisfy the requirements of CEQA (California Public Resources Code, Sections 21000-21178) and the CEQA Guidelines (California Code of Regulations, Title 14, Chapter 14, Sections 15000-15387).
- To inform the public, local community, and responsible or interested public agencies of the scope of the proposed Project and to describe the potential significant environmental impacts; mitigation measures to avoid or reduce the effects; and alternatives to the proposed project.
- To enable the City to consider environmental impacts when deciding whether to approve, modify or deny the proposed Project.
- To serve as a source document for responsible agencies to issue permits and approvals, as required, for implementation of the proposed Project.

As described in CEQA and the CEQA Guidelines, lead agencies are charged with the duty to avoid or substantially lessen any significant environmental impacts and also to consider alternatives to projects. Where mitigation measures or project alternatives are not feasible to reduce identified significant impacts, the impact is considered significant and unavoidable.

In accordance with CEQA Guidelines Section 15125, an EIR must include a description of the physical environmental conditions in the vicinity of the project. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The purpose of this requirement is to give the public and decision makers the most accurate and understandable picture is practically possible of the project's likely near-term and long-term impacts. The environmental analyses contained in Chapter 3 of this Draft EIR uses the Notice of Preparation (NOP) date as the baseline for the description of the physical conditions that might be affected by the proposed Project.

The purpose of an EIR is not to recommend approval or denial of a project. Rather, an EIR is required to identify the significant adverse environmental effects of a project to the physical environment, and to identify measures that mitigate or avoid those impacts to the extent feasible. When environmental impacts are identified as significant and unavoidable, the City may still approve the project after adopting all feasible mitigation measures and alternatives if, through the adoption of CEQA findings and statement of overriding considerations, it finds that social, economic, legal, technological, or other benefits outweigh these impacts.

1.2 Organization of the EIR

This Draft EIR is organized into chapters, as identified and briefly described below. Chapters are further divided into sections (e.g., Section 3.2, *Air Quality*).

Executive Summary: This chapter presents a summary of the proposed Project and the potential environmental impacts. It identifies the mitigation measures that would be implemented and level of significance after mitigation (as fully described in Chapter 3). It also provides a summary of alternatives to the proposed project, a summary of known controversial issues, and a summary of issues to be resolved.

Chapter 1, "Introduction": This chapter presents a discussion of the purpose and use of this Draft EIR, the overall organization of the Draft EIR, and an overview of the CEQA process.

Chapter 2, "Project Description": This chapter provides a detailed description of the proposed Project. It describes the proposed Project location and setting, proposed Project objectives, a description of proposed activities during all phases of the Project, and identifies the requested entitlements necessary to approve the proposed Project.

Chapter 3, "Environmental Analysis": This chapter provides a list of each environmental issue that will be addressed in the Draft EIR. For each environmental issue, Chapter 3 describes the existing environmental conditions on the Project Site and vicinity, the applicable policies and regulations, and provides an evaluation of the potential environmental impacts resulting from implementation of the proposed Project. Chapter 3 also discusses the cumulative impacts associated with other past, present, and reasonably foreseeable future projects and the potential Project contributions to cumulative impacts. Where significant impacts are identified, for both the Project and cumulative projects, mitigation measures are provided. A conclusion on the level of significance after implementation of mitigation measures is presented as well.

Chapter 4, "Alternatives to the Proposed Project": This chapter provides information regarding alternatives to the proposed Project to be considered by decision makers in compliance with CEQA Guidelines Section 15126.6. The alternatives analysis evaluates the potential feasible alternatives that could reduce environmental impacts associated with implementation of the proposed Project, that are identified in Chapter 3. This chapter also summarizes those alternatives that were rejected from further consideration because they did not meet proposed Project goals and objectives, or were determined to be impractical or infeasible.

Chapter 5, "Other CEQA Considerations": This chapter identifies those areas where environmental impacts are considered significant and unavoidable and reasons why the Project is being proposed notwithstanding significant unavoidable impacts. It also summarizes those resource areas where there is no potential for significant impacts and therefore no further analysis is necessary. Pursuant to CEQA Guidelines Section 15126.2(e), an EIR should also discuss the growth inducing impacts of the proposed Project, including the ways in which the proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.

Chapter 6, "List of EIR Preparers": This chapter identifies the lead agency personnel and consultants involved with preparation of this Draft EIR.

Appendices: This Draft EIR includes Appendices A through K that provide either background information or additional technical support for the analysis.

1.3 CEQA Process

As outlined in CEQA Guidelines Section 15002, the basic purposes of CEQA are to:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of mitigation measures or alternatives when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

As required by CEQA Guidelines Section 15375, an NOP is a notice sent by the Lead Agency to notify the responsible agencies, trustee agencies, the California Office of Planning and Research, and any involved federal agencies that the Lead Agency plans to prepare a Draft EIR for the proposed project. The purpose of the NOP is to solicit information, guidance, and recommendations regarding the scope, focus, and content of the Draft EIR.

An NOP was prepared for the proposed Project and is included as Appendix A-1 of this Draft EIR. The NOP identified the Project Site, provided an overview of the proposed Project, and identified environmental factors potentially affected to be analyzed in the Draft EIR. The NOP was circulated

to responsible and trustee agencies; federal, state, and local agencies; Native American Tribes, and interested members of the public. The NOP was also made available for public review at multiple locations, including the San Gabriel Public Library and the City Planning Division public counter. The NOP public comment period began on August 29, 2018, and concluded on September 28, 2018, providing a 31-day comment period.

A public scoping meeting was held on September 19, 2018, from 6:00 PM to 7:30 PM at the City of San Gabriel City Hall Council Chambers, to solicit input from any interested parties on the scope and content of the EIR in conformance with Section 21083.9 of the California Public Resources Code. A presentation provided an overview of the Project and the CEQA process, and can be found in Appendix A-3. Attendees were provided the opportunity to provide verbal and written comments.

A total of eighteen (18) comments were received in response to the NOP, including six (6) written letters/emails and twelve (12) verbal comments that were transcribed during the public scoping meeting. All comments received are included in Appendix A-2. Comments generally requested that the Draft EIR consider impacts related to traffic, building massing, public safety, and public services. Additional questions and answers regarding the Project description were provided. Information received during the scoping process has been considered during the preparation of this Draft EIR.

As required by CEQA Guidelines Section 15087, additional public and agency review of the Project will be facilitated by the City through distribution of this Draft EIR for a 45-day public review period. The public review period will extend from December 7, 2020, to January 21, 2021. This Draft EIR, as well as appendices and all supporting materials and references, can be found at the Project website (https://www.sangabrielcity.com/1339/700-800-S-San-Gabriel-Blvd).

Following the close of the Draft EIR public review period, the City will prepare written responses to comments received on the Draft EIR. The Draft EIR, comments, and responses together will constitute the Final EIR, which will be considered by the City in connection with its decision making for the proposed Project.

Please submit your written comments on the Draft EIR, with the subject line "Pacific Square Draft EIR Comments," postmarked or dated (for e-mails) no later than January 21, 2021, to:

Matt Chang
Senior Planner
City of San Gabriel Planning Division

425 South Mission Drive
San Gabriel, CA 91776
mchang@sgch.org

Phone: (626) 308-2806

CHAPTER 2
Project Description

2.1 Introduction

Pacific Square San Gabriel, LLC (the Applicant) proposes a new mixed-use development (proposed Project) on an approximately 5.85-acre (255,000 square feet) site (Project Site) located at 700-800 S. Gabriel Boulevard within the City of San Gabriel (City). The Project Site is bound by E. Grand Avenue on the south, S. Gladys Avenue on the east, E. El Monte Street on the north, and S. San Gabriel Boulevard on the west. The Project Site was previously occupied by San Gabriel Nursery & Florist, which continues to operate just north of the Project Site as a 2-acre retail garden and florist shop. The Project Site is vacant, and all previously existing greenhouses and associated structures were removed after an act of arson on February 14, 2018.

The proposed Project would develop 243 residential units, 8 live/work units, and 76,046 square feet of commercial space within five occupied stories, plus a mezzanine for a total of six stories, at a building height of 65 feet along with supporting open space across the 5.85-acre Project Site. A detailed description the Project Site characteristics and the proposed Project are provided below.

2.2 Project Location and Surrounding Uses

The Project Site is located at 700-800 S. San Gabriel Boulevard situated in the east/central part of the City and is bound by E. Grand Avenue on the south, S. Gladys Avenue on the east, E. El Monte Street on the north, and S. San Gabriel Boulevard on the west. The northern part of the Project Site fronting on E. El Monte Street is identified as the 700 Plaza, while the southern part of the Project Site fronting on E. Grand Avenue is identified as the 800 Plaza. The Project Site encompasses 49 parcels. It is located approximately 0.7 miles east of the City of San Gabriel's Mission District Core.

Local access is provided to the Project Site via S. San Gabriel Boulevard, E. Mission Road, and E. Grand Avenue. Regional access to the Project Site is provided by Interstate (I)-10, which runs east-west approximately 1.5 miles south of the Project Site; and I-210, which runs east-west approximately 3.7 miles north of the Project Site. Other major State Routes (SR) in the Project vicinity include SR 110, which runs north-south from Los Angeles to Pasadena approximately 3.7 miles northwest of the Project Site, I-710 which runs north-south approximately 4.2 miles southwest of the Project Site, and SR 60, which runs east-west from Los Angeles to Pomona approximately 3.8 miles south of the Project Site. The Southern Pacific Railroad tracks are approximately 650 feet north of the Project Site and the Rubio Wash channel is approximately 500 feet east of the Project Site at its southern end. Neighboring cities within the Project vicinity include

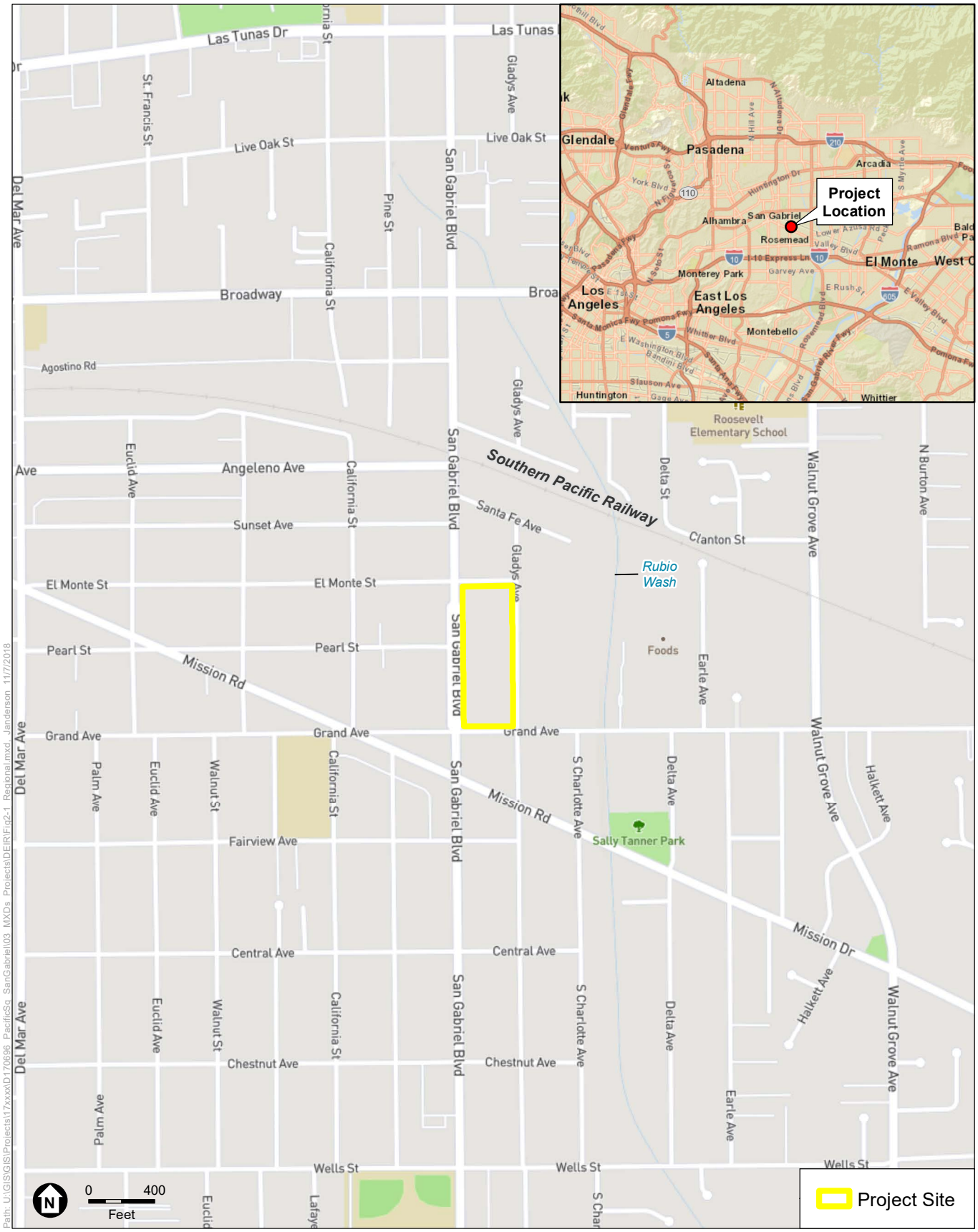
the City of Rosemead, which is located 500 feet east of the Project Site's eastern boundary at the Rubio Wash channel. In addition, Temple City is located to the northeast, San Marino is located to the northwest, and Alhambra is located to the west. The general vicinity and relationship of the Project Site to surrounding streets is illustrated in **Figure 2-1**.

The Project Site is located in an urbanized area that includes surrounding land uses, as shown in **Figure 2-2**, that are predominantly commercial and residential.

- **North:** The San Gabriel Nursery & Florist, which operates as a 2-acre garden and florist shop, is located directly north of the Project Site. The Southern Pacific Railroad tracks are farther north of the nursery. Land uses northeast of the Project Site include residential uses such as street trees, multi-family apartment buildings and townhomes. A small commercial area is located northwest of the Project Site and includes restaurants, dry cleaners, and health services such as a dentistry office and a chiropractor. Residential uses composed of mostly multi-family apartment buildings are located farther west of the commercial uses.
- **South:** Land uses south of the Project Site include the San Gabriel Valley Humane Society, street trees, and residential and commercial uses, such as multi-family apartment buildings and single-family homes. A variety of commercial uses, such as gas stations and a car wash, are located beyond the residential uses.
- **East:** Land uses east of the Project Site are residential, predominantly composed of multi-family apartment buildings and townhomes. Additionally, a senior housing development will be constructed adjacent to the Project Site to the east across S. Gladys Avenue. This approved project is analyzed within the Draft EIR as cumulative project number 19.
- **West:** Land uses west of the Project Site are predominantly commercial and include a variety of restaurants and healthcare facilities, such as a skin care center and dialysis center. Residential uses, composed of multi-family apartment buildings and single-family homes, are located farther west of the commercial uses.

2.3 Existing Conditions on Project Site

The Project Site encompasses 49 continuous parcels totaling 5.85 acres and is one of the largest undeveloped parcels in the City. The Project Site was previously occupied by (and the original location of) San Gabriel Nursery & Florist, which continues to operate just north of the Project Site as a 2-acre garden and florist shop. San Gabriel Nursery & Florist has served Southern California for over 90 years since its founding in 1923 by Fred and Mikoto Yoshimura as the Mission Nursery. The Project Site previously contained vacant greenhouses and associated structures, eight of which were burned down by an act of arson on February 14, 2018, which left the site severely burned and in damaged condition with a large amount of debris. Since July 2018, the Project Site has been cleared of all burnt debris. The Project Site currently consists of only vacant land with no structures present. A row of planted king palm trees that were formerly part of the nursery are located in the southeastern part of the Project Site, and due to their height, can be viewed from a distance. Photographs of the Project Site are presented in **Figure 2-3**. The Project Site is zoned as Retail Commercial (C-1), and designated in the General Plan as a General Commercial land use area.

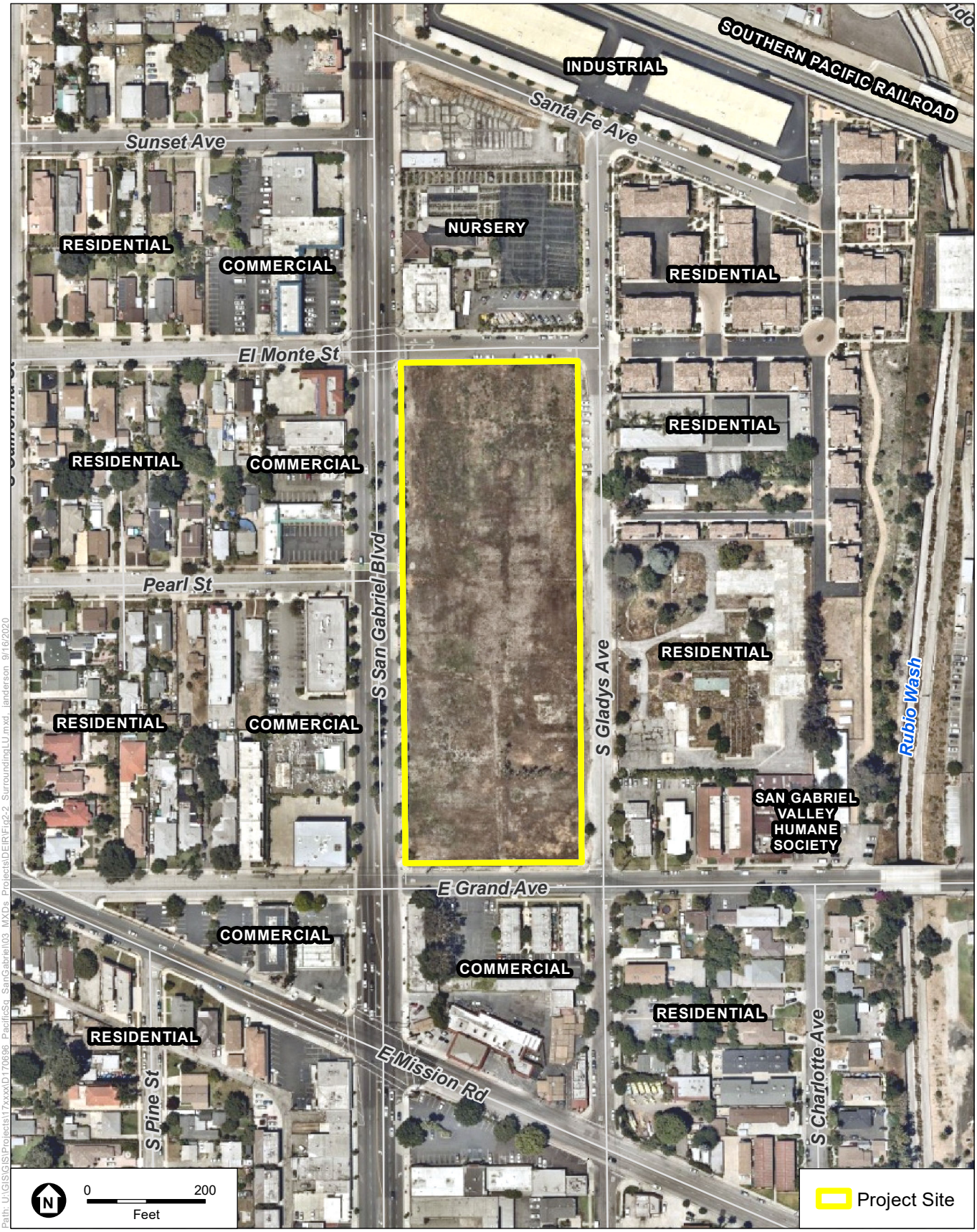


SOURCE: Mapbox, Los Angeles County

Pacific Square San Gabriel Mixed-Use Project

Figure 2-1
Regional and Site Location Map

ESA



SOURCE: Nearmap, 2020.

Pacific Square San Gabriel Mixed-Use Project

Figure 2-2
Aerial Photograph with Surrounding Land Uses

ESA



PHOTOGRAPH 1



PHOTOGRAPH 2

D170696.01

SOURCE: ESA, 2019

Pacific Square San Gabriel Mixed-Use Project

Figure 2-3
Photographs of Project Site Conditions

ESA

2.4 Project Objectives

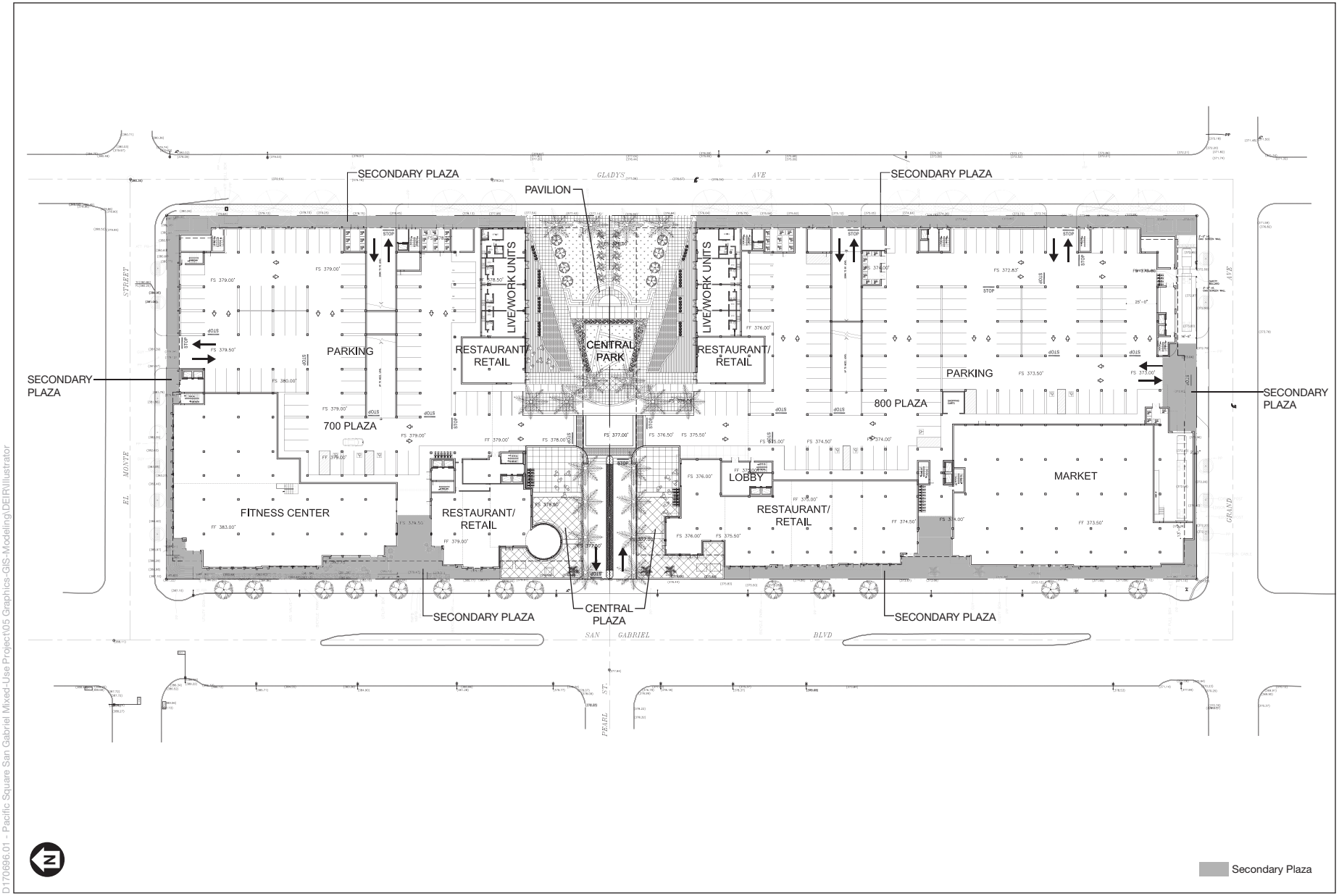
Section 15124(b) of the CEQA Guidelines states that a project description shall contain "a statement of the objectives sought by the proposed project." In addition, Section 15124(b) of the CEQA Guidelines further states that "the statement of objectives should include the underlying purpose of the project."

The objectives that the Project seeks to achieve are as follows:

- Develop new, infill housing with a mix of residential dwelling types to serve a range of household sizes in proximity to major thoroughfares.
- Redevelop a vacant site with an economically viable and attractive mixed-use development that combines residential uses with community-serving retail, grocery, restaurant, and fitness center uses.
- Provide sufficient square footage and visibility for high-quality main stream retail and restaurant uses that cater to community needs.
- Create a high-quality landscape design and publicly accessible open space area to improve the visual character of the Project Site while creating connections and integrating with the surrounding neighborhood and to provide public art and entertainment options in the public plaza.
- Encourage pedestrian activity by providing residents, employees, and visitors with commercial uses within proximity of residential neighborhoods and public transit, publicly accessible open space with landscaped seating areas and event space, and streetscape improvements to ensure pedestrian safety.
- Support multi-modal transit opportunities at and near the Project Site, including bus transit with links to Metro Rail, designated ridesharing pickup and drop-off areas, and on-site bicycle facilities, in order to reduce the use of, and dependency on, private passenger vehicles in accordance with state and local laws and policies supporting the reduction of greenhouse gas emissions.
- Create a multi-purpose hub of activity surrounded by ground-floor retail and a variety of restaurant uses, public art, and a publicly accessible central park and plaza to enhance the quality of the pedestrian environment for the residents and to provide additional publicly accessible open space for the City's residents.

2.5 Description of Project

The proposed Project would construct a six-story (five occupied stories plus one story of mezzanine parking) mixed-use development with retail commercial on the ground level and residential uses above. **Figure 2-4** shows the proposed layout of the Project Site, with the 700 Plaza and 800 Plaza connected by a publicly accessible central park area. As detailed in **Table 2-1**, the proposed Project would develop a total of approximately 495,544 square feet of residential and commercial uses across the Project Site, as well as open publicly accessible areas.



D170696.01 - Pacific Square San Gabriel Mixed-Use Project\05 Graphics-GIS-Modeling\DEIR\Illustrator

SOURCE: Media Portfolio, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 2-4
Conceptual Site Plan Ground Floor

ESA

TABLE 2-1
PROPOSED DEVELOPMENT PROGRAM

	700 Plaza	800 Plaza	Total (Across Project Site)
Residential Component			
One-Bedroom	20 du	20 du	40 du
Two-Bedroom	58 du	93 du	151 du
Three-Bedroom	24 du	24 du	48 du
Four-Bedroom	--	4 du	4 du
Ground-floor Lobby	2,800 square feet	3,200 square feet	6,000 square feet
Subtotal Residential Only Component	*102 du (179,200 square feet)*	*141 du (234,038 square feet)*	*243 du (413,238 square feet)*
Live/Work Component			
Live/Work One-Bedroom	3 du	3 du	6 du
Live/Work Two-Bedroom	1 du	1 du	2 du
Subtotal Live/Work "Live"	*3,130 square feet*	*3,130 square feet*	*6,260 square feet*
Total Residential	**106 du (182,330 square feet)**	**145 du (237,168 square feet)**	**251 du (419,498 square feet)**
Commercial Component			
Sit-Down Restaurants	2,086 square feet	2,914 square feet	5,000 square feet
Fast Casual Restaurants	3,150 square feet	2,910 square feet	6,060 square feet
Retail	--	7,115 square feet	7,115 square feet
Fitness (Office & Exercise)	25,233 square feet	--	25,233 square feet
Bakery	2,500 square feet	--	2,500 square feet
Café	--	3,042 square feet	3,042 square feet
Market	--	20,330 square feet	20,330 square feet
Subtotal Commercial	*32,969 square feet*	*36,311 square feet*	*69,280 square feet*
Subtotal Live/Work "Work"	*3,383 square feet*	*3,383 square feet*	*6,766 square feet*
Total Commercial	*36,352 square feet*	*39,694 square feet*	*76,046 square feet*
Parking			
Required	417 spaces	501 spaces	918 spaces
Provided	418 spaces	565 spaces	983 spaces
Open Space			
Central Park / Central Plaza (Publicly Accessible)	--	--	33,543 square feet
Secondary Plaza/Landscape (Publicly Accessible)	--	--	24,280 square feet
Required Publicly Accessible Open Space			25,500 square feet
Total Provided Publicly Accessible Open Space			57,823 square feet
2nd Floor Central Terrace (Common Open Space – Residents Only)	21,800 square feet	30,500 square feet	52,300 square feet
Balconies (Private Open Space)	19,584 square feet	20,677 square feet	40,261 square feet

SOURCE: Media Portfolio, 2019.

The 700 Plaza would contain 102 residential units, 4 live/work units, and 36,352square feet of ground floor commercial space including a restaurant, retail, commercial live-work space, and fitness center. The 800 Plaza would contain 141 residential units, 4 live/work units, and 39,694 square feet of ground floor commercial space including restaurant, retail, café, commercial live-work space, and a market. In total, there would be 243 residential units (413,238 square feet), 8 live/work units (13,026 square feet), and 76,046 square feet of commercial uses. In between the two plazas would be the 33,543 square feet central park area (23,218 square feet central park and 10,325 square feet central plaza) with expansive landscaping and outdoor seating areas. A 24,280 square feet secondary plaza with landscaped and hardscape areas would surround the perimeter of the entire Project Site.

2.5.1 Residential Uses

Residential units would be located on floors two through five of the proposed development. The 102 residential units in the 700 Plaza would be comprised of 20 one-bedroom dwelling units (du), 58 two-bedroom du, and 24 three-bedroom du. The 800 Plaza would include 141 residential units comprised of 20 one-bedroom du, 93 two-bedroom du, 24 three-bedroom du, and 4 four-bedroom du. In total, there would be 243 units and 413,238 square feet of residential uses (excluding the live/work units).

Residential-only amenities would be provided on the second floor terraces of both the 700 and 800 Plaza. The second floor courtyard of the 700 Plaza would total approximately 21,800 square feet and would provide residential amenities including lounge seating, a patio with fireplaces, a group barbeque area, and various decorative planters. The courtyard would also include a perimeter loop path and seating with overhead shade. The Project would also include a recreational room and indoor gym for the residents.

The second-floor courtyard of the 800 Plaza would total approximately 30,500 square feet and would provide residential amenities including central patios with fire rings, a group barbeque area, and a small fountain with casual seating arrangements. The 800 Plaza would also include a roof garden for general lounging with street view. The 800 Plaza would also include a recreational room, gym, and library for the residents.

2.5.2 Commercial Uses

The 700 Plaza would include 36,352 square feet of commercial space including 7,736 square feet of restaurant/bakery space, a 25,233 square-foot fitness center, and 3,383 square feet commercial live-work space. The 800 Plaza would include 39,694 square feet of commercial space including 8,866 square feet of restaurant/café space, 7,115 square feet of retail, a 20,330 square-foot market, and 3,383 square feet of commercial live-work space. In total, there would be 76,046 square feet of commercial uses. The proposed neighborhood-serving commercial uses would anchor the northwest and southwest corners of the Project Site, and front on the busy S. San Gabriel Boulevard thoroughfare. Proposed restaurant uses would include patios that face the central park and San Gabriel Boulevard.

2.5.3 Open Space and Landscaping

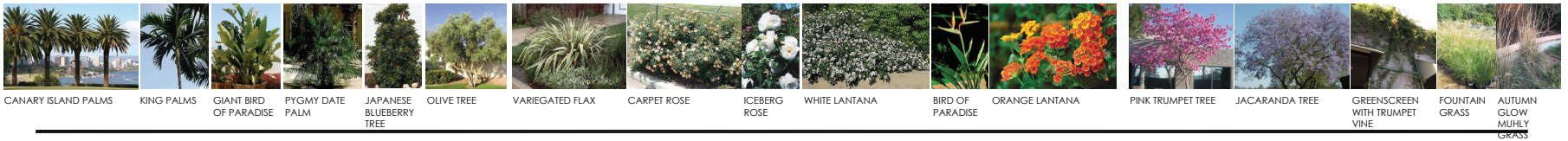
The proposed project includes the development of a central park area, a central plaza and secondary plaza. The developed parts of the Project are organized around a 23,218 square-foot central park area and 10,325 square-foot central plaza with expansive landscaping and outdoor seating areas with the focus of creating an internal, pedestrian oriented open space. This central open space is designed to allow people to circulate between the north and south portions of the development. This area could also be a location for community events and individual family use. The area would include a pavilion located in the middle of the central park/plaza area. The pavilion structure is designed as a public art element creating a focal point for the central park area for passive and programmed use. Community events in the central park/plaza space could include a weekly market, which for purposes of this EIR is assumed to occur from 6:00 PM to 10:00 PM during a week day. Activities at the market could include live or pre-recorded amplified music, food trucks, and other off-site food vendors. Raised planters, a water feature, and amphitheater-style seating would be located around the pavilion. The central park space could also host the City of San Gabriel's annual "Summer in San Gabriel" events (e.g., concert, movie) which rotate around the City from park to park in the evenings.

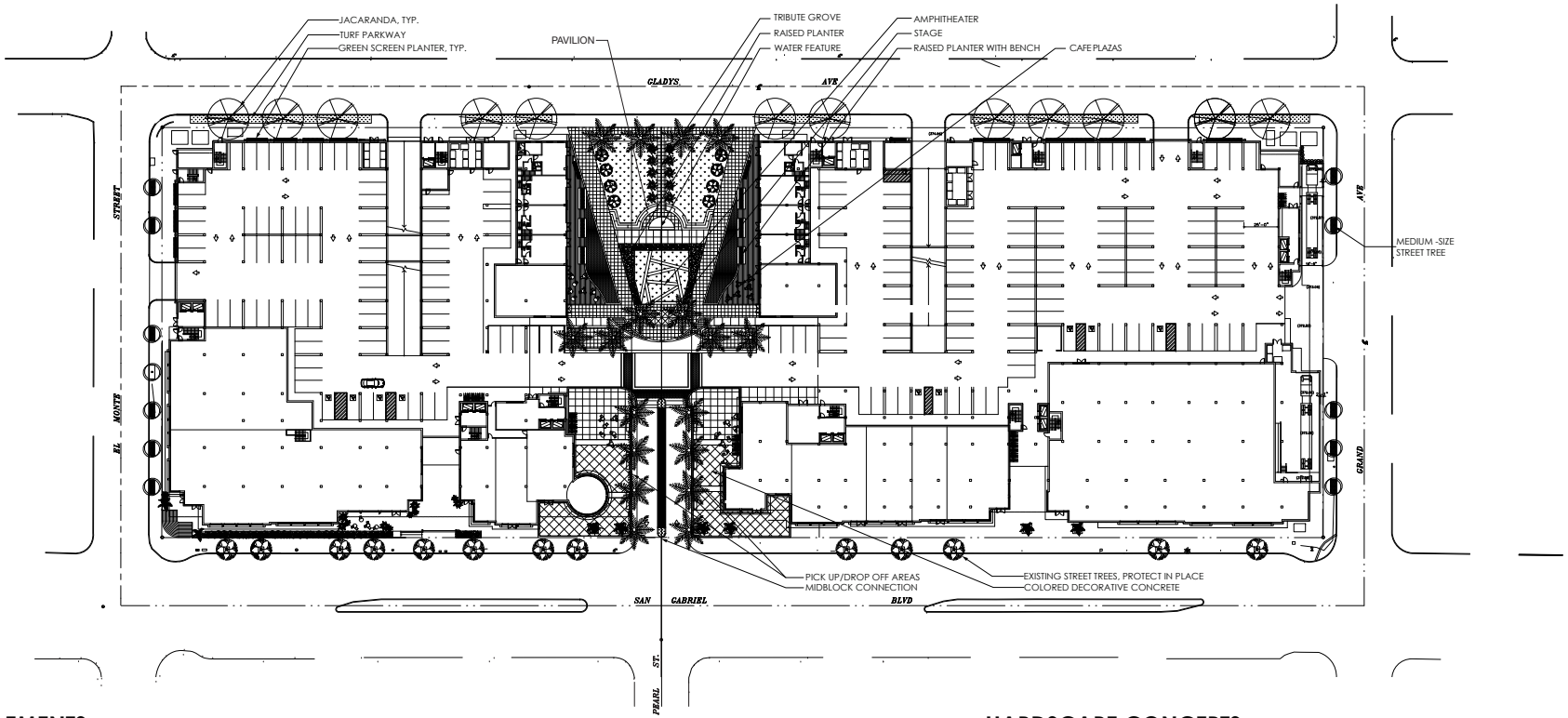
As shown in **Figure 2-5**, the central park area includes multiple green spaces consisting of trees, benches, and hardscape to encourage use and allow for both passive and programmed use, in turn activating the surrounding retail spaces. The Project includes a decorative walkway that enters the central park from S. Gladys Avenue and is lined with a grove of juniper trees leading to a water feature. The juniper grove would consist of trees relocated from along S. San Gabriel Boulevard and incorporated into the central park as a tribute to the history of the property's past use as the cultivation grounds for the San Gabriel Nursery.

The secondary plaza open space plaza areas are located at the frontage of the Project and also in between the retail areas. As shown in Figure 2-5, the secondary plaza would include 24,280 square feet of landscaped areas and hardscape around the outer perimeter of the Project Site with the exception of the entrance/exit to the central park off S. Gladys Avenue and the park plaza entrance/exit off S. San Gabriel Boulevard.

As shown in **Figure 2-6**, the second floor would also include courtyards accessible by residents for both the 700 Plaza and 800 Plaza. As previously mentioned, the second floor courtyards would include tree planters, recreational patios with fireplaces, lounge seating areas, group barbeque areas, and perimeter loop walks.

The landscape design would be consistent with the contemporary architecture of the proposed Project, with a strong use of geometry. As shown in Figure 2-5, the central park area and plaza landscaping would consist of palm trees, junipers, Japanese blueberry and olive trees, variegated flax, carpet and iceberg roses, bird of paradise, and white and orange lantana. Additionally, the proposed landscaping plan would incorporate the row of palm trees that exist within the Project Site. Perimeter street trees and planting would include pink trumpet and jacaranda trees, greenscreen with trumpet vine, and fountain and autumn glow muhly grass. Other plaza elements include a water feature, vertical metal screens, lighted bollard seating, and large decorative pots and raised planters with bench and light columns. Hardscape concepts include driveway cobble paving, sandblasted finished concrete, mica sparkles in concrete bands, and square and circular tree grates.





PLAZA ELEMENTS


STAGE


WATER FEATURE


VERTICAL METAL SCREEN


METAL SCREEN


LIGHTED BOLLARD SEATING


LARGE DECORATIVE POTS


RAISED PLANTER WITH BENCH

HARDSCAPE CONCEPTS


PAVING MATERIALS


DRIVEWAY COBBLE PAVING


SANDBLASTED FINISH C NCRETE


MICA SPARKLES IN CONCRETE BAND


SQUARE TREE GRATE


CIRCULAR TREE GRATE

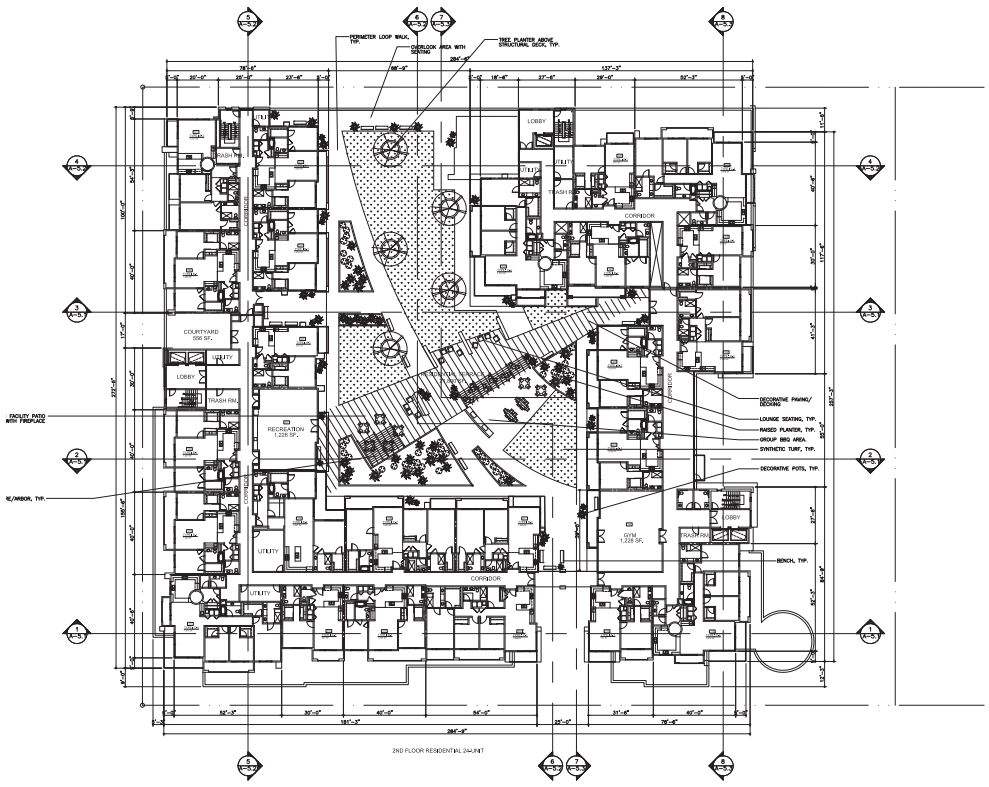
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SOURCE: Media Portfolio, 2020

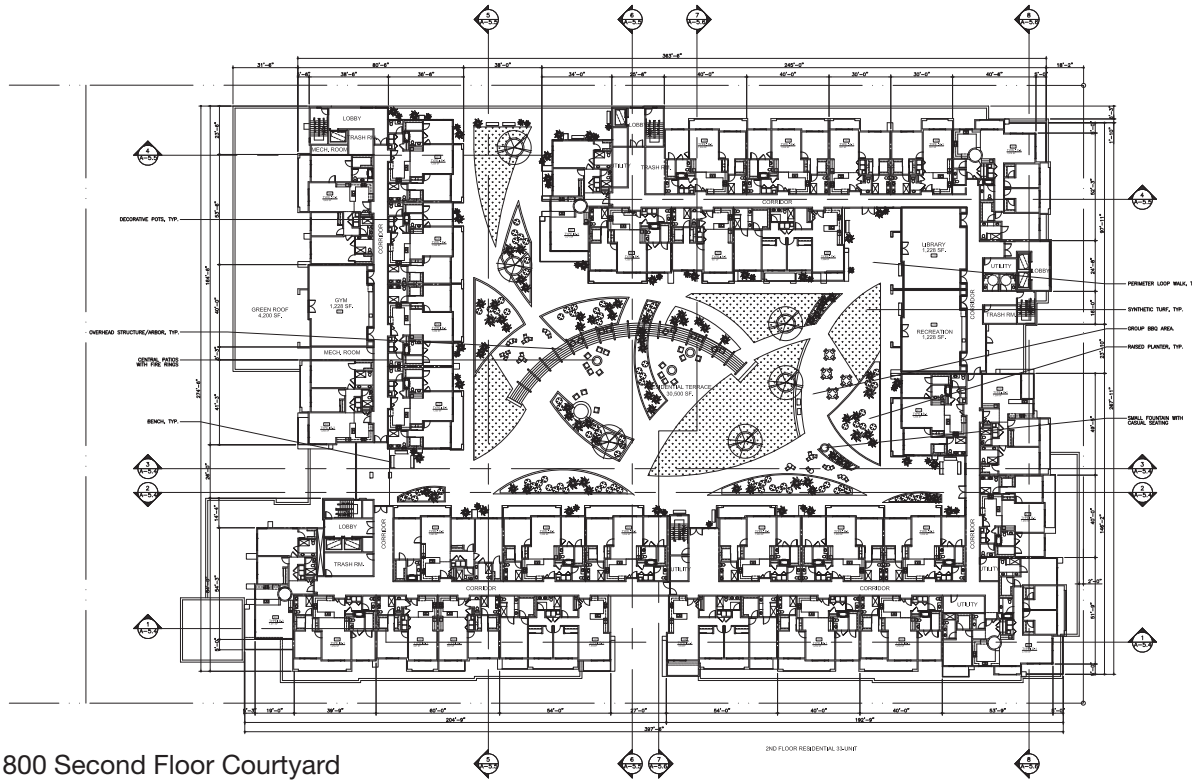
Pacific Square San Gabriel Mixed-Use Project

Figure 2-5
Landscape Concept – Ground Floor Plan

ESA



700 Second Floor Courtyard



800 Second Floor Courtyard

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SOURCE: Media Portfolio, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 2-6
Second Floor Courtyard Concept

ESA

2.5.4 Parking

A total of 983 vehicular parking spaces would be provided by two three-level concrete parking garages. The parking garages would include one subterranean basement level (with a maximum depth of 12 feet below grade), one level at grade (ground floor), and one level at mezzanine (with a maximum height of 21.5 feet above grade). The 700 Plaza would provide 418 parking spaces, exceeding the 417 requirement by 1 parking space. The 800 Plaza would provide 565 parking spaces, exceeding the 501 requirement by 64 parking spaces. At the ground level, parking and access for the 700 and 800 Plazas at the ground level are inter-connected and allow for internal circulation between the two plazas. Residential parking is provided in the subterranean basement level and is segregated from the commercial parking levels on the ground and mezzanine levels with no interconnectivity. Two driveways on S. Gladys Avenue provide access to the residential parking in the 700 Plaza and 800 Plaza, with no interconnectivity at the basement level between the 700 Plaza and 800 Plaza.

A total of six ingress/egress driveways would be provided (one on E. El Monte Street, three on S. Gladys Avenue, one on E. Grand Avenue, and one on S. San Gabriel Boulevard). The Project would install a traffic signal at the driveway on S. San Gabriel Boulevard and Pearl Street to direct commercial use patrons driving on S. San Gabriel Boulevard onto the Project Site. The Project would also include striping and vertical delineation at the intersection of S. San Gabriel Boulevard and E. Grand Avenue as traffic calming measures. The Project would also convert the existing two-way stop to an all-way stop control at the intersection of S. Gladys Avenue and E. Grand Avenue. Parking for the commercial uses would be available on the ground and mezzanine levels of both parking garages. There are four ground-level access points to the commercial parking areas, including one along E. El Monte Street, one along S. Gladys Avenue, one along E. Grand Avenue, and one along S. San Gabriel Boulevard. The primary residential parking would be located in the subterranean level of both parking garages. Access to the lower residential parking would occur at two driveways along S. Gladys Avenue. The Project would provide electric vehicle (EV) charging spaces beyond the Code minimum. Signage and secure gate access would ensure the separation between residential and commercial users. Six secure vertical pedestrian access points to the residential uses would be provided, including five access points at both the subterranean and ground levels and one access point at the ground level only. Service-related circulation would be provided through the ground level of the parking structure. Access points to the service-related parking areas will be controlled and have scheduled hours. Bicycle parking would be provided at the ground level of the parking garage for commercial users and at the subterranean level for residential users.

2.5.5 Utilities

There are a number of existing overhead utility lines (electrical, Southern California Edison) around the perimeter of the Project Site. Six power poles are situated in the public right-of-way (sidewalk) along S. San Gabriel Boulevard, three along E. Grand Avenue, six along S. Gladys Avenue, and two within E. El Monte Street. The Project would include undergrounding the overhead utilities along S. San Gabriel Boulevard, E. Gladys Avenue, and E. El Monte Street. While initial discussions between the applicant and the City indicate that undergrounding of utilities along E. Grand Avenue may not be required, the analysis in this EIR conservatively assumes all utilities would be relocated underground.

The proposed Project would also include low impact development (LID) requirements. This would include the installation of infiltration drywells on the Project Site, that would be designed to intercept low flows and provided water quality treatment onsite before discharge. High and low flows would be discharged to existing culverts located on S. San Gabriel Boulevard, E. Grand Avenue, and S. Gladys Avenue.

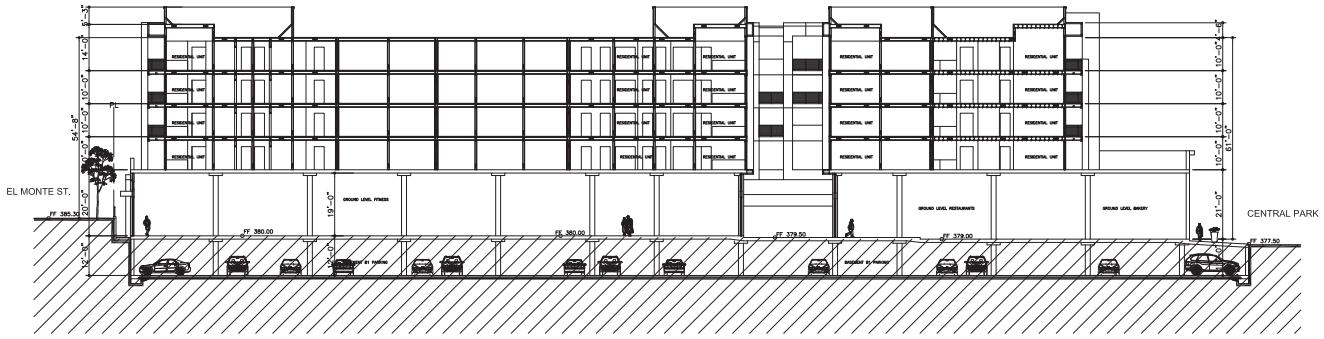
2.5.6 Project Design

The proposed Project is designed as an urban mixed-use development with attention to multiple types of circulation. Organized around a central park area, the design of the Project Site provides homage to the previous property owner, the San Gabriel Nursery. The mixed-use design allows consistency with the existing commercial uses along S. San Gabriel Boulevard and existing residential developments along E. Gladys Avenue. The location of the central park area is aligned with Pearl Street to the west and existing mature trees to the east. This alignment allows for a vista through the park from Pearl Street and a natural aesthetic relief from commercial uses along S. San Gabriel Boulevard, and offers pedestrian connection between the two halves of the Project Site.

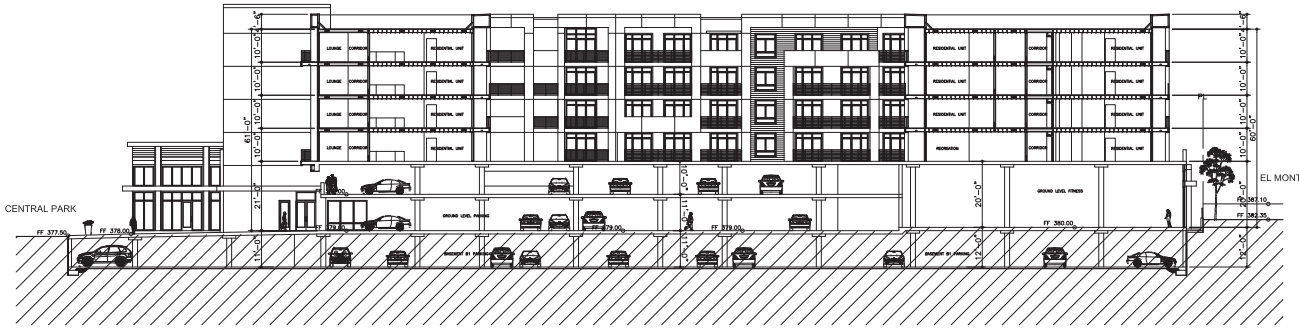
The proposed Project would be designed in the contemporary architectural style, consistent with the existing surrounding contemporary buildings along San Gabriel Boulevard. The Project proposes a strong use of geometry in the central park area and the second level residential courtyards to reinforce the modern design style. As shown in **Figures 2-7** and **Figure 2-8**, the proposed Project is designed with the second through fifth floor massing stepped back from the ground floor retail uses, providing a distinct visual identity to the retail while buffering the upper residential use from the street. The proposed Project would include a mix of building materials, including stucco, wooden and metal wall panels, and glass railings. As shown in **Figure 2-9** and **Figure 2-10**, the design would include an earth tone color palette, consisting of brown, gray, bronze, and white colors.

Signage for the proposed Project would include wayfinding signs for parking, service uses, and residential uses. Wall signage for anchor retail spaces would be consistent with national branding, mounted with dual lit lettering. In addition, a digital sign would be located within the central park area. The Applicant would utilize a Master Sign Program to ensure that all signs would be consistent and complimentary with the architecture of the development. The Project will also provide interior and exterior lighting such that all outdoor areas and indoor common areas are lit and identifiable. Exterior lighting will be used for utility to provide lighting for visitors and also small vertical decorative spotlights showcasing the architecture of the residential portion of the Project above the ground floor retail uses.

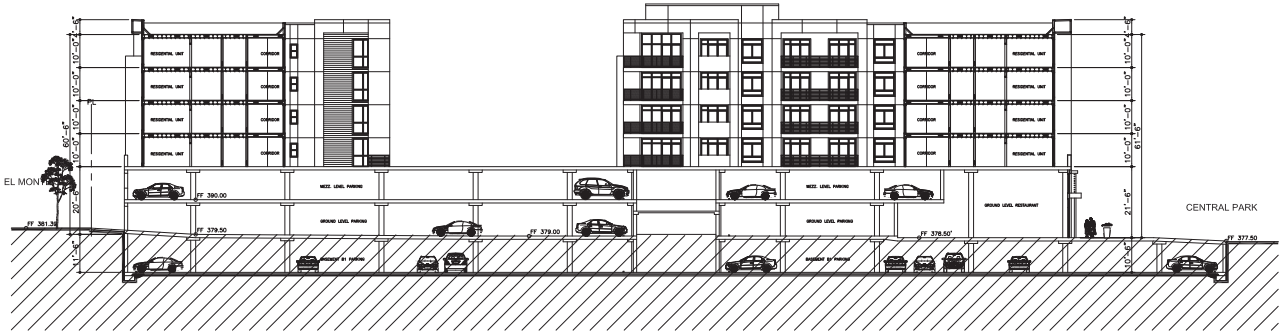
The proposed Project would include "green" building elements constructed in accordance with California's Title 24 Building Energy Efficiency Standards. Environmental design features would include, but are not limited to, collection and storage areas for recyclable materials, Energy Star appliances and lighting, energy-efficient windows, tankless water heaters, drought-tolerant landscaping, and water-efficient irrigation systems.



700 PLAZA SECTION 1



700 PLAZA SECTION 2



700 PLAZA SECTION 3

SOURCE: Media Portfolio, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 2-7
700 Plaza Building Sections

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SOURCE: Media Portfolio, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 2-8
800 Plaza Building Sections

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SOURCE: Media Portfolio, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 2-9
700 Plaza Rendering

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SOURCE: Media Portfolio, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 2-10
800 Plaza Rendering

ESA

2.5.7 Construction

Construction of the 700 Plaza would commence in May 2021, with construction of the 800 Plaza commencing shortly after in August 2021. See **Table 2-2**. Construction of 700 Plaza would be completed in September 2023. 800 Plaza would be completed in December 2023. Occupancy would occur following the completion of construction at each phase; therefore, the 700 Plaza would be operational after September 2023 and the 800 Plaza would be operational after December 2023.

TABLE 2-2
CONSTRUCTION SCHEDULE

	700 Plaza	800 Plaza
Construction Start	May 2021	August 2021
Construction Completion	September 2023	December 2023

SOURCE: Pacific Plaza Premier Development Group, 2020.

Construction of the proposed Project would require excavation to a maximum depth of 35 feet below grade. Earthwork would require a net export of 192,000 cubic yards (cy) of soil, which would be hauled offsite via either San Gabriel Boulevard or Mission Road, both of which are designated as truck routes in the City of San Gabriel (Figure 3-5 in the City of San Gabriel General Plan). San Gabriel Boulevard directly links to I-10 to the south and I-210 to the north. Construction staging would be entirely internal to the Project Site.

2.6 Anticipated Project Approvals

The Applicant is requesting approval of the following entitlements:

- Planned Development (PD);
- Zone Map Amendment to change the zoning of Project Site to PD;
- Development Agreement;
- Tentative Tract Map;
- Precise Plan of Design;
- Master Sign Program; and
- Certification of an EIR pursuant to CEQA.

In addition to the entitlements identified above, approvals are also required for all other discretionary and ministerial permits needed to implement the Project.

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CHAPTER 3
Environmental Analysis

3.0 Introduction to Environmental Analysis

3.0.1 Introduction to Analysis

This chapter of the EIR informs decision makers and the public of the type and magnitude of the change to the existing environment that could result from the proposed Project. The scope of the analysis contained within this Draft EIR is focused on the environmental resource areas that could be affected by the proposed Project activities, and is focused on the following environmental issues:

- Aesthetics
- Air Quality
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise and Vibration
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems

CEQA Guidelines Section 15128 allows for an EIR to contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and therefore not discussed in detail. Based on the scope and nature of the proposed Project, several resource areas included in Appendix G of the CEQA Guidelines do not warrant a detailed analysis in the Draft EIR because the proposed Project has no potential to result in significant impacts to these resource areas. These resource areas include: agricultural and forestry resources, biological resources, mineral resources, and wildfire. Section 5.4, *Environmental Effects Found Not to be Significant*, of this Draft EIR provides a discussion of those resource areas and the reasoning and evidence as to why a detailed analysis is not included in the Draft EIR.

3.0.2 Format of the Environmental Analysis

Each section of Chapter 3 in this Draft EIR addresses a potentially significant environmental impact of the proposed Project. The analysis of each environmental issue is organized under the following headings: Existing Conditions, Regulatory Framework, Thresholds of Significance, Methodology, Environmental Impact Analysis, Cumulative Impacts, and References. The following provides a brief description and overview of these five components of each environmental analysis.

Existing Conditions

This subsection provides a description of existing and pre-Project conditions of the physical environment that pertains to each respective environmental issue. It establishes the baseline conditions from which proposed Project-related changes are measured. For the purposes of this Draft EIR, and consistent with CEQA Guidelines Section 15125, the baseline environmental setting consists of the conditions that exist at the time the NOP was published (August 2018).

Regulatory Framework

This subsection provides a description of applicable plans, policies, and regulations that are adopted or in place in order to reduce physical environmental impacts.

Thresholds of Significance

As defined in CEQA Guidelines Section 15064.7, a threshold of significance is an identifiable quantitative, qualitative, or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant, and compliance with which means the effect normally will be determined to be less than significant. CEQA Guidelines Section 15064(2) indicates that a threshold of significance may assist lead agencies in determining whether a project may cause a significant impact. When using a threshold, the Lead Agency should briefly explain how compliance with the threshold means that the project's impacts are less than significant. A threshold of significance is a criterion applied by the Lead Agency (here, the City) to identify significant adverse environmental impacts. A threshold is defined by a Lead Agency based on scientific and factual data relative to the Lead Agency jurisdiction, views of the public in affected areas, the policy/regulatory environment of affected jurisdictions, and other factors. The environmental checklist included as Appendix G of the CEQA Guidelines provides additional guidance for determining which impacts would be regarded as significant.

Methodology

This subsection describes the analytical methods, approach, and assumptions used in developing the environmental analysis. If a focused technical report was prepared to conduct analysis, the methodology used in that report is summarized.

Environmental Impact Analysis

The environmental analysis evaluates both the proposed Project-specific impacts and the potential environmental effects when considered in combination with other cumulative development or growth; accordingly, this subsection provides the analysis of the proposed Project's potential direct and indirect environmental effects. The environmental analysis provided in Sections 3.1 through 3.16 focuses on changes in the existing physical environment that would result from implementation of the proposed Project, during both construction and operation.

Each impact is summarized in an "impact statement" that is separately numbered, corresponds with a threshold of significance, and is followed by a detailed discussion. Where the impact analysis identifies significant environmental impacts that could be reduced or avoided through implementation of a mitigation measure, the measure is presented after the relevant impact

discussion. Mitigation measures identify the parties responsible for implementation, a timeframe for implementation, and any applicable public agency approval, oversight, or monitoring that may be required. Mitigation measures would be implemented by the Project applicant, with oversight by one or more public agencies, unless indicated otherwise.

This subsection concludes with a statement regarding whether the impact, after implementation of the mitigation measures and/or compliance with existing local, state, and federal laws and regulations, would remain significant or be reduced to a less-than-significant level.

Cumulative Impacts

The cumulative impacts for each of the proposed Project components are analyzed within the discussion of each component for each threshold. As defined in CEQA Guidelines Section 15355, a cumulative impact consists of an impact which is created as a result of the combination of the project's impacts together with other projects causing related impacts. This discussion considers whether the project's incremental impact is cumulatively considerable.

References

This includes a comprehensive listing of all sources of information used in the preparation of each technical section of the Draft EIR.

3.0.3 Definitions of Terms Used in the EIR

This Draft EIR includes the following CEQA terminology to denote the significance of environmental impacts of the proposed Project:

- **Less than significant impact:** A less than significant impact does not result in a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance (see CEQA Guidelines Section 15382). Impacts determined to be less than significant do not require mitigation.
- **Significant impact:** A significant impact is defined as "a substantial, or potentially substantial, adverse change in the environment" (see Public Resources Code Section 21068). Where a significant impact is identified, feasible mitigation measures must be identified and adopted if they would avoid or substantially reduce the significant impact.
- **Potentially significant impact:** A potentially significant impact is one that, if it were to occur, would be considered a significant impact as described above; however, the likelihood of the impact's occurrence is uncertain. For example, although the Draft EIR may provide evidence that buried archaeological resources could be found in a particular location, the actual discovery cannot be determined until the time of project construction. For CEQA purposes, a potentially significant impact is treated (i.e., mitigated) as if it were a significant impact. Mitigation measures must be identified and adopted if they would avoid or substantially reduce the significant impact.
- **Significant and unavoidable impact:** A significant and unavoidable impact is a substantial adverse effect on the environment that cannot be mitigated to a less than significant level. A project with significant and unavoidable impacts could still proceed, but the City would be required to prepare a statement of overriding considerations, pursuant to CEQA Guidelines

Section 15093, explaining why the City would proceed with the proposed Project in spite of the potential for significant environmental impacts.

3.0.4 Cumulative Projects

CEQA Guidelines Section 15130 requires that the EIR discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable. Cumulative impacts are defined in CEQA Guidelines Section 15355 as "an impact which is created as a result of the combination of a project evaluated in the EIR together with other projects causing related impacts." As defined in CEQA Guidelines Section 15355, a cumulative impact consists of an impact that is created as a result of the combination of a project evaluated in the Draft EIR together with other past, present and reasonably foreseeable projects causing related impacts. As identified in Section 15130(b), the discussion of cumulative impacts shall "reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone."

An analysis of cumulative impacts follows the project-specific impacts and mitigation measures evaluation in each section. An introductory discussion that identifies the cumulative impact methodology and defines the cumulative context being addressed in each respective analysis is included at the beginning of the cumulative impact analysis in each technical section. In some instances, a project-specific impact may be considered less than significant, but may be determined to be potentially significant when considered in combination with other cumulative development of the surrounding area or in combination with regional growth projections. In some instances, a potentially significant impact may result on a project-level but would not result in a considerable contribution to a significant cumulative impact. The cumulative impacts analysis is formatted the same as the project-specific impacts.

To support the environmental analysis of the Project, a list of cumulative projects was developed based on information provided by the Cities of San Gabriel and Rosemead in September 2018 (Fehr & Peers, 2020). There are 37 cumulative projects in the study area, as shown in **Table 3.0-1**. Projects on this list consist of development projects within the City which have a pending development application, are approved, or are under construction. Certain plan documents are included on the list if they have applications pending for specific projects proposed within the plan area. The locations of the cumulative projects projects are illustrated in **Figure 3.0-1**.

TABLE 3.0-1
CUMULATIVE PROJECTS LIST

No.	Project Location	Land Use	Size	
1	235 Arroyo Drive	Condominiums	41	du
2	704 W Las Tunas Drive	Condominiums	37	du
		Retail	17.8	ksf
3	201 S San Gabriel Boulevard	Condominiums	159	du
		Retail	12.0	ksf
		Restaurant	4.6	ksf
4	402 E Las Tunas Drive	Medical Office	9.0	ksf
5	250 S Arroyo Drive	Condominiums	12	Du
6	237 E Las Tunas Drive	Medical Office	12.0	ksf
7	810 E Valley Boulevard	Retail	25.3	ksf
		Condominiums	7	Du
8	600 S San Gabriel Boulevard	Condominiums	18	du
		Retail	10.0	ksf
9	328 E Live Oak St	Condominiums	12	du
10	860 E Valley Boulevard	Condominiums	49	du
		Retail	4.6	ksf
		Restaurant	4.6	ksf
11	506 W Las Tunas Drive	Medical Office	78.0	ksf
		Retail	4.1	ksf
		Restaurant	5.7	ksf
12	500 E Valley Boulevard	Retail	5.3	ksf
13	101 W Valley Boulevard	Hotel	222	rooms
		Commercial	55.9	ksf
		Condominiums	85	du
14	400 W Valley Boulevard	Condominiums	127	du
		Commercial	50.5	ksf
15	101 E Valley Boulevard	Condominiums	81	du
		Retail	13.5	ksf
16	324 E Las Tunas Drive	Condominiums	11.0	ksf
		Commercial	5.3	ksf
17	330 E Las Tunas Drive	Office	11.0	ksf
18	902 E Mission Rd	Office	4.6	ksf
		Restaurant	1.1	ksf
		Retail	1.0	ksf
19	824 S Gladys Avenue	Senior Home	197	du
20	1956 Strathmore Avenue	Condominiums	6	du
21	314 E Mission Rd	Condominiums	3	du

No.	Project Location	Land Use	Size	
22	305 S Arroyo Drive	Houses	3	du
23	4117 Walnut Grove Avenue (City of Rosemead)	Condominiums	-	du
24	200 S San Gabriel Boulevard	Condominiums	163	du
		Commercial	34.8	ksf
25	8900 Glendon Way (City of Rosemead)	Hotel	123	du
26	1920 Strathmore Avenue	Condominiums	3	du
27	807 E Wells Street	Medical Office	9.3	ksf
28	1958 S California	Condominiums	5	du
29	1613 S Gladys Avenue	Condominiums	7	du
30	306 San Marcos Street	Condominiums	8	du
31	230 S San Marino Avenue	Condominiums	4	du
32	116 Del Marino Place	Apartments	3	du
33	1551 Prospect Avenue	Condominiums	8	du
34	300 E Valley Boulevard	Condominiums	63	du
		Commercial	16.6	ksf
35	1975 S Del Mar Avenue	Condominiums	35	du
		Commercial	9.8	ksf
36	1616 Euclid Avenue	Apartments	38	du
		Commercial	2.4	ksf
37	414 S San Gabriel Boulevard	Storage	201.3	ksf

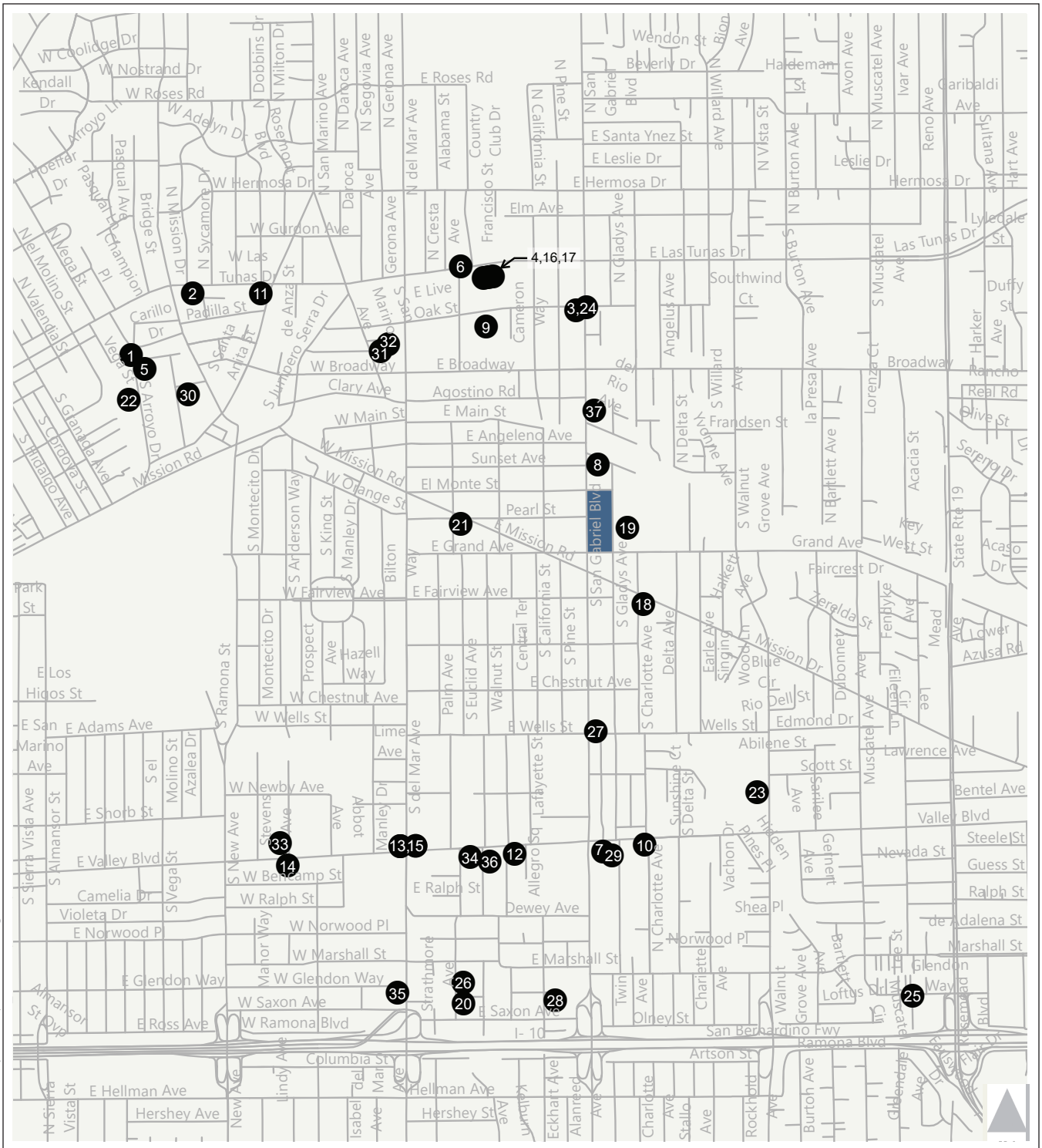
NOTES:

du = dwelling unit; ksf = one-thousand square feet

SOURCE: Fehr & Peers, 2020. Cumulative projects list based on information provided by the City of San Gabriel and the City of Rosemead in September 2019.

3.0.5 References

Fehr & Peers, 2020. *Pacific Square Mixed Use Project Circulation Study*. November 2020.



SOURCE: Fehr & Peers, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 3.0-1
Cumulative Projects Map

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3.1 Aesthetics

This section of the EIR identifies and evaluates key visual resources on the Project Site and surrounding area and analyzes the effects of the proposed Project's impacts related to aesthetics. The section contains: (1) a description of the existing aesthetic character of the Project Site and the surrounding areas; (2) a description of the views of the Project Site; and (3) an analysis of the changes in aesthetics associated with the implementation of the proposed Project.

3.1.1 Existing Conditions

Visual Character of the Project Site

The Project Site spans the entire block fronting S. San Gabriel Boulevard from E. El Monte Street on the north to E. Grand Avenue on the south. The perimeter of the entire Project Site is currently enclosed by a chain link security fence with black privacy mesh screening. The screened fencing is the primary visual element of the Project Site and public views of the interior of the Project Site are limited.

The interior of the Project Site is vacant and all previously existing greenhouses and associated structures associated with the former nursery use were removed after an act of arson. The Project Site has since been cleaned up of all burnt debris and consists of only relatively flat land with no structures. A row of planted mature king palm trees that were formerly part of the nursery are located in the southeastern part of the Project Site, and due to their height, can be viewed from a distance. Existing electrical poles, street lights, and limited trees are situated along the sidewalks surrounding the Project Site along S. San Gabriel Boulevard. Photographs of the Project Site are presented in **Figure 2-3**, included in Chapter 2, *Project Description*, of this Draft EIR.

Primary viewers of the Project Site include vehicular traffic, mainly from along S. San Gabriel Boulevard, commercial uses on the west side of S. San Gabriel Boulevard, and from residential uses fronting E. Grand Avenue to the south and fronting S. Gladys Avenue to the east and northeast. Surrounding uses and views are described below.

Surrounding Area Views

The Project Site is situated in a developed and urbanized part of San Gabriel, generally dominated by single and two-story residential, commercial, and light industrial buildings. Immediately north of E. El Monte Street with direct views of the Project Site is the San Gabriel Nursery & Florist. The nursery operates a florist shop and two-acre garden and has several single-story tent shops as well as trees and landscaping situated throughout the site. Northeast of the Project Site with full to partial views of the Project Site are two and three-story townhome units (Mission Walk). A Public Storage facility consisting of large one-story structures is located further north of the San Gabriel Nursery & Florist and townhomes, but is only partially visible from the Project Site from S. Gladys Avenue.

Immediately east of S. Gladys Avenue between E. El Monte Street and E. Grand Avenue are two-story multi-family apartment buildings and townhomes that have direct views of the Project Site.

Additionally, an approved senior housing development will be constructed on a vacant site adjacent to the Project Site to the east across S. Gladys Avenue. This vacant site contains scattered trees which partially obstruct views to the east.

Immediately south of E. Grand Avenue is a two-story commercial and associated surface parking and a multi-family apartment building, both of which have direct views of the Project Site. The San Gabriel Valley Humane Society, two-story apartment buildings, and single-family homes landscaped with street trees are located southeast of the Project Site and have partial views.

Immediately west of S. San Gabriel Boulevard with direct views of the Project Site are commercial uses, including a variety of healthcare facilities and various single-story restaurants. Residential uses, composed of two-story apartment buildings and single-family homes, are located farther west of the commercial uses and have limited to partial views of the Project Site. A variety of commercial uses, including a gas stations and a car wash are located southwest of the Project Site. Single and two-story commercial uses are located northwest of the Project Site across S. San Gabriel Boulevard, and include restaurants, dry cleaners, and health services.

Scenic Resources

Scenic vistas are panoramic views of features such as mountains, forests, the ocean, or urban skylines. The vacant Project Site itself is not considered a scenic resource. The City's General Plan (General Plan) has designated scenic corridors to preserve the scenic vistas of San Gabriel Mountains and historic sites. The Project Site is not located within or along a City-designated scenic corridor, as identified in Goal 10.7 of the General Plan (City of San Gabriel, 2004). Furthermore, the proposed Project is not within an area identified as a significant gateway, as identified in Goal 10.7 of the General Plan (City of San Gabriel, 2004). The nearest scenic corridor is along W. Fairview Avenue, between S. Ramona Street and Del Mar Boulevard, which is located approximately 0.53 mile southwest of the Project Site and has no direct views of the Project Site.

The General Plan recognizes that the San Gabriel Mountains, which are visible in the distance from the Project Site approximately 8 miles to the north, constitute a scenic vista (City of San Gabriel, 2004). However, views of the San Gabriel Mountains are not uniquely visible from within the Project area, given their distant prominence and lower scale intervening of development within the San Gabriel Valley. Additionally, these scenic vistas are only recognized for preservation from the Mission Drive corridor north of Mission Road to Northern City Limits. Although the Project Site is within the field of view of surrounding mountain ranges, due to the distance and intervening development in the surrounding area, views of the San Gabriel Mountains in the area are intermittently available through north-facing street corridors, and it does not constitute a unique scenic vista.

Scenic Highways

As indicated in the County of Los Angeles's General Plan 2035 and the California Scenic Highway Program, there are no officially designated scenic highways within the vicinity of the Project Site (County of Los Angeles, 2015; Caltrans, 2019). The closest "Officially Designated State Scenic Highway" is State Route 2 (Angeles Crest Highway), located approximately 8.25 miles northwest

of the Project Site. State Highway 39, located approximately 10.5 miles east of the Project Site, is the nearest highway to the Project Site that is designated as an "Eligible Scenic Highway." Both highways are not visible from or have views of the Project Site.

Light and Glare

Existing levels of light and glare in the Project area are typical of urbanized/suburban communities. Given that the Project Site is currently vacant, there are no existing sources of light and glare except for street lights, which are not directly visible or distinguishable from other typical urban nighttime light sources, from off-site sensitive receptors (i.e., residences to the east and south of the Project Site).

Shade and Shadow

The structures around the Project Site create a varying pattern of shadows that rotate in a sweeping arc toward the west, north, and east, according to the movement of the sun. Given the that the Project Site is currently vacant, there are no existing sources of shade and shadow.

3.1.2 Regulatory Framework

State Level

California Code of Regulations, Title 24

Title 24 of the California Code of Regulations (CCR), also known as the California Building Standards Code, consists of regulations to control building standards throughout the State. The following components of Title 24 include standards related to lighting:

California Building Code (Title 24, Part 1) and California Electrical Code (Title 24, Part 3)

The California Building Code (Title 24, Part 1) and the California Electrical Code (Title 24, Part 3) stipulate minimum light intensities for safety and security at pedestrian pathways, circulation ways, and paths of egress (CBC, 2019).

California Energy Code (Title 24, Part 6)

The California Energy Code (CEC) defines allowances for lighting power and establishes control requirements for different lighting systems, with the goal of increasing efficiency and reducing energy consumption equipment (CEC, 2019).

CEC Section 130.2 sets forth Outdoor Lighting Controls and Luminaire Cutoff requirements. All outdoor luminaires rated above 150 watts are required to comply with defined backlight, uplight, and glare (BUG) ratings in accordance with Illuminating Engineering Society of North America (IESNA) Technical Memorandum on Luminaire Classification Systems for Outdoor Luminaires Addendum A, and must be fitted with a minimum 40 percent dimming capability activated by motion sensor or other automatic controls. (This requirement does not apply to streetlights for the public right-of-way, signs, or building façade lighting.)

CEC Section 140.7 sets forth outdoor lighting power density allowances in terms of watts per area for lighting sources other than signage. The lighting allowances are provided by Lighting Zone, as

defined in Section 10-114 of the CEC. Under Section 10-114, all urban areas within California are designated as Lighting Zone 3. Sports athletic field lighting is exempt from this energy limit, and additional allowances are provided for Building Entrances or Exits, Outdoor Sales Frontage, Hardscape Ornamental Lighting, Building Façade Lighting, Canopies, Outdoor Dining, and Special Security Lighting for Retail Parking and Pedestrian Hardscape.

CEC Section 130.3 stipulates sign lighting controls with any outdoor sign that is 'ON' both day and night must include a minimum 65 percent dimming at night. Section 140.8 of the CEC sets forth lighting power density restrictions for signs.

California Green Building Standards Code (Title 24, Part 11)

The California Green Building Standards, or CALGreen Code, requires that non-residential outdoor lighting comply with the minimum light level requirements of the CEC's BUG ratings for outdoor lights defined by the; light ratings consistent with the CALGreen Code; or light and glare requirements set forth in a local ordinance, whichever is more stringent (CGBC, 2019).

California Scenic Highway Program

California's Scenic Highway Program protects and enhances the natural scenic beauty of California highways and adjacent corridors through special conservation treatment (Caltrans, 2020). As stated above under Section 3.1.1, *Existing Conditions*, the closest "Officially Designated State Scenic Highway" is State Route 2 (Angeles Crest Highway), located approximately 8.25 miles northwest of the Project Site. State Highway 39, located approximately 10.5 miles east of the Project Site, is the nearest highway to the Project Site that is designated as an "Eligible Scenic Highway."

Local Level

City of San Gabriel General Plan

The General Plan, adopted in 2004 (City of San Gabriel, 2004), provides a long-range policy guide to address changes to the City and a roadmap for future development. The General Plan outlines goals and actions that are applicable to the proposed Project are as follows:

Land Use Chapter

Land Use Chapter places an emphasis on "quality of life" issues in order to improve and enhance the development of the City. The following goals and policies are applicable to the proposed Project:

> **Goal 1.1:** Preserve our neighborhoods by preserving those things that give them character, cohesion, and quality of life.
>
> **Goal 1.6:** Ensure that new development is appropriately and sensitively buffered from its neighbors.
>
> > **Target 1.6.3:** Adopt standards for fencing by 2005 to ensure new fences and walls are attractively designed and effectively buffer adjacent properties

Environmental Resources

Environmental Resources enhances and expands the City's environmental diversity. The following goals and policies are applicable to the proposed Project and potential aesthetic impacts:

Goal 8.1: Create a verdant City by maintaining significant trees, requiring developers to plant additional trees, and promoting the healthy maintenance of trees.

Target 8.3.3: Require that all new construction include a landscape component that will increase the number of trees onsite.

Target 8.3.4: Implement policies to require developers to plant one tree for every one thousand square feet of net lot area on new commercial and residential projects. At least one tree shall be planted in the front yard of every new house or addition.

Target 8.3.5: Require applicants submitting plans for all additions of more than 800 square feet and all new buildings to submit landscape plans.

Target 8.3.6: Encourage developers to incorporate existing mature and specimen tree and other significant vegetation into the design of a development project for that site.

Community Design Chapter

Community Design Chapter focuses on better quality of new development. The following goals and policies are applicable to the proposed Project and potential aesthetic impacts:

Goal 10.1: Create an expectation that San Gabriel will accept nothing less than the highest quality in architecture, in landscape design, and in streetscape.

Target 10.1.1: Adopt the principles for design enhancement specified in the sidebar [the 14 Actions Leading to a More Livable San Gabriel] below.

14 Actions Leading to a More Livable San Gabriel:

- Expect and demand the best quality design;
- Build on our community's history and culture;
- Create designs that live and breathe like the neighborhoods in which they are placed;
- Build on existing neighborhood centers to reinforce their value;
- Beautify key commercial corridors;
- Create unique and compelling gateways into town;
- Reward good design;
- Make good landscaping a part of every project;
- End sign clutter;
- Establish engineering standards that will make walking safe and enjoyable;
- Enhance the Alameda Corridor East;
- Integrate public art and architecture;
- Design for pedestrian safety and comfort; and
- Respect historical and environmental features.

Target 10.1.3: Establish design enhancement programs for the unique commercial districts that pepper San Gabriel. These include: San Gabriel Village, the Washington School commercial district, San Gabriel Boulevard at Broadway, and others.

Goal 10.3: Create designs that live and breathe with San Gabriel's neighborhoods as they themselves live and breathe.

Target 10.3.1: Encourage a wider variety of architectural styles (except in historic districts) in new residential and commercial construction, consistent with the City's design guidelines. The City shall demand a higher level of architectural accomplishment by insisting on:

- More sensitive massing to reduce size and scale;
- Better architectural articulation, variation in plane and texture (depth, light and dark);
- Stronger sense of rhythm in placement of windows and doors;
- Better application of design and landscape elements to screen, modulate, and reduce mass;
- Awareness of cultural precedents;
- Use of natural and recycled materials;
- Craftsmanship in execution of design and construction; and
- Incentives that improve, rehabilitate and protect existing structures, with building envelopes that reinforce the existing neighborhood scale and pattern. These incentives may include design standards, the Mills Act, façade easements, other tax credits, or relaxed standards for additions that meet neighborhood conservation guidelines.

Target 10.3.3: Encourage the application of sustainable design principles and materials that do not consume irreplaceable resources. The City shall:

- Promote energy efficient construction;
- Support code modifications that encourage the use of recycled and regenerated materials;
- Orient new development to transit wherever possible;
- Permit "vertically integrated" mixed uses, meaning traditional patterns of development that permit people to live over their places of business;
- Promote traditional street patterns that allow high levels of pedestrian circulation and promote short walking distances to necessary services; and
- Support the principles for sustainable development recommended by the American Planning Association's policy guide, *Planning for Sustainability*. These practices include renewable and recycled building materials, energy efficient design, transit-oriented development, neighborhood livability, pedestrian friendly design, drought tolerant and native plant materials, and other techniques for sustainable communities.

Goal 10.4: Design the necessary features of urban life so that they contribute to the community rather than detract from it.

Target 10.4.3: Require group mailboxes to be designed with full architectural treatment that complements the colors, textures, and materials of the buildings, and is approved by the U. S. Post Office for compliance with postal regulations.

Target 10.4.4: Require developers to pay fair share for the costs of higher quality ornamental street lighting, traffic signals, and other features designed to meet the standards established by design guidelines, specific plans, and other adopted design strategies of the City.

Goal 10.6: Target selected commercial and residential corridors for action to improve their appearance. These include:

Corridor	Treatment
Del Mar Avenue, from Las Tunas Drive south to Interstate 10.	• Additional street trees • Utility undergrounding
Junipero Serra Drive	• Median and streetscape improvements from Las Tunas to Mission • Clear pedestrian path and wayfinding to connect Smith Park to other City facilities
Las Tunas Drive, from western City limits to eastern City limits	• New and replacement street trees • Underground utilities • Sign control • Historical markers and wayfinding
Mission Drive, from Mission Road to the Rosemead City Limits	• New and replacement street trees • Underground utilities • Sign control • Historical markers and wayfinding
Mission Road, from Santa Anita Street to Junipero Serra Drive	• New and replacement street trees • Underground utilities • Sign control • Historical markers and wayfinding • Parkway development • Public art elements • Screening of proposed railway right of way
New Avenue, from Ramona Avenue south to the I-10 Freeway, focusing particularly on the stretch between Valley Boulevard and Interstate 10	• Sidewalks, curbs, gutters, and street improvements • Street tree planting • Underground utilities • Sign control • Historical markers and wayfinding
San Bernardino Freeway (Interstate 10)	• Enhanced landscaping • Enhanced sound wall screening • Enhanced offramp improvements • Ornamental street lighting
San Gabriel Boulevard, from Hermosa Avenue to the I-10 Freeway	• Sidewalks, curbs, gutters, and street improvements • Street tree planting • Underground utilities • Sign control • Historical markers and wayfinding • Medians

Corridor	Treatment
Valley Boulevard, from New Avenue to easterly City limits	• Sidewalks, curbs, gutters, and street improvements • Street tree planting • Underground utilities • Sign control • Historical markers and wayfinding • Ornamental street lighting

Goal 10.8: Designate significant gateways to the City; develop entry monumentation and landscape improvements at those locations:

- Alhambra Road at City Limits;
- Del Mar Avenue at Roses Road;
- Del Mar Avenue and I-10;
- Las Tunas Drive at Alhambra Wash;
- Las Tunas Drive at Muscatel Ave.;
- Mission Road at Rosemead City Limits;
- Mission Road at Santa Anita Street;
- New Avenue and I-10;
- S. San Gabriel Boulevard and I-10;
- S. San Gabriel Boulevard at Hermosa;
- Valley Boulevard at New;
- Valley Boulevard west of Walnut Grove (at City limits); and
- St. Albans Road at Roses Road.

Goal 10.10: Make the quality of landscape design a fundamental component of all decision-making for new development.

Target 10.10.5: Require that all new development meet certain minimum standards, including: - Preparation of the landscape plan by a licensed landscape architect; show and reflect the landscape character of the environment surrounding the property.

Goal 10.11: End sign clutter in San Gabriel.

Target 10.11.1: Revise the sign ordinance to simplify, improve and strengthen the amortization process. Develop City sign guidelines by 2005 to provide improved design guidance to the development community.

Target 10.11.2: Implement the amortization provisions of the Code with respect to roof signs, illegal or oversize projecting signs, and pole signs.

Target 10.11.3: Require that master sign programs be submitted, reviewed and approved by the City for all multi-tenant developments.

Target 10.11.4: Strengthen and enhance the code enforcement tools available to support sign control. Develop a concentrated code enforcement program, supported by an administrative citation and necessary resources to make it happen.

Goal 10.13: Require development to provide architectural and public art amenities.

Target 10.13.1: Require all new development of greater than 100,000 square feet (gross area) to provide public art integral to the project, including but not limited to: historical interpretation exhibits, murals, sculptural elements, enhanced architectural treatment showing unique craftsmanship.

Target 10.13.2. Require all new construction projects to provide textured paving to distinguish pedestrian and vehicle areas, public vs. private spaces, and other features.

San Gabriel Municipal Code

Section 150.218 Special Residential Building Provisions.

(D) Lighting in multiple-family dwellings shall be as follows:

(1) Aisles, passageways, and recesses related to and within the building complex shall be illuminated with intensity at least 0.25 foot-candles at ground level during the hours of darkness. Lighting devices shall be protected and maintained by using weather resistant and vandalism resistant covers and lenses.

(2) Open parking lots, exterior garage door areas, carports and access thereto, shall be provided with a maintained minimum of one foot-candle of light on the parking surface during the hours of darkness. Lighting devices shall be protected and maintained by using weather and vandalism resistant covers and lenses.

(3) All required lighting shall be designed to turn on automatically. Luminaries shall be directed or shielded so as to not be directly visible from a dwelling unit or cause off-site glare or nuisance.

(4) In dwellings/units where a common laundry is equipped, it shall be constructed so that the interior is visible from the exterior. Lighting shall be provided during the hours of darkness with a minimum of one internal vandalism resistant fixture, which shall be connected to the lighting circuitry.

Section 150.219 Special Commercial Provisions.

(L) The following standards shall apply to lighting, address identification, and parking areas:

(1) The address number of every commercial building shall be illuminated during the hours of darkness so that it shall be easily visible from the street. The numerals in these address numbers shall be no less than six inches in height and be of a color contrasting to the background. If the building is more than one story in height, address numbers should be no less than ten inches in height, contrasting to the background. In addition, any business that

affords vehicular access to the rear through any driveway, alleyways, or parking lot shall also display the same numbers on the rear of the building.

(2) All exterior commercial doors, during the hours of darkness, shall be illuminated with a minimum of one foot-candle of light. All exterior bulbs shall be protected by weather and vandalism resistant cover(s).

(3) Open parking lots and access thereto, for use by the general public, shall be provided with a maintained minimum of one-foot candle of light on the parking surface from dusk until one hour after the termination of the business day.

(4) All required lighting shall be designed to turn on and off automatically. Luminaries shall be directed or shielded so as not to be directly visible from any dwelling unit or to cause off-site glare or nuisance.

Section 150.003 Construction; Hours of Operation.

No construction shall take place within the city except between the hours of 7:00 AM and 7:00 PM, Monday through Friday and between the hours of 8:00 AM and 4:00 PM on Saturday. Construction shall be prohibited on Sundays and such holidays as may be designated by Council resolution. The Community Development Director may extend the hours of operation for special circumstances by providing written notice to surrounding residents in advance. The restriction on construction hours shall not apply to emergency repairs required to protect the public health, safety, and welfare, whether performed by a public agency, utility, company, or private owner. Said restrictions shall not apply to a residential property owner and or members of his immediate family, performing work on his personal property.

City of San Gabriel Design Guidelines

The City adopted Design Guidelines on September 21, 2010, in the interest of maintaining and improving the City of San Gabriel (City of San Gabriel, 2010). Design Guidelines were written for single-family residential uses, multi-family residential uses, and commercial uses. The Design Guidelines for multi-family residential uses would be applicable to the proposed Project. The Design Guidelines include design principals for architecture and landscape design in order to avoid visual conflicts within a project or between a project and its setting. In addition, the Design Guidelines include a Guidelines Table, which provide a guide for "encouraged", "variable", and "discouraged" design features related to a certain site quality.

3.1.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to aesthetics if it would:

a) Have a substantial adverse effect on a scenic vista;

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;

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; or

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

3.1.4 Methodology

The following describes the methodology used to determine the proposed Project's potential impacts to scenic vistas, scenic resources, regulations governing scenic quality, light and glare, and shade/shadow.

Scenic Vistas

The analysis of scenic vistas includes a qualitative analysis of whether the proposed Project would block views of valued visual resources and scenic vistas from public vantage points in the Project area. When analyzing aesthetic impacts, views generally refer to visual access to, or the visibility of, a particular sight from a given vantage point or corridor. In order to evaluate the effects of the proposed Project on views, simulations were created to represent the "before and after" effects on the view field created by development of the proposed Project from six locations surrounding the Project Site. The simulations illustrate the specific changes in representative view fields caused by the individual and combined buildings. See Figures 3.1-1 to 3.1-7 below.

Scenic Resources

The evaluation of scenic resources is focused on whether identified scenic resources within a State Scenic Highway would be substantially directly or indirectly damaged by development of the proposed Project.

Regulations Governing Scenic Quality

The proposed Project is compared to regulations that govern scenic quality, including goals, plans, and policies provided in the General Plan and San Gabriel Municipal Code (SGMC). These include requirements for street trees, building setbacks, building heights, exterior lighting and signage.

Light and Glare

The analysis of light and glare describes the existing light and glare environments in the Project area, identifies the light- and glare-sensitive land uses in the area, describes the light and glare sources under the proposed Project, and qualitatively evaluates whether the proposed Project would result in a substantial increase in nighttime lighting and daytime glare as seen from the area's sensitive uses. The analysis of lighting impacts focuses on whether the proposed Project would cause or substantially increase adverse night time lighting effects on light sensitive uses. Included in this analysis is consideration of the affected street frontages, the direction in which Project lighting would be directed, the potential for sunlight to reflect off the exterior surfaces of the proposed buildings, and the extent to which glare would interfere with the operation of motor vehicles or other activities.

Shade/Shadow

While the effects of shade/shadow are not included as part of the Appendix G of the CEQA Guidelines, an analysis is provided for informational purposes. The consequences of shadows on land uses can be positive, including cooling effects during warm weather; or negative, such as loss of warmth during cooler weather and loss of natural light for landscaping and human activity. In order to determine the extent of any negative shading impacts associated with the proposed Project, shading diagrams were prepared to show the off-site shadow-sensitive uses in the Project vicinity, demonstrate the extent shadows generated by the proposed Project, and the length of time that the shadow-sensitive uses would be shaded. Shadow-sensitive uses include routinely usable outdoor spaces associated with residential, recreational or institutional uses (e.g., schools, convalescent homes), commercial uses such as pedestrian-oriented outdoor spaces and outdoor eating areas, nurseries, and existing solar collectors. These uses are considered sensitive because sunlight is important to function, physical comfort, or commerce.

The shading durations evaluated include shading that would occur for three consecutive hours on the winter solstice (December 21) between 9:00 AM Pacific Standard Time (PST) and 3:00 PM PST and for more than four consecutive hours on the summer solstice, and spring and fall equinoxes (June 21, March 21, and September 21, respectively) between 9:00 AM and 5:00 PM.

3.1.5 Analysis

Impact AES-1: The proposed Project would not have a substantial adverse effect on a scenic vista. (Less than Significant Impact.)

As discussed above, under Subsection 3.1.1, *Existing Conditions*, scenic vistas are panoramic views of features such as mountains, forests, the ocean, or urban skylines. Scenic vistas generally include public views that provide visual access to large panoramic views of natural features, unusual terrain, or unique urban or historic features. A scenic vista field of view can be wide and extend into the distance, and include focal views that focus on a particular object, scene, or feature of interest for the benefit of the general public.

Based on a review of the General Plan, the San Gabriel Mountains would be the closest scenic vista visible from the Project Site, located approximately 8 miles north. Although the distant San Gabriel Mountains are visible from the Project Site and surrounding area, the views are broad and representative of views to the mountains from many locations in the San Gabriel Valley and surrounding area (primarily north-south facing streets). The views from the Project Site are not considered unique and are not recognized by the City as, nor considered for the purposes of this analysis, a scenic vista. This is evidenced by the fact that these scenic vistas are only recognized for preservation from the Mission Drive corridor north of Mission Road to Northern City Limits. The Project Site is not located within or along a City-designated scenic corridor (City of San Gabriel, 2004).

Construction

Construction of the proposed Project would require excavation to a maximum depth of 35 feet below grade. Earthwork would require a net export of 192,000 cubic yards (cy) of soil. As the

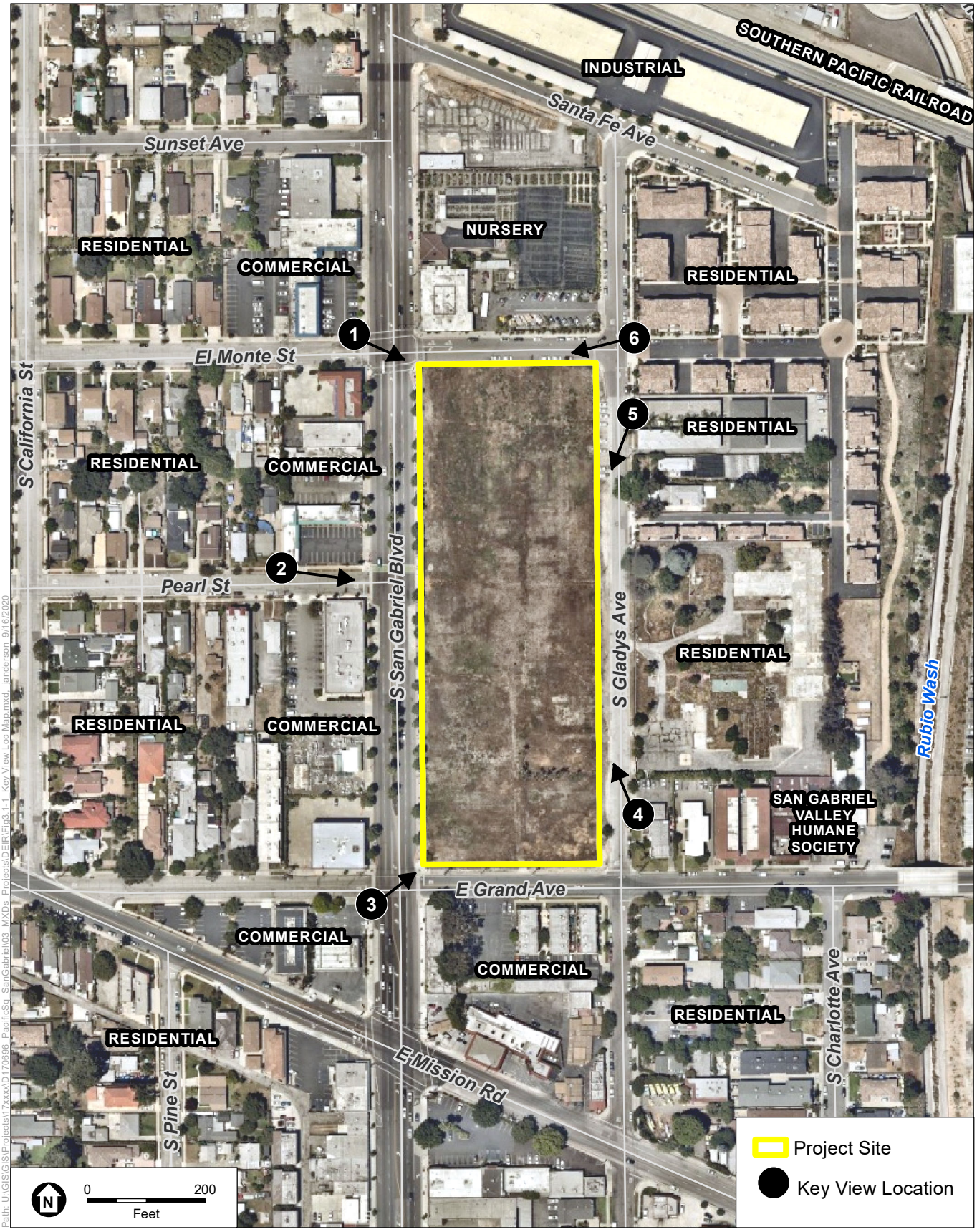
Project Site is not within a scenic corridor, nor is the Project Site itself considered a scenic resource, grading and construction would not substantially alter the existing available public scenic views. The nearest scenic resources, the San Gabriel Mountains, are located approximately 8 miles north of the Project Site and are only recognized for preservation from the Mission Drive corridor north of Mission Road to Northern City Limits. As the Project Site is located within an urbanized area of the City of San Gabriel, construction of the proposed Project would not impact views of the San Gabriel Mountains due to the distance and intervening development surrounding the Project Site and due to the fact that the views of the San Gabriel Mountains from the Project Site are broad and representative of views to the mountains from many locations in San Gabriel and surrounding area (primarily north-south facing streets). As such, construction of the proposed Project would not have a substantial adverse effect on a scenic vista. **Impacts would be less than significant.**

Operation

As described in Chapter 2, *Project Description*, of this Draft EIR, the proposed Project would replace the existing vacant Project Site with a mixed-use development that includes five occupied stories plus a mezzanine, for a total of six stories at a building height of 65 feet. Retail and commercial uses would be situated on the ground level with residential uses above in upper levels. The developed parts of the proposed Project are organized around a central park area and plaza with expansive landscaping and outdoor seating areas with the focus of creating an internal, pedestrian oriented open space. This central open space is designed to allow people to circulate between the north and south portions of the development. The central park area includes multiple green spaces consisting of trees, benches, and hardscape to encourage use and allow for both passive and programmed use, in turn activating the surrounding retail spaces. The Project also includes a decorative walkway that enters the central park from S. Gladys Avenue and is lined with a grove of juniper trees leading to a water feature. The juniper grove would consist of trees relocated from along S. San Gabriel Boulevard and incorporated into the central park. The central park area also includes a pavilion, which could host evening events that would encourage further use of the central park.

As previously discussed, the Project Site is not within a scenic corridor, nor is the Project Site itself considered a scenic resource. The nearest scenic resources, the San Gabriel Mountains, are located approximately 8 miles north of the Project Site and are only recognized for preservation from the Mission Drive corridor north of Mission Road to Northern City Limits. As the Project Site is located within an urbanized area of the City of San Gabriel, operation of the proposed Project would not impact views of the San Gabriel Mountains due to the distance and intervening development surrounding the Project Site and due to the fact that the views of the San Gabriel Mountains from the Project Site are broad and representative of views to the mountains from many locations in San Gabriel and surrounding area (primarily north-south facing streets).

To illustrate the effects of the proposed Project with respect to representative public views to the Project Site, view simulations have been prepared. The vantage points used to show existing views and future simulated views with the proposed Project are mapped in **Figure 3.1-1** and the view simulations are provided in **Figures 3.1-2** through **3.1-7**. The simulations show rendered computer-generated images of Project components. Each of the simulated views is described below.



SOURCE: Nearmap, 2020.

Pacific Square San Gabriel Mixed-Use Project

Figure 3.1-1
Key View Locations Map

ESA



BEFORE



AFTER

D170696.01

SOURCE: Media Portfolio, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 3.1-2
Key View 1 –
Existing and Simulated Views from San Gabriel Boulevard,
Looking South at El Monte Street

ESA



BEFORE



AFTER

D170696.01

SOURCE: Media Portfolio, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 3.1-3
Key View 2 –
Existing and Simulated Views from Pearl Street,
Looking East across San Gabriel Boulevard

ESA



BEFORE



AFTER

D170696.01

SOURCE: Media Portfolio, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 3.1-4
Key View 3 –
Existing and Simulated Views from San Gabriel Boulevard, Looking North at Grand

ESA



BEFORE



AFTER

D170696.01

SOURCE: Media Portfolio, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 3.1-5
Key View 4 –
Existing and Simulated Views from Gladys Avenue, Looking North

ESA



BEFORE



AFTER

D170696.01

SOURCE: Media Portfolio, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 3.1-6
Key View 5 –
Existing and Simulated Views from Gladys Avenue, Looking South

ESA



BEFORE



AFTER

D170696.01

SOURCE: Media Portfolio, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 3.1-7
Key View 6 –
Existing and Simulated Views from El Monte Street,
Looking West Towards San Gabriel Boulevard

ESA

Key View 1 – Existing and Simulated Views from S. San Gabriel Boulevard, Looking South at E. El Monte Street

Figure 3.1-2 shows a representative existing view and simulated future view of the Project Site as seen from southbound S. San Gabriel Boulevard looking southeast towards E. El Monte Street. Under the existing view, there are no structures on the Project Site and the perimeter of the Project Site is enclosed by a chain link security fence with black privacy mesh screening. The screened fencing is the primary visual element of the Project Site and public views of the interior of the Project Site are limited. Power poles and power lines as well as commercial and residential development and street trees are seen within this view. No scenic resources are visible in this view. As shown in the simulation of future views, the proposed Project's 6-story mixed-use building shown within this view adds development to the existing suburban setting. In addition, the power lines and power poles may be removed and relocated underground, as shown in this view, thus improving the visual character of the surrounding area. As no scenic vistas are visible from this view, the proposed Project would not have a substantial adverse effect on a scenic vista.

Key View 2 – Existing and Simulated Views from Pearl Street, Looking East across S. San Gabriel Boulevard

Figure 3.1-3 shows a representative existing view and simulated future view of the Project Site as seen from eastbound Pearl Street looking east towards the Project Site. Under the existing view, there are no structures on the Project Site and the perimeter of the Project Site is enclosed by a chain link security fence with black privacy mesh screening. The screened fencing is the primary visual element of the Project Site and public views of the interior of the Project Site are limited. Power poles and power lines as well as surrounding street trees are seen within this view. No scenic resources are visible in this view. As shown in the simulation of future views, this view illustrates the views of the plaza and central park areas. The central park includes a pavilion, which is also visible from this view. The pavilion could reach 12 feet in height and would be surrounded by landscaping. In addition, the power lines and power poles could be removed and relocated underground, as shown in this view, thus improving the visual character of the surrounding area. As no scenic vistas are visible from this view, the proposed Project would not have a substantial adverse effect on a scenic vista.

Key View 3 – Existing and Simulated Views from San Gabriel Boulevard, Looking North at E. Grand Avenue

Figure 3.1-4 shows a representative existing view and simulated future view of the Project Site as seen from S. San Gabriel Boulevard looking northeast towards the Project Site. Under the existing view, there are no structures on the Project Site and the perimeter of the Project Site is enclosed by a chain link security fence with black privacy mesh screening. The screened fencing is the primary visual element of the Project Site and public views of the interior of the Project Site are limited. A row of king palm trees that were formerly part of the nursey can be seen from this view. Power poles and power lines as well as surrounding commercial uses and street trees are also visible within this view. Some intermittent views of the distant San Gabriel Mountains are also visible. As shown in the simulation of future views, both of the proposed 6-story mixed-use buildings are shown, which adds development to the existing suburban setting. In addition, the power lines and power poles could be removed and relocated underground, as shown in this view, thus improving the

visual character of the surrounding area. While the development of the proposed Project would block distant views of the San Gabriel Mountains from this segment of S. San Gabriel Boulevard, as illustrated in this simulation, these views do not represent prominent views of the San Gabriel Mountains due to the distance and intervening development surrounding the Project Site. As such, the proposed Project would not have a substantial adverse effect on a scenic vista.

Key View 4 – Existing and Simulated Views from S. Gladys Avenue, Looking North

Figure 3.1-5 shows a representative existing view and simulated future view of the Project Site as seen from S. Gladys Avenue looking northwest towards the Project Site. Under the existing view, there are no structures on the Project Site and the perimeter of the Project Site is enclosed by a chain link security fence with black privacy mesh screening. The screened fencing is the primary visual element of the Project Site and public views of the interior of the Project Site are limited. Power poles and power lines are visible within this view as well as the surrounding street trees and commercial and residential buildings located to the northwest and north of the Project Site. Some distant views of the San Gabriel Mountains are also visible. As shown in the simulation of future views, both of the proposed 6-story mixed-use buildings are shown, which adds development to the existing suburban setting. In addition, the power lines and power poles could be removed and relocated underground, as shown in this view, thus improving the visual character of the surrounding area. While the development of the proposed Project would block distant views of the San Gabriel Mountains from this segment of S. San Gabriel Boulevard, as illustrated in this simulation, these views do not represent prominent views of the San Gabriel Mountains due to the distance and intervening development surrounding the Project Site. As such, the proposed Project would not have a substantial adverse effect on a scenic vista.

Key View 5 – Existing and Simulated Views from S. Gladys Avenue, Looking South

Figure 3.1-6 shows a representative existing view and simulated future view of the Project Site as seen from S. Gladys Avenue looking south towards the Project Site. Under the existing view, there are no structures on the Project Site and the perimeter of the Project Site is enclosed by a chain link security fence with black privacy mesh screening. The screened fencing is the primary visual element of the Project Site and public views of the interior of the Project Site are limited. A row of king palm trees that were formerly part of the nursey can be seen from this view. Power poles and power lines as well as surrounding residential uses and street trees are also visible within this view. No scenic resources are visible in this view. As shown in the simulation of future views, both of the proposed 6-story mixed-use buildings are shown, which adds development to the existing suburban setting. In addition, the power lines and power poles could be removed and replaced underground and street trees would be planted, as shown in this view, thus improving the visual character of the surrounding area. As no scenic vistas are visible from this view, the proposed Project would not have a substantial adverse effect on a scenic vista.

Key View 6 – Existing and Simulated Views from E. El Monte Street, Looking West Towards S. San Gabriel Boulevard

Figure 3.1-7 shows a representative existing view and simulated future view of the Project Site as seen from E. El Monte Street looking west towards the Project Site. Under the existing view, there are no structures on the Project Site and the perimeter of the Project Site is enclosed by a chain link security fence with black privacy mesh screening. The screened fencing is the primary visual element of the Project Site and public views of the interior of the Project Site are limited. Power poles and power lines as well as surrounding street trees are seen within this view. No scenic resources are visible in this view. As shown in the simulation of future views, the building on the northern portion of the Project Site is shown, including the driveway entrance from E. El Monte Street, which adds development to the existing urbanized setting. In addition, the power lines and power poles could be removed and relocated underground and street trees would be planted, as shown in this view, thus improving the visual character of the surrounding area. As no scenic vistas are visible from this view, the proposed Project would not have a substantial adverse effect on a scenic vista.

Based on the discussion above and the simulations of view impacts, operation of the proposed Project would not have a substantial adverse effect on a scenic vista. **Impacts would be less than significant.**

Impact AES-2: The proposed Project would not substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway. (No Impact.)

As discussed above, under Subsection 3.1.1, *Existing Conditions*, there are no officially designated or eligible scenic highways within the vicinity of the Project Site (County of Los Angeles, 2015; Caltrans, 2019). The closest "Officially Designated State Scenic Highway" is State Route 2 (Angeles Crest Highway), located approximately 8.25 miles northwest of the Project Site. State Highway 39, located approximately 10.5 miles east of the Project Site, is the nearest highway to the Project Site that is designated as an "Eligible Scenic Highway." Both highways are not visible to or from the Project Site. In addition, no historic buildings would be affected by the Project.

As such, development of the proposed Project would not substantially damage scenic resources including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **No impacts would occur.**

Impact AES-3: The proposed Project would not conflict with applicable zoning and other regulations governing scenic quality. (Less than Significant Impact.)

Regulations Governing Scenic Quality

The Project Site is located in the City of San Gabriel, which is an urbanized area that includes surrounding land uses that are predominately commercial and residential, as shown in Figure 2-2 included in Chapter 2, *Project Description*, of this Draft EIR. As such, this impact analysis focuses on whether the proposed Project conflicts with the applicable zoning and other regulations governing scenic quality, including the General Plan and SGMC.

City of San Gabriel's General Plan

The following General Plan goals governing scenic quality are applicable to the proposed Project and analyzed for consistency with the proposed Project.

Land Use

The Land Use Chapter of the City of San Gabriel's General Plan places an emphasis on "quality of life" issues in order to improve and enhance the development of the City.

Goal 1.1: Preserve our neighborhoods by preserving those things that give them character, cohesion, and quality of life.

Consistent. The proposed Project is located on S. San Gabriel Boulevard, a main arterial that connects San Marino to Rosemead. Surrounding areas are comprised of an urbanized setting with commercial and residential uses. The proposed Project would develop the vacant Project Site with a mixed-use development, including 76,046 square feet of commercial space (including live/work space) on the ground floor with 243 residential units above and 8 live/work units within five occupied stories plus a mezzanine, for a total of six stories at a maximum height of 65 feet along with supporting open space across the 5.85-acre Project Site. The proposed Project would be designed in the contemporary architectural style, consistent with the existing surrounding contemporary buildings along S. San Gabriel Boulevard. In addition, the proposed Project would include an open space which allows for people to circulate through the Project Site and between the 700 Plaza and the 800 Plaza, as well as to the larger community to the east and west of the Project Site.

Furthermore, while the proposed Project would include six-story buildings up to 65 feet in height, which would be taller than the one-, two- and three-story buildings that surround the Project Site, the design of the proposed buildings would step back the second through fifth floor from the ground floor retail uses, which would break up the building's massing. These features of the proposed Project would serve to preserve the neighborhood in which the Project Site is located.

Goal 1.6: Ensure that new development is appropriately and sensitively buffered from its neighbors.

Consistent. The Project Site is bound and buffered by E. El Monte Boulevard, S. Gladys Avenue, S. San Gabriel Boulevard, and E. Grand Avenue, and does not have directly connected neighbors. The proposed Project would include streetscaping on all public spaces fronting the Project Site, including street trees, sidewalks, a turf parkway, raised planters, and green screen planters, which would provide a buffer between the proposed development and the surrounding neighbors. As such, the proposed Project would be appropriately and sensitively buffered from its neighbors.

Environmental Resources

Environmental Resources enhances and expands the City's environment.

Goal 8.1: Create a verdant City by maintaining significant trees, requiring developers to plant additional trees, and promoting the healthy maintenance of trees.

Consistent. The proposed Project's proposed 33,543 square-foot central park/plaza and 24,280 square feet of secondary plaza and would incorporate the planting of trees as part of the landscaping and outdoor seating areas. The existing fan palm and juniper trees located within the Project Site would be relocated within the development, to be consistent with the City goal of creating a verdant City.

Community Design

Community Design Chapter focuses on better quality of new development.

Goal 10.1: Create an expectation that San Gabriel will accept nothing less than the highest quality in architecture, in landscape design, and in streetscape.

Consistent. The proposed Project would be designed in the contemporary architectural style. It is designed with the second through fifth floor massing stepped back from the ground floor retail uses, providing a distinct visual identity to the retail while buffering the upper residential use from the street. The proposed Project would include a mix of building materials, including stucco, wooden and metal wall panels, and glass railings. The design would include an earth tone color palette, consisting of brown, gray, bronze, and white colors. In addition, the Applicant would utilize a Master Sign Program to ensure that all signs would be consistent and complimentary with the architecture of the development. Additionally, the landscape plan would include a varied palette of landscaping plants, shrubs, and trees within the central open space area that is designed to allow people to circulate between the north and south portions of the development. Based on the above, development of the proposed Project would incorporate high quality architecture, landscape design, and streetscape, consistent with this goal.

Goal 10.3: Create designs that live and breathe with San Gabriel's neighborhoods as they themselves live and breathe.

Consistent. The proposed Project would adhere to existing City Design Guidelines. As previously detailed, the proposed Project is designed with the second through fifth floor massing stepped back from the ground floor retail uses, providing a distinct visual identity to the retail while buffering the upper residential use from the street. The proposed Project would include a mix of building materials, including stucco, wooden and metal wall panels, and glass railings. The design would include an earth tone color palette, consisting of brown, gray, bronze, and white colors. The proposed Project includes a central park area and plaza with expansive landscaping and outdoor seating areas with the focus of creating an internal, pedestrian oriented open space. Landscaping would screen the proposed development through its placement of street trees, a turf parkway, raised planters, and green screen planters, which would provide a buffer between the proposed buildings and the surrounding uses. The landscaping design of the Project Site is intended to provide homage to the previous property owner, the San Gabriel Nursery, located north of the Project Site. Thus, the design of the proposed Project would serve to live and breathe with the City's neighborhoods.

Goal 10.4: Design the necessary features of urban life so that they contribute to the community rather than detract from it.

Consistent. Design of the proposed Project includes residential amenities such as central patios with fire rings, a group barbeque area, and a water feature with casual seating arrangements. In

addition, the proposed neighborhood-serving commercial uses would anchor the northwest and southwest corners of the Project Site and would be accessible to both residents of the proposed Project and visitors to the Project Site. The proposed central park and plaza would include expansive landscaping and outdoor seating with the focus of creating an internal, pedestrian oriented open space. The central open space is designed to allow people to circulate between the north and south portions of the development. This area could also be a location for community events and individual family use. These design feature of the proposed Project would contribute to the community rather than detract from it.

Goal 10.6: Target selected commercial and residential corridors for action to improve their appearance. These include:

San Gabriel Boulevard, from Hermosa Avenue to the I-10 Freeway	• Sidewalks, curbs, gutters, and street improvements • Street tree planting • Underground utilities • Sign control • Historical markers and wayfinding • Medians

Consistent. The Project Site is located in the segment of S. San Gabriel Boulevard between Hermosa Avenue to the I-10 Freeway and the proposed Project would develop residential and commercial uses on a vacant Project Site that has no unique visual appearance. In support of this goal to improve the S. San Gabriel Boulevard corridor, development of the proposed Project would include sidewalk, curb, gutter, and street improvements, as necessary. The proposed Project would also include streetscaping on all public spaces fronting the Project Site, including street trees, sidewalks, a turf parkway, raised planters, and green screen planters. In addition, the Project could include undergrounding the overhead utilities along S. San Gabriel Boulevard, S. Gladys Avenue, and E. El Monte Street. Furthermore, the proposed Project would utilize a Master Sign Program to ensure that all signs would be consistent and complimentary with the architecture of the development. As such, development of the proposed Project would serve to improve the appearance of S. San Gabriel Boulevard.

Goal 10.10: Make the quality of landscape design a fundamental component of all decision-making for new development.

Consistent. Organized around a central park area, the landscaping design of the Project Site provides homage to the previous property owner, the San Gabriel Nursery, now located north of the Project Site. The proposed landscaping plan, to be prepared by a licensed landscape architect, would consist of a broad variety of species types and would incorporate the row of palm trees that exist within the Project Site. Additionally, the juniper trees located along the frontage of S. San Gabriel Boulevard would be relocated to the grove that would line the walkway from S. Gladys Avenue to and through the central park.

Goal 10.11: End sign clutter in San Gabriel.

Consistent. Signage for the proposed Project would include wayfinding signs for parking, service uses, and residential uses. Wall signage for anchor retail spaces would be consistent with national branding, mounted with dual lit lettering. In addition, a digital sign would be located within the central park area.

In support of this goal to end sign clutter, the Applicant would utilize a Master Sign Program to ensure that all signs would be consistent and complimentary with the architecture of the development.

Goal 10.13: Require development to provide architectural and public art amenities.

Consistent. The proposed Project proposes a strong use of geometry in the central park area and the second level residential courtyards to reinforce the modern design style. The pedestrian-oriented central park and plaza area includes multiple green spaces allowing for both passive and programmed use, which in turn would activate the surrounding retail spaces. Proposed plaza elements include a water feature, vertical metal screens, lighted bollard seating, and large decorative pots and raised planters with bench and light columns. Hardscape concepts would differentiate between pedestrian and vehicle areas, including driveway cobble paving, sandblasted finished concrete, and mica sparkles in concrete bands.

As mentioned above, the proposed Project is organized around a central park and plaza with expansive landscaping and outdoor seating areas with the focus of creating an internal, pedestrian oriented open space. This open space allows for people to circulate through the site and between the 700 Plaza and the 800 Plaza, as well as to the larger community to the east and west of the Project Site. Vehicle circulation within the central park area is limited to service vehicles only to maintain a pedestrian dominant open space. In addition, the central park area would also include a pavilion, which is designed as a public art element creating a focal point for the central park area for passive and programmed use.

San Gabriel Municipal Code (Lighting)

The proposed Project would be consistent with both residential and commercial zoning regulations regarding lighting as specified in the SGMC. Specifically, the proposed Project would be consistent with Section 150.218 Special Residential Building Provisions, which includes lighting requirements for multiple-family dwelling units. Lighting within aisles, passageways, and recesses would be illuminated with an intensity of at least 0.25 foot-candles; open parking lots, exterior garage door areas, carports and access thereto would be maintained minimum of one foot-candle of light; all required lighting would be designed to turn on automatically; and luminaries would be directed or shielded so as to not be directly visible from a dwelling unit or cause off-site glare or nuisance. The proposed Project would also be consistent with Section 150.219 Special Commercial Provisions. As required by this section, the proposed Project would illuminate the address number of every commercial building and any business that affords vehicular access to the rear through any driveway, alleyways, or parking lot would also display the same numbers on the rear of the building; all exterior commercial doors would be illuminated with a minimum of one foot-candle of light; open parking lots for use by the general public, would be provided with a maintained minimum of one-foot candle of light; all required lighting would be designed to turn on and off automatically; and luminaries would be directed or shielded so as not to be directly visible from any dwelling unit or to cause off-site glare or nuisance.

Therefore, based on the above, the proposed Project would not conflict with applicable zoning and other regulations governing scenic quality, including the General Plan goals and lighting regulations required under the SGMC. **Impacts would be less than significant.**

Shade/Shadow

While not required by the CEQA Guidelines, an analysis of shade/shadow impacts has been provided for informational purposes.

Figures 3.1-8 through **3.1-11**, show Project-generated shading during the summer solstice, fall equinox, spring solstice, and summer equinox, respectively. Note that shadows are at their shortest during the summer solstice and shadows are at their longest during the winter solstice.

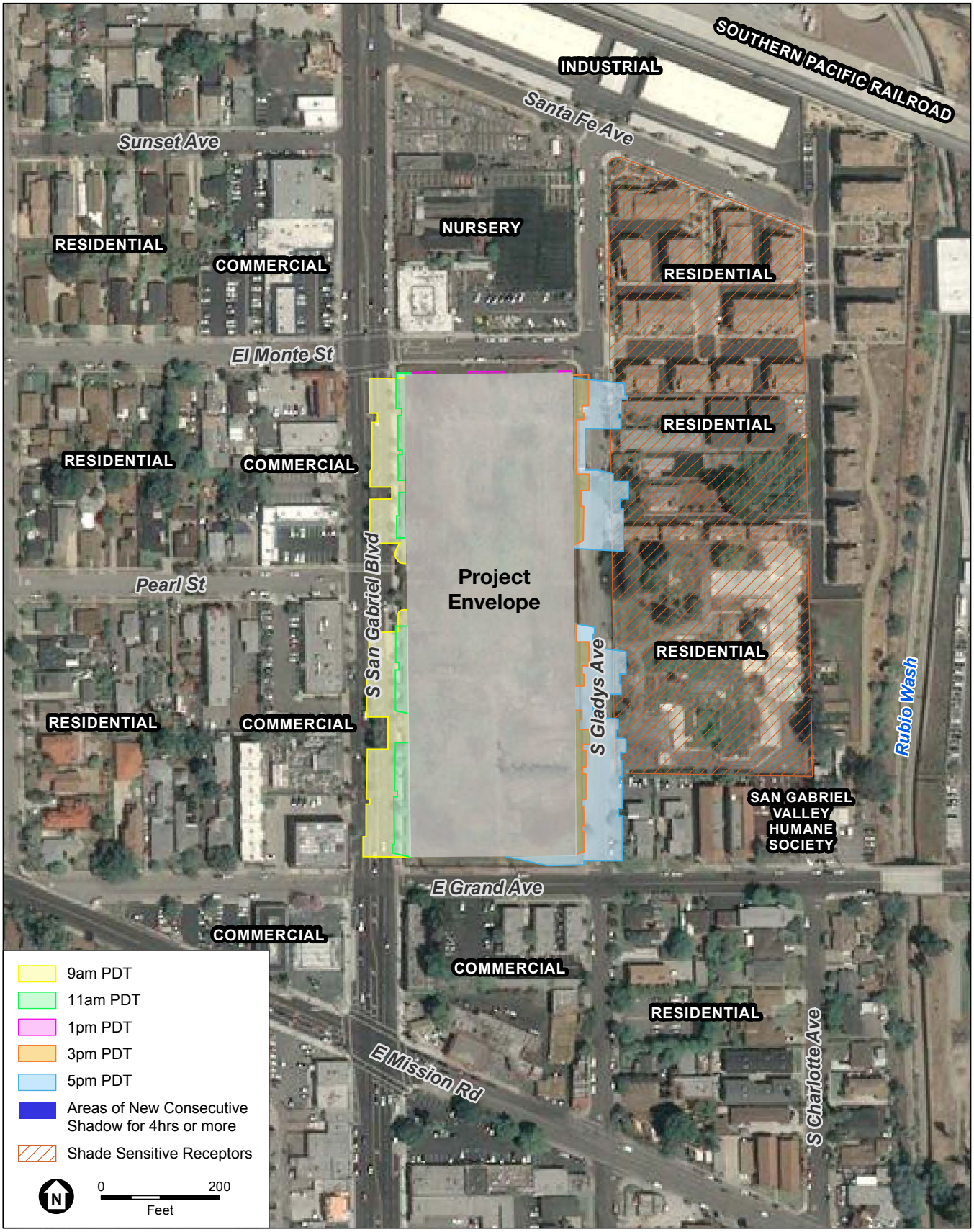
As shown in the summer solstice diagram provided in Figure 3.1-8, while shadows would extend off-site towards the shadow sensitive receptors to the east of the Project Site from 3:00 PM to 5:00 PM, no areas would be consecutively shadowed for more than four hours.

The fall equinox diagram is provided in Figure 3.1-9. As illustrated therein, from 3:00 PM to 5:00 PM, shadows move from the Project Site toward the off-site shadow sensitive receptors to the east of the Project Site and shadows would encroach on the boundary of residential uses by 5:00 PM. However, no areas would be consecutively shadowed for more than four hours. The only area that would include new consecutive shadows for four hours or more are shadows cast to the north on E. El Monte Street toward the existing nursey uses.

As shown in the winter solstice diagram provided in Figure 3.1-10, shadows would only be cast from 9:00 AM to 3:00 PM Shadows would encroach on the boundary of residential uses by 3:00 PM. However, no areas would be consecutively shadowed for more than three hours. The only area that would include new consecutive shadows for four hours or more are shadows cast to the north on E. El Monte Street toward the existing nursey uses and would specifically shadow a small portion of the existing surface parking area.

The spring equinox diagram is provided in Figure 3.1-11. As illustrated therein, from 3:00 PM to 5:00 PM, shadows move from the Project Site toward the off-site shadow sensitive receptors to the east of the Project Site and shadows would encroach on the boundary of residential uses by 5:00 PM. However, no areas would be consecutively shadowed for more than four hours. The only area that would include new consecutive shadows for four hours or more are shadows cast to the north on E. El Monte Street toward the existing nursey uses.

The proposed Project would not shade any off-site shade-sensitive receptors for more than four hours between the hours of 9:00 AM and 5:00 PM Pacific Daylight Time (PDT) (between March and November) and for more than three hours between the hours of 9:00 AM and 3:00 PM PDT (between December and March). Additionally, while the shadows would be cast towards the existing nursery uses, the shadows would not shade the nursery itself and would only cast shadows onto the sidewalk and surface parking lot by the nursery. **Impacts would be less than significant.**



D170696.01 - Pacific Square San Gabriel Mixed-Use Project\05 Graphics-GIS-Modeling\DEIR\Illustrator

SOURCE: ESA, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 3.1-8
Shadow Diagram – Summer Solstice

ESA



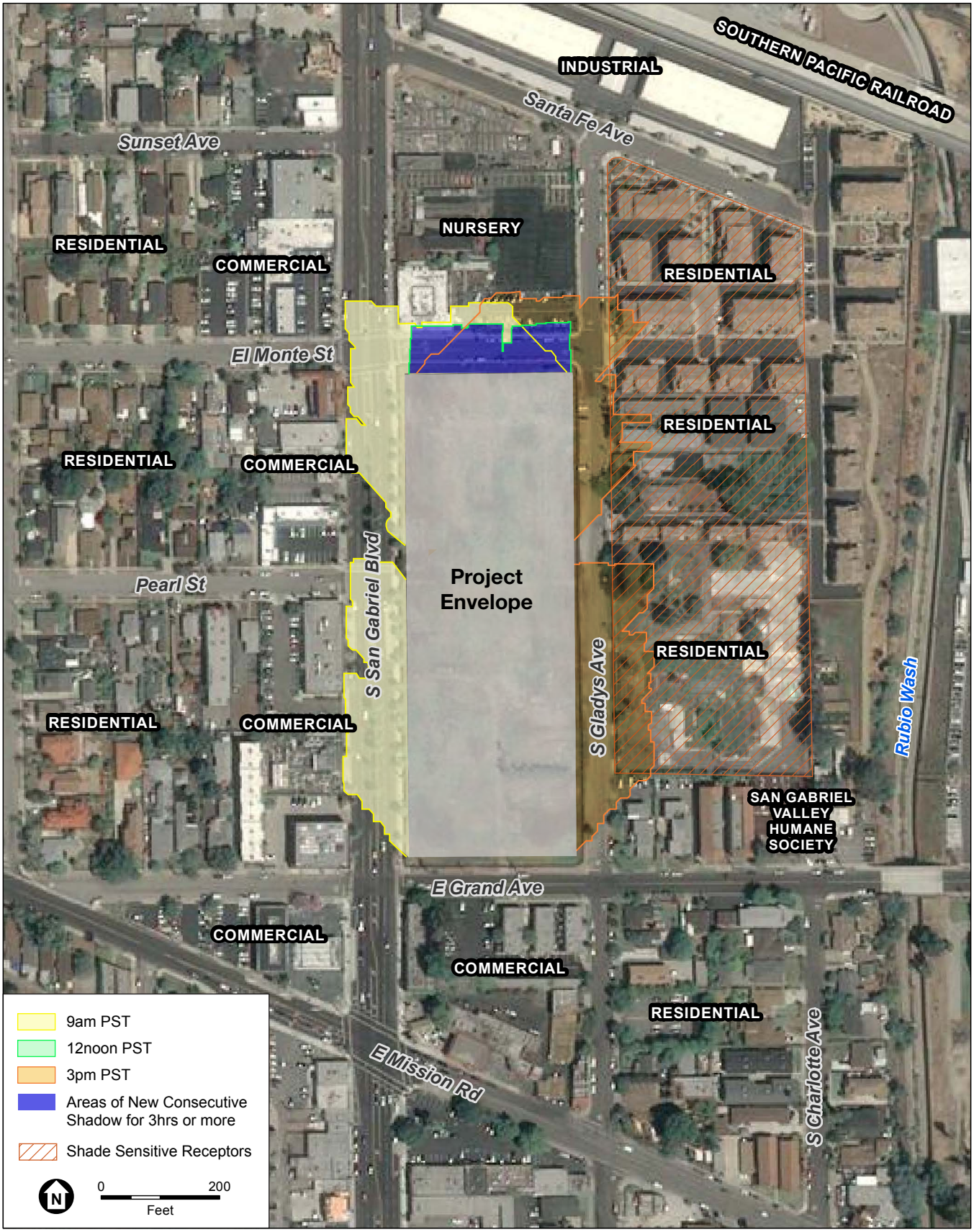
D170696.01 - Pacific Square San Gabriel Mixed-Use Project\05 Graphics-GIS-Modeling\DEIR\Illustrator

SOURCE: ESA, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 3.1-9
Shadow Diagram – Fall Equinox

ESA



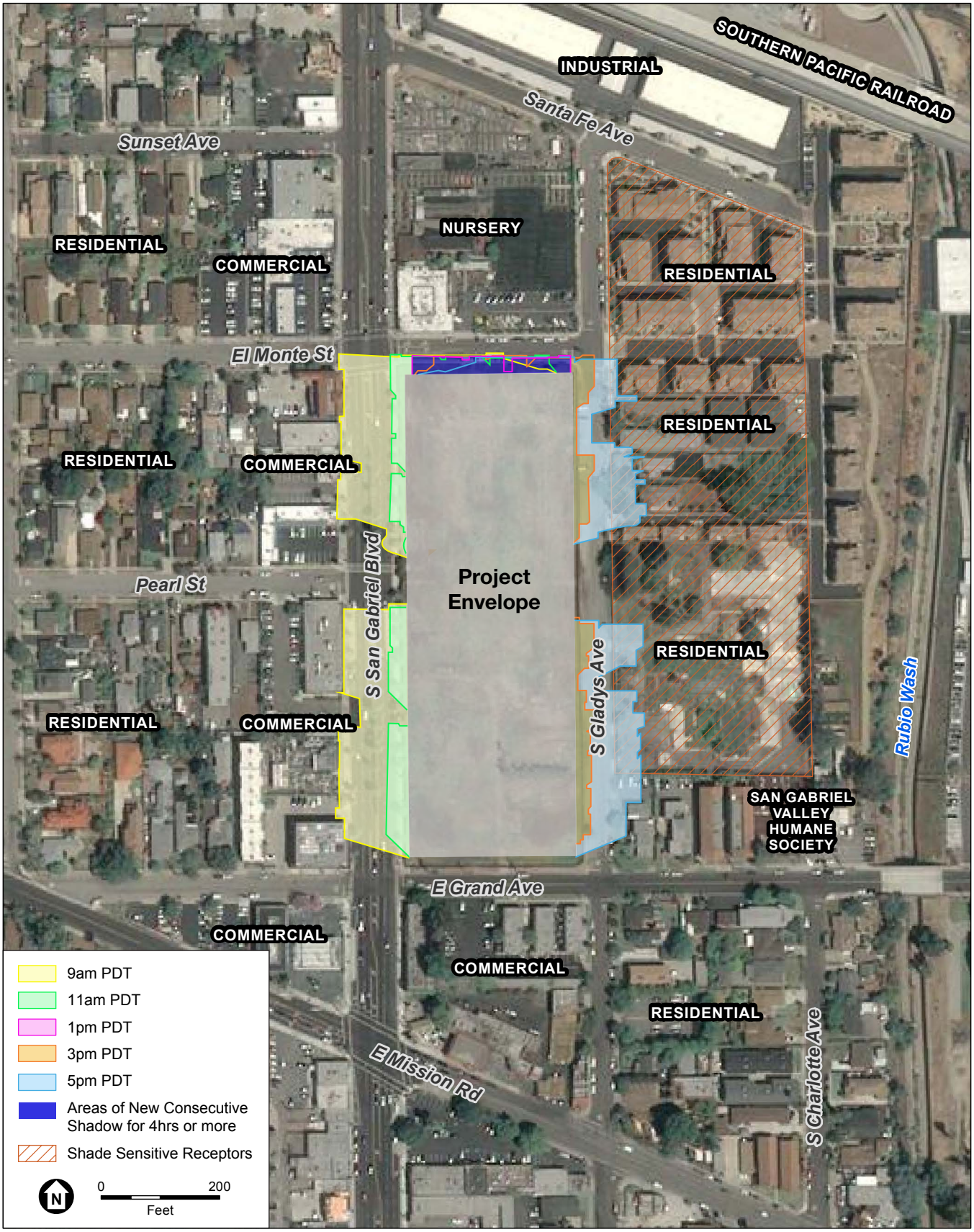
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SOURCE: ESA, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 3.1-10
Shadow Diagram – Winter Solstice

ESA



D170696.01 - Pacific Square San Gabriel Mixed-Use Project\05 Graphics-GIS-Modeling\DEIR\Illustrator

SOURCE: ESA, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 3.1-11
Shadow Diagram – Spring Equinox

ESA

Impact AES-4: The proposed Project would not create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area. (Less than Significant Impact.)

Construction

Project construction lighting would increase the low level of existing nighttime lighting at the Project Site. However, the Project area is an urbanized setting characterized by a moderate amount of nighttime lighting. Construction activities are anticipated to take place during daylight hours, as required by the SGMC. In particular, construction work shall take place within the City only between the hours of 7:00 AM and 7:00 PM, Monday through Friday and between the hours of 8:00 AM and 4:00 PM on Saturday. Any construction-related nighttime lighting would be used at the Project Site only for safety and security purposes. Construction lighting would be shielded, directed downward in such a manner as to avoid undue glare or light trespass onto adjacent uses. In addition, 8-foot tall security fencing would be provided around the construction site, which would block ground-level views of the construction site and reduce light spillover onto adjacent properties. Finally, Project construction lighting would be intermittent during certain stages of the construction period. **As such, impacts related to lighting and glare during construction would be less than significant.**

Operation

The proposed Project would develop 243 residential units, 8 live/work units, and 76,046 square feet of commercial space within five occupied stories, plus a mezzanine for a total of six stories, at a maximum height of 65 feet along with supporting open space across the 5.85-acre Project Site. Currently, the Project vicinity generates a moderate level of artificial lighting typical of urbanized areas. Light sources include street lights, illumination from signs, low-level security lighting, vehicle headlights, interior lighting from surrounding land uses including the regional shopping centers and residential lighting. During the nighttime hours, surrounding commercial and residential developments typically display moderate levels of interior and exterior lighting for wayfinding, security, parking, signage, architectural highlighting, and landscaping/decorative purposes. Traffic on local streets also contributes to medium ambient light levels in the area.

The proposed Project would include the development of commercial-retail uses, such as a market and a restaurant, and residential uses, which would increase the light and glare levels emanating from the Project Site. New sources of artificial lighting that would be introduced to the Project Site include: site lighting along walkways and landscaping, lighting associated with safety, security, and wayfinding; interior and exterior building lighting, and signage lighting; additional street lighting; and lighting within the proposed central park located at the center of the Project Site, which could include occasional night-time events held at the pavilion. The proposed Project could include a digital sign located within the central park area, but would not include signs with flashing, mechanical, or strobe lights. New sources of glare would include building surfaces, such as windows and glass doors, and vehicles associated with the Project Site.

During operation, the proposed Project would introduce new sources of light including site lighting, building signage, and interior lighting. Light sources would include site exterior lighting along walkways, landscaped areas, and safety and security lighting on the ground floor and in the

common areas which would assist with safety, security, and wayfinding. Building signage which would be used for building identification, and interior lighting which could be visible through the windows of the residential units and the ground-floor and mezzanine parking garage.

Project Site lighting has the potential to spill over to off-site sensitive land uses in the Project vicinity. However, the lighting would be low intensity and directed towards the interior of the Project Site to avoid light spillover. Generally, the Project lighting sources would be similar to or less than other lighting sources in the Project vicinity and would not generate artificial light levels that are out of character with the surrounding area. Building lighting used for signage would be low intensity in nature would be characterized as having a low to medium intensity.

As for the lighting related to the pavilion, as with the uses on the Project Site, lighting related to evening events related to the pavilion would also be directed towards the interior of the Project Site to avoid light spillover to the residential uses to the east of the Project Site. In addition, the pavilion would be located away from the residential uses to the east of the Project Site and would avoid any potential spillover. All lighting would be subject to the provisions of the City lighting regulations which are found in Sections 150.218 and 150.219 of the SGMC. Per these provisions, all residential aisles, passageways, and recesses related to and within the building complex shall be illuminated with intensity at least 0.25 foot-candles at ground level during the hours of darkness and all required lighting shall be designed to turn on automatically. Exterior commercial doors, during the hours of darkness, shall be illuminated with a minimum of one foot-candle of light and all luminaries shall be directed or shielded so as to not be directly visible from a dwelling unit or cause off-site glare or nuisance. Therefore, compliance with and SGMC requirements related to project lighting would ensure that impacts from lighting during operation of the proposed Project would be less than significant.

The proposed Project would introduce new sources of glare, including building surfaces and project-related vehicles. The proposed Project would be designed in a contemporary architectural style and would feature a wide variety of surface materials, including: pre-cast concrete, terra cotta, plaster, aluminum, glass, tile, and prefinished metal. Metal and prefinished building materials would be used as accent materials, such as metal awnings and aluminum storefronts, and would not cover expansive spaces. The glass used in building facades would be anti-reflective or treated with anti-reflective coating in order to minimize glare from reflected sunlight. Thus, implementation of the proposed Project would not generate any potential impacts from glare as a result of the use of glass or other building materials.

Furthermore, while the proposed Project would introduce new project-related vehicles, these vehicles would be parked throughout three levels of concrete parking, including one level subterranean (maximum depth 12’ below grade), one level at grade, and one level of mezzanine (maximum height 21’-6” above grade). Thus, vehicles would not have the potential to produce glare when exposed to the sun as in a surface parking lot. In addition, the parking structure would eliminate the reflection potential from parked cars as viewed from surrounding areas and roadways during the day and night, and would substantially reduce lighting levels from vehicle headlights during the night. Therefore, no impacts to glare or reflection potential from parked cars would be anticipated.

Based on the above, with compliance with the SGMC requirements, lighting and glare associated with project operation would not substantially alter the character of offsite areas surrounding the Project Site. **Therefore, impacts from project-related sources of artificial light and glare during Project operations would be considered less than significant.**

3.1.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the proposed Project in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. **Table 3.0-1** in Chapter 3, *Introduction to Environmental Analysis*, provides the list of the 37 cumulative projects within the Cities of San Gabriel and Rosemead within the study area of the Project Site. These cumulative projects in the study area with these cities have a pending development application, are approved, or are under construction. Certain plan documents are located on the list if they have applications pending for specific projects in the study area. The locations of the related projects are illustrated in **Figure 3-1** provided in Chapter 3, *Introduction to Environmental Analysis*, of this Draft EIR.

The geographic area affected by the proposed Project and its potential to contribute to cumulative impacts encompasses the Project Site and its adjacent areas. The aesthetic impacts are generally specific to the Project Site and the nearby land uses that would be visible from the Project Site. For the purpose of evaluating aesthetics, related projects are projects near enough to the Project Site to share the same field of view so that viewers along a street or sidewalk could experience the cumulative visual experience of the Project combined with related projects.

The relevant related projects for cumulative aesthetic analysis include:

No. 8 – 600 S. San Gabriel Boulevard, located approximately 0.06-miles north of the Project Site

No. 19 – 824 S. Gladys Avenue, located approximately 0.01-mile east of the Project Site, across S. Gladys Avenue

Scenic Vistas

As previously discussed, while the development of the proposed Project would block intermittent views of the San Gabriel Mountains from this segment of S. San Gabriel Boulevard, these views do not represent prominent views of the San Gabriel Mountains due to the distance and intervening development surrounding the Project Site and due to the fact that the views of the San Gabriel Mountains from the Project Site are broad and representative of views to the mountains from many locations in San Gabriel and surrounding area (primarily north-south facing streets. Cumulative Project No. 8, which includes the development of 18 condominiums, and 10,000 square feet of retail uses, and Cumulative Project No. 19, which includes the development of 197 senior living dwelling units, are in proximity to the Project Site. Development of the proposed Project and near-by cumulative projects are within the same view field, as viewed from E. Grand Avenue. However, as scenic views of the San Gabriel Mountains are currently intermittent in the existing condition, development of the proposed Project and cumulative projects combined would not have a substantial adverse effect on a scenic vista. **Cumulative impacts would be less than significant.**

Scenic Resources

As previously discussed, the proposed Project would have no impact with respect to scenic resources. Accordingly, the proposed Project could not contribute to cumulative impacts. **No further discussion of cumulative impacts related to scenic resources is required.**

Regulations Governing Scenic Quality

Cumulative projects, as with the proposed Project, are expected to comply with regulations governing scenic quality provided within the General Plan and the SGMC. The proposed Project was found to not conflict with goals of the General Plan and zoning regulations in the SGMC. As with the proposed Project, cumulative projects, which include the development of residential and commercial uses, would generally be consistent with various goals of the General Plan. Goals include those related to preserving the character of the surrounding neighborhoods as well as emphasizing landscape design and providing architectural and public art amenities. Cumulative projects would also be required to implement zoning regulations related to lighting as part of the lighting design of the cumulative project, similar to the proposed Project. As such, the combination of the cumulative projects and the proposed Project would not conflict with applicable zoning and other regulations governing scenic quality. **Cumulative impacts would be less than significant.**

Light and Glare

The area surrounding the Project Site and cumulative projects is urbanized and generates ambient light. Similar to the proposed Project, the cumulative projects would be required to minimize excessive light and glare that would be inappropriate for the setting. Each cumulative project would respectively be required to reduce light or glare generated by each project. During construction, cumulative projects would implement similar techniques as the proposed Project that would require lighting used during construction to be shielded and/or aimed so that no direct beam illumination is directed outside of the Project Site boundary. In addition, as with the proposed Project, all lighting introduced by cumulative projects would be subject to the provisions of the City lighting regulations which are found in Sections 150.218 and 150.219 of the SGMC. Light sources would be required to be shielded and/or aimed downwards to minimize direct illumination and to preclude light pollution or trespass onto adjacent properties. Materials would also be required to include low-reflectivity glass and/or materials with low-reflective coating to reduce impacts from glare onto surrounding areas. The combination of the cumulative projects and the proposed Project would not create a discernable increase in light and glare. **Cumulative impacts would be less than significant.**

3.1.7 References

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3.2 Air Quality

This section analyzes the potential effects of the proposed Project's impacts on air quality by identifying quantified construction and operational air emissions. The analysis also addresses the consistency of the Project with the air quality policies set forth within the California Air Resources Board (CARB), the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan (AQMP), and the City of San Gabriel General Plan. The analysis of Project-generated air emissions focuses on whether the Project would cause exceedance of an ambient air quality standard or SCAQMD significance thresholds. Calculation worksheets, assumptions, and model outputs used in the analysis are contained in Appendix B of this Draft EIR.

3.2.1 Existing Conditions

The 5.85-acre Project Site is located in the City of San Gabriel (City) at 700-800 S. San Gabriel Boulevard and is bounded by E. Grand Avenue on the south, S. Gladys Avenue on the east, E. El Monte Street on the north, and S. San Gabriel Boulevard on the west. The Project Site is currently vacant and unoccupied as all previously existing greenhouses and associated structures on-site were removed after an act of arson in 2018. The Project Site was previously occupied by San Gabriel Nursery & Florist, which continues to operate on a 2-acre parcel just north of the Project Site as a retail garden and florist shop. Because the Project Site is currently vacant, development of the Project would not remove any current uses emitting criteria air pollutants. Therefore, all construction and operational emissions are considered to be net new, i.e., no existing air quality emissions.

Regional Conditions

Criteria Pollutants

The Project Site is located within the South Coast Air Basin (Air Basin), which is an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Air Basin consists of Orange County, Los Angeles County (excluding the Antelope Valley portion), the western, non-desert portion of San Bernardino County, and the western Coachella Valley and San Gorgonio Pass portions of Riverside County. The terrain and geographical location are coastal plain with connecting broad valleys and low hills, which determine the distinctive climate of the Air Basin.

The Air Basin lies in the semi-permanent high-pressure zone of the eastern Pacific Ocean. The usually mild climatological pattern is interrupted by periods of hot weather, winter storms, or Santa Ana winds. The extent and severity of pollutant concentrations in the Air Basin are a function of the area's natural physical characteristics (weather and topography) and man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and dispersion of pollutants throughout the Air Basin, making it an area of high pollution potential. The Air Basin's meteorological conditions, in combination with regional topography, are particularly conducive to the formation and retention of ozone (O_3), which is a secondary pollutant that forms through photochemical reactions in the atmosphere. Thus, the greatest air pollution impacts throughout the Air Basin typically occur from

June through September. This condition is generally attributed to the emissions occurring in the Air Basin, light winds, and shallow vertical atmospheric mixing. These factors reduce the potential for pollutant dispersion causing elevated air pollutant levels. Pollutant concentrations in the Air Basin vary with location, season, and time of day. Concentrations of O_3, for example, tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Air Basin and adjacent desert (SCAQMD, 2017).

Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants, due to their presence in elevated concentrations in the atmosphere. Such pollutants have been identified as criteria air pollutants and are regulated as part of the overall endeavor to prevent further deterioration and facilitate improvement in air quality. The following criteria pollutants are regulated by the United States Environmental Protection Agency (USEPA) and are subject to emissions control requirements adopted by federal, state, and local regulatory agencies. The federal criteria air pollutants include: ozone (O_3); nitrogen dioxide (NO_2); carbon monoxide (CO); sulfur dioxide (SO_2); respirable particulate matter (PM10); fine particulate matter (PM2.5); and lead. These pollutants are described below.

Ozone: O_3 is a secondary pollutant formed by the chemical reaction of volatile organic compounds (VOCs) and nitrogen oxides (NO_X) in the presence of sunlight under favorable meteorological conditions, such as high temperature and stagnation episodes. O_3 is formed in the atmosphere from chemical reactions between pollutants emitted from vehicles, factories, industrial sources, consumer products and many other sources. O_3 has a characteristic pungent odor. O_3 can damage the tissues of the respiratory tract, causing inflammation and irritation, and result in symptoms such as coughing, chest tightness and worsening of asthma symptoms. O_3 can also cause damage to crops, forests, and native plans, as well as, rubber and plastics. Children, adolescents and adult who exercise or work outdoors are at the greatest risk of harm from O_3 exposure (CARB, 2019a).

Volatile Organic Compounds: VOCs are typically formed from combustion of fuels and/or released through evaporation of organic liquids, internal combustion associated with motor vehicle usage, and consumer products (e.g., architectural coatings, etc.) and are the major sources of hydrocarbons (CARB, 2016a). Some VOCs are also classified by the State as toxic air contaminants (TACs). VOCs are comprised primarily of hydrogen and carbon. VOCs themselves are not "criteria" pollutants; however, they contribute with NOx to the formation of O_3 and are regulated as O_3 precursor emissions.

Nitrogen Dioxide: NO_2 is a pungent, reddish-brown, reactive gas that is formed in the ambient air through the oxidation of nitric oxide (NO). The principle form of NO_2 produced by combustion is NO, which reacts quickly to form NO_2, creating the mixture of NO and NO_2 referred to as nitrogen oxides (NO_X). Major sources of NO_X include power plants, large industrial facilities, and motor vehicles. Emissions of NO_X can potentially irritate the nose and throat and may increase susceptibility to respiratory infections, especially in people with asthma. NO_2 exposure can intensify responses to allergens in allergic asthmatics. In addition, studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and

intensified allergic responses (CARB, 2019b). Infant and children, due to their greater breathing rates for their body weight and typically greater outdoor exposure, are at greater risk from NO_2 exposure than adults. Several studies have determined that long-term NO_2 exposure during childhood can lead to smaller lungs at maturity versus children with lower levels of exposure (CARB, 2019b). For adults, the greatest risk from exposure is to people with chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB, 2019b)

Carbon Monoxide (CO): Carbon monoxide is a colorless, odorless gas, primarily emitted from combustion processes and motor vehicles due to incomplete combustion of fuel. CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen which interferes with oxygen delivery to the body's organs (CARB, 2019c). The most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen to the brain (CARB, 2019c). People with cardiovascular disease are at a greater risk to short-term CO exposure as it can further reduce their body's ability to respond to the increased oxygen demands of exercise, exertion, or stress (CARB, 2019c). Pregnant women who are exposed to high levels of CO during pregnancy have babies with a higher risk of adverse developmental effects (CARB, 2019c). Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB, 2019c).

Sulfur Dioxide (SO_2): Sulfur dioxide is a gas with a pungent and irritating odor. Sulfur oxides (SOx), including SO_2, are emitted when sulfur-containing fuel is burned. Major sources of SO_2 include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Children and adults with asthma are more likely to experience adverse responses with SO_2 exposure, compared with the non-asthmatic population. Effects at levels near the one-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath, and chest tightness, especially during exercise or physical activity. Also, exposure at elevated levels of SO_2 (above 1 part per million [ppm]) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality (CARB, 2019d). The elderly and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB, 2019d).

Particulate Matter (PM10 and PM2.5): The human body naturally prevents the entry of larger particles into the body. However, small particles including fugitive dust, with an aerodynamic diameter equal to or less than ten microns (PM10) and even smaller particles with an aerodynamic diameter equal to or less than 2.5 microns (PM2.5), can enter the body and are trapped in the nose, throat, and upper respiratory tract. Emissions from the combustion of gasoline, oil, diesel fuel or wood produce much of the PM2.5 found in outdoor air, as well as a significant portion of PM10 (CARB, 2017). PM10 also includes dust from construction sites, landfills and agriculture, wildfires and brush/waste burning, industrial sources, wind-blown dust form open lands, pollen and fragments of bacteria (CARB, 2017). PM10 and PM2.5 can be inhaled and deposited throughout the airways with PM10 deposited on the surfaces of the larger airways of the upper region of the lung and PM2.5 deposited on the surface of the deeper parts of the lung which can cause tissue damage and lung inflammation (CARB, 2017). Short-term (up to 24-hour duration) exposure to

PM10 have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits. Short-term exposure to PM2.5 have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days (CARB, 2017). Long-term (months to years) exposure to PM2.5 has been linked to premature death, particularly in people with chronic heart or lung diseases, and reduced lung function growth in children and long-term PM10 exposure can be linked to respiratory mortality (CARB, 2017). In addition, the PM in outdoor air pollution causes lung cancer (CARB, 2017). The elderly with chronic lung or heart disease, children, and asthmatics are the groups most likely to experience adverse health effects from exposure to PM10 and PM2.5.

Lead: Lead is emitted from industrial facilities and from the sanding or removal of old lead-based paint. Smelting or processing the metal is the primary source of lead emissions, which is primarily a regional pollutant. Lead can accumulate in the body, especially in the bones, and causes a variety of adverse health effects if the amount of lead in the body is sufficiently high (CARB, 2019e). Young children are particularly at risk from lead poisoning, adverse health effects are often irreversible and include brain damage and mental retardation, as well as result in behavioral problems, reduced intelligence, anemia, and liver or kidney damage (CARB, 2019e). In adults, lead poisoning can cause reproductive problems, high blood pressure, kidney disease, digestive problems, nerve disorders, memory and concentration problems, muscle and joint pain, and cancer (CARB, 2019e). Additionally, if a pregnant woman is exposed to elevated levels of lead, it can cross the placenta into the baby's blood, increasing the risk of adverse developmental effects in the brain and nervous system (CARB, 2019e).

Toxic Air Contaminants

TACs are generally defined as those contaminants that are known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard. TACs are also defined as an air pollutant that may increase a person's risk of developing cancer and/or other serious health effects; however, the emission of a toxic chemical does not automatically create a health hazard. Other factors, such as the amount of the chemical; its toxicity, and how it is released into the air, the weather, and the terrain, all influence whether the emission could be hazardous to human health. TACs are emitted by a variety of industrial processes such as petroleum refining, electric utility and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust and may exist as PM10 and PM2.5 or as vapors (gases). TACs include metals, other particles, gases absorbed by particles, and certain vapors from fuels and other sources.

The emission of toxic substances into the air can be damaging to human health and to the environment. Human exposure to these pollutants at sufficient concentrations and durations can result in cancer, poisoning, and rapid onset of sickness, such as nausea or difficulty in breathing. Other less measurable effects include immunological, neurological, reproductive, developmental, and respiratory problems. Pollutants deposited onto soil or into lakes and streams affect ecological systems and eventually human health through consumption of contaminated food. The carcinogenic potential of TACs is a particular public health concern because many scientists currently believe

that there is no "safe" level of exposure to carcinogens. Any exposure to a carcinogen poses some risk of contracting cancer.

The public's exposure to TACs is a significant public health issue in California. The Air Toxics "Hotspots" Information and Assessment Act is a state law requiring facilities to report emissions of TACs to air districts. The program is designed to quantify the amounts of potentially hazardous air pollutants released, the location of the release, the concentrations to which the public is exposed, and the resulting health risks (CARB, 2016b). The State Air Toxics Program (Assembly Bill [AB] 2588) identified over 200 TACs, including the 189 TACs identified in the federal Clean Air Act (https://www.arb.ca.gov/toxics/id/taclist.htm).

The Unites States Environmental Protection Agency (USEPA) has assessed this expansive list of toxics and preliminarily identified 21 TACs as Mobile Source Air Toxics (MSATs); however, the list is subject to change (USEPA, 2007). MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline. USEPA also extracted a subset of these 21 MSAT compounds that it considers high priority compounds due to their significant contribution to cancer and non-cancer health risks and the contribution of mobile sources to total exposure as evaluated by the USEPA's National Air Toxics Assessments (NATA). These pollutants include benzene, 1,3-butadiene, ethylbenzene, acrolein, acetaldehyde, formaldehyde, naphthalene, polycyclic organic matter, and diesel particulate matter (DPM)/organic gases (Kimbrough et al, 2014).

To date, the most comprehensive study on air toxics in the Air Basin is the Multiple Air Toxics Exposure Study (MATES-IV), conducted by SCAQMD in 2012 and 2013. This study is a follow-up to previous air toxics studies (MATES-I through MATES-III) conducted in the Air Basin. The MATES IV Final Report was issued in 2015 (SCAQMD, 2015a). The study, based on actual monitored data throughout the Air Basin, consisted of several elements: a monitoring program, an updated emissions inventory of TACs, and a modeling effort to characterize carcinogenic risk across the Air Basin from exposure to TACs. The study concluded that the average of the modeled air toxics concentrations measured at the monitoring stations in the Air Basin equates to a background cancer risk of approximately up to 418 per million (SCAQMD, 2015a).

Subsequent to the SCAQMD's risk calculations estimates performed for MATES IV, the California Environmental Protection Agency Office of Environmental Health Hazard Assessment (OEHHA) updated the methods for estimating cancer risks, which utilize higher estimates of cancer potency during early life exposures and use different assumptions for breathing rates and length of residential exposure (OEHHA, 2015). When combined together, SCAQMD staff estimates that risks for the same inhalation exposure level will be about 2.5 to 2.7 times higher using the updated methods. This is reflected in the average lifetime air toxics risk estimate increasing from up to 418 per million to up to 1,023 per million (SCAQMD, 2015a).

Approximately 68 percent of the risk is attributed to diesel particulate matter emissions, approximately 22 percent to other toxics associated with mobile sources (including benzene, butadiene, and formaldehyde), and approximately 10 percent of all airborne carcinogenic risk is attributed to stationary sources (which include industries and other certain businesses, such as dry cleaners and chrome plating operations) (SCAQMD, 2015a). The study also found lower ambient concentrations of most of the measured air toxics compared to the levels measured in the previous MATES-III study conducted during 2004 and 2006. Specifically, benzene and 1,3-butadiene, pollutants generated mainly from vehicles, were down 35 percent and 11 percent, respectively (SCAQMD, 2015a). The reductions were attributed to air quality control regulations and improved emission control technologies. In addition to air toxics, MATES IV included continuous measurements of black carbon and ultrafine particles (particles smaller than 0.1 microns in size), which are emitted by combustion of diesel fuels. Sampling sites located near heavily-trafficked freeways or near industrial areas were characterized by increased levels of black carbon and ultrafine particles compared to more rural sites (SCAQMD, 2015a).

Diesel Particulate Matter

According to the 2009 California Almanac of Emissions and Air Quality, the majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from the exhaust of diesel-fueled engines, at 79 percent of statewide health risk (CARB, 2009a). DPM emissions have decreased by 37 percent between 2000 and 2010 with forecasts of emissions to decline by 71 percent from 2000 levels by 2035 (CARB, 2013). DPM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances.

Diesel exhaust is composed of two phases, gas and particle, and both phases contribute to the health risk. The gas phase is composed of many of the urban hazardous air pollutants, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde and polycyclic aromatic hydrocarbons. The particle phase is also composed of many different types of particles by size or composition. Fine and ultra-fine diesel particulates are of the greatest health concern, and may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals and other trace elements. Diesel exhaust is emitted from a broad range of diesel engines; the on-road diesel engines of trucks, buses and cars and the off-road diesel engines that include locomotives, marine vessels and heavy-duty equipment. Although DPM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present.

The most common exposure to DPM is breathing the air that contains diesel exhaust. The fine and ultra-fine particles are respirable (similar to PM2.5), which means that they can avoid many of the human respiratory system defense mechanisms and enter deeply into the lung. Exposure to DPM comes from both on-road and off-road engine exhaust that is either directly emitted from the engines or lingering in the atmosphere. Based on receptor modeling techniques, SCAQMD estimated that DPM accounts for 68 percent of the total risk in the Air Basin. From MATES III to MATES IV, DPM has shown a reduction of 70 percent in levels measured at the 10 monitoring sites (SCAQMD, 2015a).

Local Conditions

Air Quality Monitoring Station Data

SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin to measure ambient criteria pollutant concentrations. The monitoring station most representative of the Project Site is the West San Gabriel Valley Monitoring Station, located at 752 S. Wilson Ave, Pasadena, CA 91702, which monitors CO, O_3, NO_2, and PM2.5. The next most representative station is the Central Los Angeles monitoring station; however, for this analysis, only SO_2, PM10, and lead are used from this monitoring station for ambient conditions. The most recent data available from SCAQMD for these monitoring stations are from years 2016 to 2018 (SCAQMD, 2018), which are summarized in **Table 3.2-1**.

TABLE 3.2-1
AMBIENT AIR QUALITY DATA

Pollutant/Standard [a]	2016	2017	2018
Ozone, O_3 (1-hour)			
Maximum Concentration (ppm)	0.126	0.139	0.112
Days > CAAQS (0.09 ppm)	12	18	8
Days > Old NAAQS (0.124 ppm)	1	2	0
Ozone, O_3 (8-hour)			
Maximum Concentration (ppm)	0.098	0.100	0.090
4th High 8-hour Concentration (ppm)	0.086	0.092	0.085
Days > CAAQS (0.070 ppm)	19	36	19
Days > NAAQS (0.070 ppm)	18	36	19
Days > Old 1997 NAAQS (0.0.084 ppm)	3	6	4
Days > Old 2008 NAAQS (0.075 ppm)	15	25	8
Nitrogen Dioxide, NO_2 (1-hour)			
Maximum Concentration (ppm)	0.071	0.072	0.068
Days > CAAQS (0.18 ppm)	0	0	0
98th Percentile Concentration (ppm)	0.058	0.059	0.054
Days > NAAQS (0.100 ppm)	0	0	0
Nitrogen Dioxide, NO_2 (Annual)			
Annual Arithmetic Mean (0.030 ppm)	0.015	0.015	0.014
Carbon Monoxide, CO (1-hour)			
Maximum Concentration (ppm)	1.5	2.2	2.0
Days > CAAQS (20 ppm)	0	0	0
Days > NAAQS (35 ppm)	0	0	0
Carbon Monoxide, CO (8-hour)			
Maximum Concentration (ppm)	1.0	1.7	1.4
Days > CAAQS (9.0 ppm)	0	0	0
Days > NAAQS (9 ppm)	0	0	0
Sulfur Dioxide, SO_2 (1-hour)			
Maximum Concentration (ppm)	0.013	0.057	0.018
Days > CAAQS (0.25 ppm)	0	0	0
99th Percentile Concentration (ppm)	0.002	0.003	0.003
Days > NAAQS (0.075 ppm)	0	0	0

Pollutant/Standard [a]	2016	2017	2018
Respirable Particulate Matter, PM10 (24-hour)			
Maximum Concentration (µg/m^3)	67	96	81
Samples > CAAQS (50 µg/m^3)	18	41	31
Samples > NAAQS (150 µg/m^3)	0	0	0
Respirable Particulate Matter, PM10 (Annual)			
Annual Arithmetic Mean (20 µg/m^3)	32.4	34.4	34.1
Fine Particulate Matter, PM2.5 (24-hour)			
Maximum Concentration (µg/m^3)	29.2	22.8	32.5
98th Percentile Concentration (µg/m^3)	25.3	18.8	29.5
Samples > NAAQS (35 µg/m^3)	0	0	0
Fine Particulate Matter, PM2.5 (Annual)			
Annual Arithmetic Mean (12 µg/m^3)	9.5	9.7	10.3
Lead			
Maximum 30-day average (µg/m^3)	0.016	0.017	0.011
Samples > CAAQS (1.5 µg/m^3)	0	0	0
Maximum 3-month rolling average (µg/m^3)	0.01	0.01	0.01
Days > NAAQS (0.15 µg/m^3)	0	0	0

[a] ppm = parts per million; µg/m^3 = micrograms per cubic meter

SOURCE: SCAQMD, 2018.

Toxic Air Contaminant Cancer Risk

SCAQMD has prepared a series of maps that show regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks in the MATES IV Study (SCAQMD, 2015a). The maps represent the estimated number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years). The background potential cancer risk per million people in the Project Site area, using the updated OEHHA methodology, is estimated at 2,588 in one million (compared to an overall Air Basin-wide risk of 1,023 in one million for the average of 10 fixed monitoring sites) (SCAQMD, 2015a). The Project Site has a higher than normal cancer risk because it is located in close proximity to major thoroughfares (i.e., S. San Gabriel Boulevard) and the Southern Pacific Railroad tracks which cause higher levels of DPM exposure. Generally, the risk from air toxics is lower near the coastline and increases inland, with higher risks concentrated near large diesel sources (e.g., freeways, airports, and ports).

Sensitive Receptors and Locations

Certain population groups, such as children, elderly, and acutely and chronically ill persons (especially those with cardio-respiratory diseases), are considered more sensitive to the potential effects of air pollution than others. As a result, certain land uses that are occupied by these population groups, such as residences, hospitals, recreational facilities, and schools, are considered to be air quality-sensitive land uses. The Project Site is primarily surrounded by commercial and residential uses. Sensitive air quality land uses within approximately 500 feet of the Project Site include the following:

- Single-family residences, and apartment buildings are located along the northeast border of the Project Site.
- Single-family residences and apartment buildings are located south of the Project Site.
- Single-family residences and apartment buildings are located east of the Project Site.
- Single family residences and apartment buildings are located west of the Project Site beyond commercial uses.

3.2.2 Regulatory Framework

A number of statutes, regulations, plans, and policies have been adopted that address air quality issues. The Project is subject to the following air quality regulations developed and implemented at the federal, state, and local levels.

Federal Level

Federal Clean Air Act

The Federal Clean Air Act (CAA) was enacted in 1955 and has been amended numerous times in subsequent years, with the most recent amendments occurring in 1990.[1] The CAA is the comprehensive federal law that regulates air emissions in order to protect public health and welfare (USEPA, 2017a). USEPA is responsible for the implementation and enforcement of the CAA, which establishes federal National Ambient Air Quality Standards (NAAQS), specifies future dates for achieving compliance, and requires USEPA to designate areas as attainment, nonattainment, or maintenance. The CAA also mandates that each state submit and implement a State Implementation Plan (SIP) for each criteria pollutant for which the state has not achieved the applicable NAAQS. The SIP includes pollution control measures that demonstrate how the standards for those pollutants will be met.

The sections of the CAA most applicable to the Project include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions) (USEPA, 2017b).[2] Title I requirements are implemented for the purpose of attaining NAAQS for the following criteria pollutants: (1) O_3; (2) NO_2; (3) CO; (4) SO_2; (5) PM10; and (6) lead. The NAAQS were amended in 1997 to include an NAAQS for 8-hour O_3 and for PM2.5. The NAAQS were also amended in 2006 to include an established methodology for calculating PM2.5, as well to revoke the annual PM10 threshold. **Table 3.2-2** shows the NAAQS and the California Ambient Air Quality Standards (CAAQS) currently in effect for each criteria pollutant (USEPA, 2019; CARB, 2016c). The NAAQS, and the CAAQS for the California criteria air pollutants (discussed below), have been set at levels considered safe to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including against decreased visibility and damage to animals, crops, vegetation, and buildings (USEPA, 2019, CARB, 2016c).

[1] 42 United States Code §7401 et seq. (1970).

[2] Mobile sources include on-road vehicles (e.g. cars, buses, motorcycles) and non-road vehicles e.g. aircraft, trains, construction equipment). Stationary sources are comprised of both point and area sources. Point sources are stationary facilities that emit large amount of pollutants (e.g. municipal waste incinerators, power plants). Area sources are smaller stationary sources that alone are not large emitters, but combined can account for large amounts of pollutants (e.g. consumer products, residential heating, dry cleaners).

TABLE 3.2-2
AMBIENT AIR QUALITY STANDARDS

Pollutant	Average Time	California Standards [a]		National Standards [b]		
		Concentration[c]	Method[d]	Primary[c,e]	Secondary[c,f]	Method[g]
O_3 [h]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
NO_2 [i]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemi-luminescence	100 ppb (188 µg/m^3)	None	Gas Phase Chemi-luminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		53 ppb (100 µg/m^3)	Same as Primary Standard	
CO	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10mg/m^3)		9 ppm (10 mg/m^3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
SO_2 [j]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)[9]
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[j]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) [j]	—	
PM10[k]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
PM2.5 [k]	24 Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3 [k]	15 µg/m^3	
Lead [l,m]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[m]	Same as Primary Standard	
	Rolling 3-Month Average [m]	--		0.15 µg/m^3		
Visibility Reducing Particles [n]	8 Hour	Extinction coefficient of 0.23 per kilometer — visibility of ten miles or more (0.07 — 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		**No Federal Standards**		

Pollutant	Average Time	California Standards [a]		National Standards [b]		
		Concentration[c]	Method[d]	Primary[c,e]	Secondary[c,f]	Method[g]
Sulfates (SO_4)	24 Hour	25 µg/m^3	Ion Chroma-tography	**No Federal Standards**		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence	**No Federal Standards**		
Vinyl Chloride [l]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chroma-tography	**No Federal Standards**		

a California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations (CCR).

b National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms/per cubic meter (µg/m^3) is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

d Any equivalent procedure which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

e National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

f National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

g Reference method as described by the USEPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the USEPA.

h On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

i To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb.

j On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

k On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3.

l The California Air Resources Board has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

m The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

n In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

SOURCE: CARB, 2016c; USEPA, 2019.

In addition to criteria pollutants, Title I also includes air toxics provisions, which require USEPA to develop and enforce regulations to protect the public from exposure to airborne contaminants that are known to be hazardous to human health. In accordance with Section 112, USEPA establishes National Emission Standards for Hazardous Air Pollutants (NESHAPs). The list of hazardous air pollutants (HAPs), or air toxics, includes specific compounds that are known or suspected to cause cancer or other serious health effects.

Title II requirements pertain to mobile sources, such as cars, trucks, buses, and planes. Reformulated gasoline, automobile pollution control devices, and vapor recovery nozzles on gas pumps are a few of the mechanisms the USEPA uses to regulate mobile air emission sources. The

provisions of Title II have resulted in tailpipe emission standards for vehicles, which have been strengthened in recent years to improve air quality. For example, the standards for NO_X emissions have been lowered substantially, and the specification requirements for cleaner burning gasoline are more stringent.

The Project is located within the Air Basin, which is designated as nonattainment because it does not currently meet NAAQS for certain pollutants regulated under the CAA. **Table 3.2-3** shows the current attainment status of criteria air pollutants in the Air Basin with national and California standards.

TABLE 3.2-3
SOUTH COAST AIR BASIN ATTAINMENT STATUS (LOS ANGELES COUNTY)

Pollutant	National Standards	California Standards
Ozone (1-hour standard)	Nonattainment – Extreme [a]	Nonattainment
Ozone (8-hour standard)	Nonattainment – Extreme [b]	Nonattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
PM10	Attainment	Nonattainment
PM2.5	Nonattainment – Moderate	Nonattainment
Lead	Nonattainment (Partial) [c]	Attainment
Visibility Reducing Particles	N/A	Unclassified
Sulfates	N/A	Attainment
Hydrogen Sulfide	N/A	Attainment
Vinyl Chloride	N/A	N/A [d]

NOTES:
N/A = not applicable

[a] The NAAQS for 1-hour ozone (0.12 ppm) was revoked on June 15, 2005; however, the Air Basin has not attained this standard based on 2008-2010 data and is still subject to anti-backsliding requirements.

[b] The 1997 NAAQS for 8-hour ozone (0.08 ppm) was reduced (0.075 ppm), effective May 27, 2008; however, the revoked 1997 standard is still subject to anti-backsliding requirements.

[c] Partial Nonattainment designation – Los Angeles County portion of the Air Basin only for near-source monitors. Expect redesignation to attainment based on current monitoring data.

[d] In 1990, the CARB identified vinyl chloride as a toxic air contaminant and determined that it does not have an identifiable threshold. Therefore, the CARB does not monitor or make status designations for this pollutant.

SOURCE: USEPA, 2019; CARB, 2019, SCAQMD, 2016

As shown in Table 3.2-3, the Air Basin does not meet the NAAQS for O_3 (both 1-hour and 8-hour standards), PM10, and PM2.5 and is designated as nonattainment for these pollutants.

The Los Angeles County portion of the Air Basin is also designated as non-attainment for the NAAQS for lead; however, this was due to localized emissions from two previously operating lead-acid battery recycling facilities located in the City of Vernon and the City of Industry, and therefore,

would not affect the Project Site. These facilities are no longer operating and SCAQMD expects re-designation of lead to attainment based on current monitoring data (SCAQMD, 2016).

State Level

California Clean Air Act

In 1988, the California Clean Air Act (CCAA) requires all areas of the State to achieve and maintain the CAAQS by the earliest practical date. The CAAQS apply to the same criteria pollutants as the CAA but also include State-identified criteria pollutants; sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride. CARB has primary responsibility for ensuring implementation of the CCAA (Chapter 1568 of the Statutes of 1988), responding to the CAA planning requirements applicable to the State, and regulating emissions from motor vehicles and consumer products within the State. Table 3.2-2 shows the CAAQS currently in effect for each of the federally recognized criteria pollutants, as well as, the additional pollutants recognized by California. The CAAQS include more stringent standards than the NAAQS for most of the criteria air pollutants.

Health and Safety Code Section 39607(e) requires CARB to establish and periodically review area designation criteria. Table 3.2-3 provides a summary of the attainment status of the Los Angeles County portion of the Air Basin with respect to the state standards. The Air Basin is designated as nonattainment for O_3, PM10, and PM2.5.

The Air Basin is designated as attainment for the California standards for sulfates, hydrogen sulfide, and vinyl chloride and unclassified for visibility-reducing particles. The additional pollutants recognized by California are described below.

Sulfates (SO_4^{2-}): Sulfates occur in the environment as a result of SO_2 being converted to SO_4^{2-} in combination with metal and/or hydrogen ions. Emissions of sulfur compounds occur primarily from the combustion of sulfur-containing, petroleum-derived fuels (e.g., gasoline and diesel fuel) (CARB, 2009b). Exposure to SO_4^{2-} at levels above the standards causes negative health effects including decreased ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease (CARB, 2009b). SO_4^{2-} also degrades visibility and can damage materials and property (CARB, 2009b).[3]

Hydrogen Sulfide (H_2S): H_2S is a colorless gas with a strong odor, like that of rotten eggs. The most common sources of H_2S emissions are oil and natural gas extraction and processing, and natural emissions from geothermal fields (CARB, 2019f). Industrial sources of H_2S include petrochemical plants, coke oven plants, and kraft paper mills (CARB, 2019f). H_2S is also formed during bacterial decomposition of human and animal wastes, and is present in emissions from sewage treatment facilities and landfills (CARB 2019f). Through its strong, foul odor, H_2S can induce tearing of the eyes and symptoms related to overstimulation of the sense of smell, including headache, nausea, or vomiting and is primarily an occupational hazard (CARB, 2019f). H_2S is

[3] Ventilatory function refers to lung volume and the process of moving gas in and out of the lungs from ambient air to the air sacs.

regulated as a nuisance based on its odor detection level. Studies have suggested that asthmatics may be at increased risk of exacerbation of their symptoms (CARB, 2019f).

Visibility-Reducing Particles: Visibility-reducing particles, often known as particulate matter, come from a variety of natural and manmade sources and can vary greatly in shape, size and chemical composition and impact the environment by decreasing visibility (haze) (CARB, 2016d). Visibility reduction is caused by the absorption and scattering of light by the particles in the atmosphere before it reaches the observer. Certain visibility-reducing particles are directly emitted to the air such as windblown dust and soot, while others are formed in the atmosphere through chemical transformations of gaseous pollutants (e.g., sulfates, nitrates, organic carbon particles) which are the major constituents of particulate matter (CARB, 2016d). As the number of visibility reducing particles increases, more light is absorbed and scattered, resulting in less clarity, color, and visual range (CARB, 2016d). Visibility-reducing particles, besides causing visibility impacts, have also been linked to serious health problems (see PM10 and PM2.5 health effects) and environmental damage (CARB, 2016d). The CAAQS is intended to limit the frequency and severity of visibility impairment due to regional haze, which is primarily caused by ambient particles.

Vinyl Chloride: Vinyl chloride is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products (CARB, 2016e). Major sources of vinyl chloride have been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents (CARB, 2016e). Vinyl chloride exposure is primarily an occupational concern and short-term health of effects of exposure to high levels of vinyl chloride in the air include central nervous system effects, such as dizziness, drowsiness, and headaches (CARB, 2016e). Long-term exposure to vinyl chloride through inhalation and oral exposure causes liver damage and inhalation exposure has been shown to increase the risk of angiosarcoma, a rare form of liver cancer in humans (CARB, 2016e).

With respect to the State-identified criteria pollutants (i.e., sulfates, hydrogen sulfide, visibility reducing particles, and vinyl chloride), the Project would either not emit them (i.e., hydrogen sulfide and vinyl chloride), or they would be accounted for as part of the other pollutants estimated in this analysis (i.e., sulfates and visibility reducing particles). For example, visibility reducing particles are associated with particulate matter emissions and sulfates are associated with SO_X emissions. Both particulate matter and SO_X emissions are included in the emissions estimates for the Project.

California Air Resources Board

Air Quality and Land Use Handbook

In 2005, CARB published the *Air Quality and Land Use Handbook* to serve as a general guide for considering impacts to sensitive receptors from facilities that emit TAC emissions (CARB, 2005). The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000

vehicles per day, or rural roads with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines; and (4) avoid siting sensitive receptors within 300 feet of a large gasoline dispensing facility (3.6 million gallons per year or more) or 50 feet of a typical gasoline dispensing facility (less than 3.6 million gallons per year) (CARB, 2005).

On-Road and Off-Road Vehicle Rules

In 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to DPM and other TACs (Section 2485 of Title 13 of the CCR). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given time (CARB, 2018a).

In 2008, CARB approved the Truck and Bus regulation (Section 2025 of Title 13 of the CCR) to reduce NO_X, PM10, and PM2.5 emissions from existing diesel vehicles operating in California (CARB, 2018b). The requirements were amended to apply to nearly all diesel fueled trucks and busses with a gross vehicle weight rating greater than 14,000 pounds (CARB, 2018b). For the largest trucks in the fleet, those with a gross vehicle weight rating greater than 26,000 pounds, there are two methods to comply with the requirements. The first way is for the fleet owner to retrofit or replace engines, starting with the oldest engine model year, to meet 2010 engine standards, or better. This is phased over 8 years, starting in 2015 and would be fully implemented by 2023, meaning that all trucks operating in the State subject to this option would meet or exceed the 2010 engine emission standards for NO_X and PM by 2023, meaning that all trucks operating in the State subject to this option would meet or exceed the 2010 engine emissions standards for NO_X and PM by 2023 (CARB, 2018b). The second option, if chosen, requires fleet owners, starting in 2012, to retrofit a portion of their fleet with diesel particulate filters achieving at least 85 percent removal efficiency, so that by January 1, 2016 their entire fleet is equipped with diesel particulate filters (CARB, 2018b). However, diesel particulate filters do not typically lower NO_X emissions. Thus, fleet owners choosing the second option must still comply with the 2010 engine emission standards for their trucks and busses by 2020 (CARB, 2018b).

In addition to limiting exhaust from idling trucks, CARB recently promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The In-Use Off-Road Diesel-Fueled Fleets Regulation, adopted by CARB in 2007 as Section 2449 of Title 13 of the CCR, aims to reduce NO_X and DPM emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models (CARB, 2019g). Implementation is staggered based on fleet size (which is the total of all off-road horsepower under common ownership or control), with the largest fleets to begin compliance in 2014, medium fleets in 2017, and small fleets in 2019 (CARB, 2016f). Each fleet must demonstrate compliance through one of two methods. The first option is to

calculate and maintain fleet average emissions targets, which encourages the retirement or repowering of older equipment and rewards the introduction of newer cleaner units into the fleet and the second option is to meet the Best Available Control Technology (BACT) requirements by turning over or installing Verified Diesel Emission Control Strategies (e.g., engine retrofits) on a certain percentage of its total fleet horsepower (CARB, 2016f). The compliance schedule requires that BACT turn overs or retrofits be fully implemented by 2023 in all equipment in large and medium fleets and by 2028 for small fleets (CARB, 2016f).

Regional Level

South Coast Air Quality Management District

SCAQMD has jurisdiction over air quality planning for all of Orange County, Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The Air Basin is a subregion within SCAQMD jurisdiction. While air quality in the Air Basin has improved over recent decades, the Air Basin requires continued diligence to meet the air quality standards. SCAQMD is responsible for promoting and improving the air quality of the Air Basin. This is accomplished through air quality monitoring, evaluation, education, implementation of control measures to reduce emissions from stationary source, permitting and inspection of pollution sources, enforcement of air quality regulations, and by supporting and implementing measures to reduce emissions from motor vehicles.

Air Quality Management Plan

SCAQMD has adopted a series of AQMPs (1997, 2003, 2012, 2016) to achieve the CAAQS and NAAQS. The 2012 AQMP incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, and on-road and off-road mobile sources. The 2012 AQMP includes new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches. Additionally, the 2012 AQMP highlights the significant amount of emission reductions needed and the urgent need to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria pollutant standards within the timeframes allowed under the federal CAA (SCAQMD, 2013).

The key undertaking of the 2012 AQMP is to bring the Air Basin into attainment with the NAAQS for the 24-hour PM2.5 standard (SCAQMD, 2013). The 2012 AQMP also intensifies the scope and pace of continued air quality improvement efforts toward meeting the 2024 8-hour O_3 standard deadline with new measures designed to reduce reliance on the federal CAA Section 182(e)(5) long-term measures for NO_X and VOC reductions (SCAQMD, 2013). SCAQMD expects exposure reductions to be achieved through implementation of new and advanced control technologies, as well as improvement of existing technologies.

The control measures in the 2012 AQMP consist of four components: (1) Basin-wide and Episodic Short-term PM2.5 Measures; (2) Contingency Measures; (3) 8-hour O_3 Implementation Measures; and (4) Transportation and Control Measures provided by the Southern California Association of Governments (SCAG) (SCAQMD, 2013). The AQMP includes eight short-term PM2.5 control

measures, 16 stationary source 8-hour O_3 measures, 10 early action measures for mobile sources and seven early action measures are proposed to accelerate near-zero and zero emission technologies for goods movement related sources, and five on-road and five off-road mobile source control measures (SCAQMD, 2013). In general, SCAQMD's control strategy for stationary and mobile sources is based on the following approaches: (1) available cleaner technologies; (2) best management practices; (3) incentive programs; (4) development and implementation of zero- near-zero technologies and vehicles and control methods; and (5) emission reductions from mobile sources (SCAQMD, 2013). Control strategies in the AQMP with potential applicability to reducing short-term emissions from construction activities associated with the Project include strategies denoted in the AQMP as ONRD-04 and OFFRD-01, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment (SCAQMD, 2013). Descriptions of measures ONRD-04 and OFFRD-01 are provided below:

> **ONRD-04 – Accelerated Retirement of Older On-Road Heavy-Duty Vehicles:** This measure seeks to replace up to 1,000 heavy-duty vehicles per year with newer or new vehicles that at a minimum, meet the 2010 on-road heavy-duty NO_X exhaust emissions standard of 0.2 grams per brake horsepower-hour (SCAQMD, 2013).
>
> **OFFRD-01 – Extension of the SOON Provision for Construction/Industrial Equipment:** This measure continues the Surplus Off-Road Option for NO_X (SOON) provision of the statewide In-Use Off-Road Fleet Vehicle Regulation beyond 2014 through the 2023 timeframe.

The 2016 AQMP (SCAQMD, 2017) includes key elements of implementing fair-share emissions reductions strategies at the federal, state, and local levels; establishing partnerships, funding, and incentives to accelerate deployment of zero and near-zero-emissions technologies; and taking credit for co-benefits from greenhouse gas, energy, transportation and other planning efforts (SCAQMD, 2017). The strategies in the 2016 AQMP are intended to demonstrate attainment of the NAAQS for the federal non-attainment pollutants O_3 and PM2.5 (SCAQMD, 2016).

The 2016 AQMP has been adopted by SCAQMD and CARB, however, it has not yet received USEPA approval for inclusion in the SIP. Therefore, until such time as the 2016 AQMP has been approved by USEPA, the 2012 AQMP remains the applicable AQMP for federal purposes. However, the 2016 AQMP is used in the analyses in this section, since it has been adopted by both SCAQMD and CARB. The 2016 AQMP incorporates the above-listed 2012 AQMP control strategies, which are designated as MOB-08 and MOB-10 (SCAQMD, 2017).

SCAQMD Air Quality Guidance Documents

SCAQMD published the CEQA Air Quality Handbook to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts (SCAQMD, 2005). The CEQA Air Quality Handbook provides standards, methodologies, and procedures for conducting air quality analyses in CEQA documents and was relied upon in the preparation of this analysis. However, SCAQMD is currently in the process of replacing the CEQA Air Quality Handbook with the Air Quality Analysis Guidance Handbook. While this process is underway, SCAQMD recommends that the Lead Agency avoid using the outdated screening tables in Chapter 6 (Determining the Air

Quality Significance of a Project) and the on-road mobile source emission factors in Table A9-5-J1 through A9-5 of the CEQA Air Quality Handbook. SCAQMD instead recommends using other approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod) software. To assist the City, this assessment follows SCAQMD's recommendations.

SCAQMD has also adopted land use planning guidelines in its Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, which considers impacts to sensitive receptors from facilities that emit TAC emissions (SCAQMD, 2005). SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for sensitive land uses proposed in proximity to freeways and high-traffic roads, and the same siting criteria for distribution centers and dry-cleaning facilities). The SCAQMD's document introduces land use-related policies that rely on design and distance parameters to minimize emissions and lower potential health risk. SCAQMDs guidelines are voluntary initiatives recommended for consideration by local planning agencies.

SCAQMD has published a document called the Localized Significance Threshold Methodology for use in CEQA evaluations that is intended to provide guidance for lead agencies when evaluating the localized effects from mass emissions during construction and operation of a project (SCAQMD, 2008). The document was revised to incorporate additional guidance regarding PM2.5 emissions (SCAQMD, 2008). The Localized Significance Threshold Methodology was also used in the preparation of this assessment.

SCAQMD Rules and Regulations

Several SCAQMD rules adopted to implement portions of the AQMP may apply to construction or operation of the Project. These are as follows:

Regulation IV – Prohibitions: This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air emissions, fuel contaminants, start-up/shutdown exemptions and breakdown events. The following is a list of rules which may apply to the Project:

> Rule 401 – Visible Emissions: This rule states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view.
>
> Rule 402 – Nuisance: This rule states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
>
> Rule 403 – Fugitive Dust: This rule requires projects to prevent, reduce or mitigate fugitive dust emissions from a site. Rule 403 restricts visible fugitive dust to the Project property

line, restricts the net PM10 emissions to less than 50 micrograms per cubic meter ($\mu g/m^3$), and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the best available control measures (identified in the tables within the rule). Mitigation measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers, and/or ceasing all activities. Finally, a contingency plan may be required if so, determined by the USEPA.

Regulation XI – Source Specific Standards: Regulation XI sets emissions standards for different specific sources. The following is a list of rules which apply to the Project:

Rule 1113 – Architectural Coatings: This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Rule 1121 – Control of Nitrogen Oxides from Residential Type, Natural Gas-Fired Water Heaters: This rule specifies NO_X emission limits for natural gas-fired water heaters, with heat input rates less than 75,000 British thermal units (BTUs) per hour.

Rule 1138 – Control of Emissions from Restaurant Operations: This rule specifies PM and VOC emissions and odor control requirements for commercial cooking operations that use chain-driven charbroilers to cook meat.

Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters: This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NO_X emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.

Rule 1186 – PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations: This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM10 emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

Regulation XIII – New Source Review (NSR): Regulation XIII sets requirements for preconstruction review required under both federal and state statutes for new and modified sources located in areas that do not meet the CAA standards ("non-attainment" areas). NSR applies to both individual permits and entire facilities. Any permit that has a net increase in emissions is required to apply BACT. Facilities with a net increase in emissions are required to offset the emission increase by use of Emission Reduction Credits (ERCs). The regulation provides for the application, eligibility, registration, use and transfer of ERCs. For low emitting facilities, the SCAQMD maintains an internal bank that can be used to provide the required offsets. In addition, certain facilities are subject to provisions that require public notice and modeling analysis to determine the downwind impact prior to permit issuance.

Regulation XIV – Toxics and Other Non-Criteria Pollutants: Regulation XIV sets requirements for new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants or other non-criteria pollutants. The following is a list of rules which apply to the Project:

> Rule 1401 – New Source Review of Toxic Air Contaminants: This rule specifies limits for maximum individual cancer risk (MICR), cancer burden, and non-cancer acute and chronic hazard index (HI) from new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants listed in Table 1 of this rule. Establishes allowable risks for permit units requiring new permits pursuant to Rules 201 and 203.
>
> Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines: This rule applies to stationary compression ignition (CI) engine greater than 50 brake horsepower and sets limits on emissions and operating hours. In general, new stationary emergency standby diesel-fueled engines greater than 50 brake horsepower are not permitted to operate more than 50 hours per year for maintenance and testing.

Southern California Association of Governments

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the federally designated metropolitan planning organization (MPO) for the majority of the Southern California region and is the largest MPO in the nation.

Pursuant to Health & Safety Code Section 40460, SCAG is responsible for preparing and approving the portions of the AQMP relating to regional demographic projections and integrated regional land use, housing, employment and transportation programs, measures and strategies (SCAQMD, 2017). With regard to air quality planning, SCAG adopted the 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS), which contains such regional development and growth forecasts. These regional development and growth forecasts form the basis for the land use and transportation control portions of the 2016 AQMP, and its growth forecasts were utilized in the preparation of the air quality forecasts and consistency analysis included in the 2016 AQMP (SCAQMD, 2017). Both the RTP/SCS and the AQMP are based on projections that originate with local jurisdictions, including the City.

SCAG is required to adopt an SCS along with its RTP pursuant to Senate Bill (SB) 375 (Chapter 728, Statutes of 2008), which required the development of regional targets for reducing passenger vehicle greenhouse gas (GHG) emissions. Under SB 375, CARB is required, in consultation with the state's MPOs, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. In 2011, CARB adopted the final GHG emissions reduction targets for SCAG, within whose jurisdiction the City is located. SCAG's target is a per capita reduction of 8 percent for 2020 and 13 percent for 2035 compared to the 2005 baseline (SCAG, 2016). SCAG's 2016 RTP/SCS meets or exceeds these targets, lowering GHG emissions (below 2005 levels) by 8 percent by 2020 (has been achieved); 18 percent by 2035; and 21 percent by 2040 (SCAG, 2016).

Of note, the proposed reduction targets explicitly exclude emission reductions expected from AB 1493 and the low carbon fuel standard regulations. Compliance with and implementation of 2016 RTP/SCS policies and strategies would also reduce per capita criteria air pollutant emissions due to a reduced per capita vehicle miles traveled (VMT).

Local Level

Local jurisdictions, such as the City, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The City is also responsible for the implementation of transportation control measures, as outlined in the AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits and monitors and enforces implementation of such mitigation measures. In accordance with CEQA requirements, the City does not, however, have the expertise to develop plans, programs, procedures, and methodologies to ensure the air quality within the City and region will meet Federal and State standards. Instead, the City relies on the expertise of SCAQMD and utilizes the CEQA Air Quality Handbook as the guidance document for the environmental review of plans and development proposals within its jurisdiction.

City of San Gabriel, Comprehensive General Plan

The Comprehensive General Plan of the City of San Gabriel (General Plan), adopted in 2004 (City of San Gabriel, 2004), provides a long-range policy guide to address changes to the City and a roadmap for future development. The General Plan outlines goals and actions that are applicable to air quality and the Project as follows:

Chapter 8: Environmental Resources

Goal 8.6 Improve air quality within the City of San Gabriel.

Target 8.6.1 Reduce the amount of emissions from vehicles in San Gabriel.

Target 8.6.2 Encourage the use of mass transit, carpooling, bicycling, and other alternative transportation options.

Target 8.6.5 Encourage the planting of street trees and yard trees because of their air quality contribution.

Target 8.6.8 Work with the South Coast Air Quality Management District to reduce emissions from the stationary sources in San Gabriel.

Target 8.6.9 Permit major indirect sources of air pollution only if they provide transportation measures to reduce their impacts to an insignificant level.

Target 8.6.12 Require priority parking areas for carpoolers in projects with larger numbers of employees.

Target 8.6.13 Require large developments to include improvements to bus shelters in front of the site.

Target 8.6.14 Discourage the placement of parking lots along the street.

Target 8.6.16 Require new construction in Transit Oriented Design areas to be designed to incorporate the ideas of transit-oriented design.

3.2.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to air quality if it would:

a) Conflict with or obstruct implementation of the applicable air quality plan;

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;

c) Expose sensitive receptors to substantial pollutant concentrations; or

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

Section 15064.7 of the CEQA Guidelines provides that, when available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make determinations of significance. The potential air quality impacts of the Project are, therefore, evaluated according to thresholds developed by SCAQMD in the CEQA Air Quality Handbook, Air Quality Analysis Guidance Handbook, and subsequent guidance, discussed below.

Construction Emissions

SCAQMD has established numerical emission indicators of significance for construction, which are based on the recognition that the Air Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health (SCAQMD, 1993). Given that construction impacts are temporary and limited to the construction phase, SCAQMD has established significance thresholds specific to construction activity. Based on the indicators in the SCAQMD CEQA Air Quality Handbook, the Project would potentially cause or contribute to an exceedance of an ambient air quality standard if the following would occur:

Regional construction emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed daily emissions thresholds (SCAQMD, 2015b):

- 75 pounds a day for VOC
- 100 pounds per day for NO_X
- 550 pounds per day for CO
- 150 pounds per day for SO_2
- 150 pounds per day for PM10
- 55 pounds per day for PM2.5

In addition, SCAQMD has developed a methodology to assess the potential for localized emissions to cause an exceedance of applicable ambient air quality standards or ambient concentration limits. Impacts would be considered significant if the following would occur:

- Maximum daily localized emissions of NO_X and/or CO during construction are greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for NO_2 and/or CO (SCAQMD, 2008).
- Maximum daily localized emissions of PM10, and/or PM2.5 during construction are greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the Project Site to exceed 10.4 $\mu g/m^3$ over 24 hours (SCAQMD Rule 403 control requirement).

SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards or ambient concentration limits without project-specific dispersion modeling. This analysis uses the screening criteria to evaluate impacts from localized emissions.

Operational Emissions

SCAQMD has also established numerical emission indicators of significance for operations (SCAQMD,1993). SCAQMD has established significance thresholds in part based on Section 182(e) of the CAA, which identifies 10 tons per year of VOC as a significance level for stationary source emissions in extreme non-attainment areas for O_3 (such as, the Air Basin) (SCAQMD, 1993). SCAQMD converted this significance level to pounds per day for O_3 precursor emissions (i.e., 10 tons per year × 2,000 pounds per ton ÷ 365 days per year = 55 pounds per day). The numeric indicators for other pollutants are also based on federal stationary source significance levels. Based on the indicators in the SCAQMD CEQA Air Quality Handbook, the Project would potentially cause or contribute to an exceedance of an ambient air quality standard if the following would occur:

- Operational emissions exceed any of the following SCAQMD prescribed daily regional numeric indicators (SCAQMD, 2015b):
    - 55 pounds a day for VOC
    - 55 pounds per day for NO_X
    - 550 pounds per day for CO
    - 150 pounds per day for SO_2
    - 150 pounds per day for PM10
    - 55 pounds per day for PM2.5

In addition, SCAQMD has developed a methodology to assess the potential for localized emissions to cause an exceedance of applicable ambient air quality standards. Impacts would be considered significant if the following were to occur:

- Maximum daily localized emissions of NO_X and/or CO during operation are greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the project site greater than the most stringent ambient air quality standards for NO_2 and/or CO (SCAQMD, 2008).
- Maximum daily localized emissions of PM10, and/or PM2.5 during operation are greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the project site to exceed 2.5 $\mu g/m^3$ over 24 hours (SCAQMD Rule 1303 allowable change in concentration).

As discussed previously, SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards or ambient concentration limits without project-specific dispersion modeling. This analysis uses the SCAQMD screening criteria to evaluate impacts from localized emissions.

Carbon Monoxide Hotspots

With respect to the formation of CO hotspots, the Project would be considered significant if the following would occur:

- The Project would cause or contribute to an exceedance of the CAAQS one-hour or eight-hour CO standards of 20 or 9.0 parts per million (ppm), respectively.

Toxic Air Contaminants

Based on the TAC criteria set forth by SCAQMD (SCAQMD, 1993), the Project would expose sensitive receptors to substantial concentrations of toxic air contaminants if any of the following would occur:

- The Project emits carcinogenic materials or TACs that exceed the maximum incremental cancer risk of ten in one million or a cancer burden greater than 0.5 excess cancer cases (in areas greater than or equal to 1 in 1 million), or an acute or chronic hazard index of 1.0.

Construction and operational impacts from TACs are evaluated quantitatively against this threshold.

3.2.4 Methodology

The evaluation of potential impacts to air quality emissions that may result from the construction and long-term operations of the Project is conducted as follows:

Consistency with Air Quality Plan

The 2012 AQMP was prepared to accommodate growth, reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, return clean air to the region, and minimize the impact on the economy. Projects that are consistent with the assumptions used in the AQMP do not interfere with attainment because the growth is included in the projections utilized in the formulation of the AQMP. Thus, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the AQMP would not

jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's numeric indicators. As previously noted, while the 2016 AQMP was adopted by SCAQMD and CARB, it has not yet received USEPA approval for inclusion in the SIP. Therefore, until such time as the 2016 AQMP is approved by USEPA, the 2012 AQMP remains the applicable AQMP for federal purposes. The 2016 AQMP is used in the analyses in this section, since it has been adopted by both SCAQMD and CARB.

Construction Emissions

Construction of the Project has the potential to generate temporary criteria pollutant emissions through the use of heavy-duty construction equipment, such as excavators and forklifts, and through vehicle trips generated from workers and haul trucks traveling to and from the Project Site. In addition, fugitive dust emissions would result from demolition and various earth-moving activities. Mobile source emissions, primarily NO_X, would result from the use of construction equipment such as dozers and loaders. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential factors.

Emissions are estimated using CalEEMod (Version 2016.3.2), which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California, and recommended by SCAQMD. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying criteria pollutant and GHG emissions from construction and operations of various land use projects throughout California.

Daily regional emissions during construction are forecasted in CalEEMod by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. CalEEMod is based on outputs from CARB emissions estimation models OFFROAD and the on-road vehicle emissions factor model EMFAC, which are used to calculate emissions from construction activities, including on- and off-road vehicles. The input values used in this analysis are based on CalEEMod default values for phase length, construction equipment, worker trips, vendor trips, and hauling trips except where Project-specific information was provided and confirmed by the Applicant. These values were then applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. Detailed construction equipment lists, construction scheduling, and emissions calculations are provided in Appendix B. Criteria pollutant emissions from worker vehicles and haul trucks were estimated outside of CalEEMod using EMFAC2017. Worker vehicles consisted of emission factors for light-duty automobiles and light-duty trucks. Vendor, cement, and haul trucks were based on emission factors for medium heavy-duty trucks and heavy-duty trucks.

Construction Assumptions

Construction of the 700 Plaza would take place from approximately May 2021 to September 2023. Construction of the 800 Plaza would take place from August 2021 to December 2023 (see Appendix B for construction scheduling assumptions). Should the Project commence construction on a later date, or occur over a longer period of time than that analyzed in this air quality impact analysis, air quality impacts would be less than the impacts disclosed herein due to a more energy-efficient and cleaner burning construction equipment fleet mix and/or reduced peak daily emissions.

Sub-phases of construction would include site preparation, grading, infrastructure installation, foundation, building construction, paving and architectural coatings. Approximately 192,000 cubic yards of soil would be exported due to required excavation. The maximum daily regional emissions from these activities are estimated by construction phase and compared to the SCAQMD significance thresholds. The maximum daily regional emissions are predicted values for the worst-case emissions day, and therefore, do not represent the typical emissions that would occur daily, of Project construction, i.e., which would be less than the maximum daily emissions.

Emissions Sources

Mobile source emissions, primarily NO_X and particulate matter (PM2.5 and PM10), would result from the use of construction equipment such as bulldozers, wheeled loaders, and cranes. During the finishing phase, the application of architectural coatings (i.e., paints) and other building materials would release reactive organic compounds. 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. The assessment of construction air quality impacts considers each of these potential factors.

Construction generates on-road vehicle exhaust, evaporative, and dust emissions from personal vehicles for worker and vendor commuting, and trucks for soil and material hauling. These emissions are based on the number of trips and VMT along with emission factors from EMFAC2017.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings. The CalEEMod tool calculates the VOC evaporative emissions from application of residential and non-residential surface coatings.

Operational Emissions

Operation of the Project would generate criteria pollutant emissions from vehicle trips traveling to and from the Project Site. In addition, emissions would result from area sources on-site such as natural gas combustion, landscaping equipment, and use of consumer products. Operational impacts were conservatively assessed for the Phase 1 buildout year (i.e., 2023).

The operational emissions are estimated using the CalEEMod software. CalEEMod was used to forecast the daily regional operational emissions from area sources that would occur during long-term Project operations. The maximum daily emissions from operation of the Project are compared to the SCAQMD daily regional numeric indicators. Detailed assumptions used in this analysis are included with the CalEEMod output sheets in Appendix B.

Emission Sources

Area source emissions were calculated using CalEEMod default assumptions for the proposed land uses as identified in Chapter 2, *Project Description*. Area sources include consumer product use, architectural coatings, and landscape maintenance equipment.

Consumer products are chemically formulated products used by household and institutional consumers, including, but not limited to, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products; but does not include other paint products, furniture coatings, or architectural coatings.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers. The CalEEMod tool calculates the VOC evaporative emissions from application of residential and non-residential surface coatings.

CalEEMod uses landscaping equipment emission factors from the CARB OFFROAD model and the CARB Technical Memo: Change in Population and Activity Factors for Lawn and Garden Equipment (6/13/2003). CalEEMod estimates that landscaping equipment operate for 250 days per year in the South Coast Air Basin.

With regard to energy usage, the consumption of fossil fuels to generate electricity and to provide heating and hot water generates criteria pollutants. Future fuel consumption rates are estimated based on specific square footage of the Project, as well as predicted water supply needs of the Project. Natural gas-related emissions of criteria pollutants associated with operation of the Project are also based on the size of the Project and the natural gas demand factors for the land uses. Energy usage (on-site natural gas consumption) for the Project is calculated within CalEEMod using the California Energy Commission (CEC) California Commercial End Use Survey (CEUS) data set, which provides energy intensities of different land uses throughout the state and different climate zones. However, since the data from the CEUS is from 2002, the CalEEMod software incorporates correction factors to account for compliance with the Title 24 Building Standards Code. For the Project, building electricity and natural gas usage rates were adjusted to assume compliance with 2019 Title 24 requirements.

Mobile source emissions were estimated based on CARB's EMFAC2017 and used to generate Air Basin-specific vehicle fleet emission factors in units of grams per mile, which are then converted to pounds per mile. Mobile source emissions were estimated outside of CalEEMod based on CARB's EMFAC2017 emission factors which were generated and using trip generation rates and VMT provided in the Project's Circulation Study (Fehr & Peers, 2020). In calculating mobile-source emissions, the trip length values were based on the distances provided in CalEEMod. Detailed emissions calculations are provided in Appendix B.

Substantial Pollutant Concentrations

The localized effects from the on-site portion of the construction emissions are evaluated at nearby sensitive receptor locations potentially impacted by the Project according to the SCAQMD's Localized Significance Threshold Methodology (SCAQMD, 2008). The localized significance

thresholds (LSTs) are only applicable to NO_X, CO, PM10, and PM2.5. SCAQMD has established screening criteria for projects that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards without project-specific dispersion modeling. The localized analysis is based on this SCAQMD screening criteria. The screening criteria depend on: (1) the area in which a project is located, (2) the size of the project site, and (3) the distance between the project site and the nearest sensitive receptor.

The 5.85-acre Project Site is located in the SCAQMD source receptor area (SRA) 8. The off-site air quality sensitive receptors would be located within 25 meters to the Project Site to the north, east, south and west of the Project Site. Therefore, conservatively the SCAQMD LST screening criteria applicable to a 5-acre Site in SRA 8 with sensitive receptors located within 25 meters (82 feet) to the Project Site was used.

The localized effects from the onsite portion of the operational emissions are evaluated at nearby sensitive receptor locations potentially impacted by the Project according to the SCAQMD's LST Methodology, which relies on on-site mass emission rate screening tables. Similar to construction, the SCAQMD LST screening criteria applicable to a 5-acre site in SRA 8 with sensitive receptors located within 25 meters to the Project Site were used.

In addition, CO emissions are generated in greatest quantities from vehicle combustion of fossil fuels, usually concentrated at or near ground level as not readily disperse into the atmosphere, particularly under cool, stable (i.e., low or no wind) atmospheric conditions. Localized areas where ambient CO concentrations exceed state and/or federal CO standards are termed "CO hotspots". The potential for the Project to cause or contribute to the formation of offsite CO hotspots is evaluated based on previous dispersion modeling of the four busiest roadway intersections in the Air Basin that was conducted by SCAQMD for its CO Attainment Demonstration Plan in the 2003 AQMP (SCAQMD, 2003). The Project analysis compares the Project intersections with the greatest peak-hour traffic volumes that would be impacted by Project volumes to the traffic volumes at the worse-case intersections modeled by SCAQMD for the 2003 AQMP. Project-impacted intersections with peak-hour traffic volumes that are lower than at the intersections modeled by SCAQMD, in conjunction with lower background CO levels, would result in lower overall CO concentrations compared to the SCAQMD modeled values in its 2003 AQMP.

Health Impacts for Criteria Pollutants

In *Sierra Club v. County of Fresno* (S219783) (*Sierra Club*) the Supreme Court held that CEQA requires environmental impact reports to either (i) make a "reasonable effort" to substantively connect the estimated amount of a given air pollutant a project will produce and the health effects associated with that pollutant, or (ii) explain why such an analysis is infeasible (6 Cal.5th at 1165-66). However, the Court also clarified that CEQA "does not mandate" that EIRs include "an in-depth risk assessment" that provides "a detailed comprehensive analysis … to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and to assess and quantify both the individual and population wide health risks associated with those levels of exposure." *Id.* at 1665.

Correlating a project's criteria air pollutant emissions to specific health impacts, particularly with respect to O_3, is speculative. SCAQMD agrees that it is very difficult to quantify health impacts with regard to O_3, opining that the only possible means of successfully doing so is for a project so large that emissions would essentially amount to *all* regional increases (SCAQMD 2015). As an example, the most recent SCAQMD basin wide emissions inventory shows VOC emissions at 162.4 tons (324,800 pounds) per day and NOx emissions at 293.1 tons (586,200 pounds) per day for the baseline year of 2012 (SCAQMD, 2017). SCAQMD's AQMP shows that reducing the baseline 2008 NO_X and VOC emissions by 432 tons per day and 187 tons per day respectively, would only reduce ozone levels at the monitor with the greatest ozone concentrations by 9 parts per billion (ppb) (SCAQMD, 2013). Additionally, SCAQMD modeling that accounts for increases in emissions due to new or modified sources within the District between 2010 and 2030 show an increase of 6,620 pounds per day of NO_X and 89,947 pounds per day of VOC. The results of this analysis show that this level of daily pollutant increase would only increase ozone concentrations in the air basin by 2.6 ppb and less than 1 ppb of NO_2 (SCAQMD, 2011). These analyses indicate that projects with daily emissions less than 55 to 150 pounds per day (depending on pollutant) would, on its own, have a negligible increase in regional pollutant concentrations and correlating health impacts.

USEPA and CARB have established AAQS at levels above which concentrations could be harmful to human health and welfare, with an adequate margin of safety. Further, California air districts, like SCAQMD, have established emission-based thresholds that provide project-level estimates of criteria air pollutant quantities that air basins can accommodate without affecting the attainment dates for the AAQS, and therefore providing indicators of significance for regional and localized air quality impacts from both construction and operation of projects. These thresholds are based on "scientific and factual data that is contained in the federal and state Clean Air Acts" and recommends "that these thresholds be used by lead agencies in making a determination of significance." (SCAQMD, 1993) SCAQMD thresholds take into account that the Air Basin is a distinct geographic area that has critical air pollution problems for which AAQS have been established to protect human health and welfare (SCAQMD, 1993). Therefore, analyzing a project against these thresholds assesses whether these emissions directly contribute to regional or local exceedances of AAQS and assesses their potential to be harmful to human health. Thus, in order to determine the potential for adverse health effects, project emissions are compared to the SCAQMD's regulatory thresholds.

Toxic Air Contaminants

Construction

The greatest potential for TAC impacts during Project construction would be related to diesel particulate matter (DPM) emissions associated with heavy-duty equipment during demolition, excavation and grading activities. Construction activities associated with the Project would be sporadic, transitory, and short-term in nature. Although Project construction would be temporary, construction impacts associated with TACs are addressed quantitatively in a refined health risk assessment (HRA).

Health risk calculations were performed using the OEHHA methodologies and exposure parameters, and the corresponding SCAQMD guidance documents (OEHHA, 2015). This analysis

calculated the cancer risk and chronic hazard indices to estimate Project-specific health risks for construction emissions using annual average pollutant ambient concentrations modeled by the USEPA's AMS/EPA Regulatory Model (AERMOD) model.

The cancer risk values for DPM considers exposure via the inhalation pathway. The potential exposure through other pathways (e.g., ingestion) requires substance and site-specific data, and the specific parameters for DPM are not known for these pathways (CARB, 1998). The OEHHA Guidance recommends the incorporation of several factors to quantify the carcinogenic compound dose via the inhalation pathway. Once determined, the dose is multiplied by the compound-specific inhalation cancer potency factor to derive the cancer risk estimate. The dose takes into account the concentration at a sensitive receptor. The cancer potency factor is compound-specific. In performing health risk calculations, carcinogenic compounds are not considered to have threshold levels (i.e., dose levels below which there are no risks). Any exposure, therefore, will have some associated risk. Incremental health risks associated with exposure to carcinogenic compounds is defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. Under a deterministic approach (i.e., point estimate methodology), the cancer risk probability is determined by multiplying the chemical's annual concentration by its unit risk factor (URF). The URF for DPM recommended by the Scientific Review Panel[4] is 3.0×10^{-4} per microgram per cubic meter ($\mu g/m^3$). This value corresponds to a Cancer Potency Factor (CPF) of 1.1 per milligram/kilogram (body weight) per day (mg/kg(bw)-day). The URF for DPM means that for receptors with an annual average concentration of 1 $\mu g/m^3$ in the ambient air, the probability of contracting cancer over a lifetime of exposure is 300 in 1 million. This approach for calculating cancer risk is intended to result in conservative (i.e., health protective) estimates of health impacts and is used for assessing risks to sensitive receptors. The estimation of health risks is calculated as follows:

Equation 1: $Dose_{RESIDENT}$ (mg/kg/day) = $C_{AIR} \times DBR \times A \times EF \times CF$ where:

- C_{air}= concentration in air ($\mu g/m^3$)
- DBR= daily breathing rate normalized to body weight (L/kg body weight-day)
- A= inhalation absorption factor (1 for DPM, unitless)
- EF= exposure frequency (unitless) (days/365 days)
- CF= 10^{-6}, correction factor, micrograms to milligrams conversion, liters to cubic meters conversion

Equation 2: $Risk_{INH\text{-}RESIDENT}$ (in one million) = $Dose_{AIR} \times CPF \times ASF \times ED/AT \times FAH \times CCF$

where:

- $Dose_{AIR}$= daily inhalation dose (mg/kg-day)
- CPF= cancer potency factor $(mg/kg\text{-}day)^{-1}$
- ASF= age sensitivity factor (unitless)

[4] The Scientific Review Panel is charged with evaluating the risk assessments of substances proposed for identification as toxic air contaminants by CARB, OEHHA, and the Department of Pesticide Regulation (DPR), and the review of guidelines prepared by OEHHA.

- ED= exposure duration (years)
- AT= averaging time for lifetime cancer risk (years)
- FAH= fraction of time spent at home (unitless)
- CCF= 10^6, cancer conversion factor to represent risk in chances per million

A summary of the exposure parameters used under this methodology are shown in **Table 3.2-4**.

TABLE 3.2-4
CANCER RISK EXPOSURE PARAMETERS

	Residential			
Parameter	**3rd Trimester**	**0 < 2 years**	**2 < 16 years**	**16<30**
C_{AIR} (ug/m^3)				
DBR[a] (L/kg BW-day)	361	1,090	631	261
A (unitless)	1	1	1	1
EF (unitless)	0.96	0.96	0.96	0.96
CF (unitless)	10^{-6}	10^{-6}	10^{-6}	10^{-6}
CPF (mg/kg/day-^{1})	1.1	1.1	1.1	1.1
ASF (unitless)	10	10	3	1
ED (years)	Varies by phase (max 0.25)	Varies by construction phase (max 2)	Varies by construction phase (max 14)	Varies by construction phase (max 14)
AT (years)	70	70	70	70
FAH (unitless)	1	1	1	1
WAF (unitless)	--	--	--	--
CCF (unitless)	10^6	10^6	10^6	10^6

SOURCE: OEHHA, 2015; ESA 2019.

Age Sensitivity Factors

The estimated excess lifetime cancer risks for residential receptors (including the early-in-life exposure) were adjusted using the ASFs recommended in the California Environmental Protection Agency (Cal/EPA) OEHHA Technical Support Document and 2015 OEHHA guidance (OEHHA, 2009). This approach accounts for an "anticipated special sensitivity to carcinogens" of infants and children. Cancer risk estimates were weighted by a factor of 10 for exposures that occur from the third trimester of pregnancy to two years of age and by a factor of three for exposures that occur from 2 to 15 years of age. No weighting factor (i.e., an ASF equal to one, which is equivalent to no adjustment) is applied to ages 16 to 70 years.

Cancer Risk Calculation

Excess lifetime cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to carcinogens. The risk is expressed as a unitless probability, and was calculated as the number of cancer incidences per

million individuals in the HRA. The cancer risk for each chemical was calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the DPM CPF. For cancer risk, the SCAQMD guidance identifies a significant impact if a project would result in an incremental cancer risk that is greater than 10 per million for any receptor.

Chronic Health Impacts

Non-cancer effects of chronic (i.e., long- term) DPM exposures were evaluated using the Hazard Index (HI) approach consistent with the OEHHA guidance. The chronic HI was calculated by dividing the modeled annual average concentration by the Reference Exposure Level (REL). The REL is the concentration at or below which no adverse health effects are anticipated. The REL for DPM was obtained from OEHHA. OEHHA has recommended an ambient concentration of 5 micrograms per cubic meter ($\mu g/m^3$) as the chronic inhalation REL for DPM exhaust. The SCAQMD guidance identifies a significant impact if a project would result in an incremental chronic HI that is greater than 1.0.

The process of assessing health risks and impacts includes a degree of uncertainty. The level of uncertainty depends on the availability of data and the extent to which assumptions must be relied upon in cases where the data are incomplete or unknown. All HRAs rely upon scientific studies to reduce the level of uncertainty; however, it is not possible to completely eliminate uncertainty from the analysis. Where assumptions are used to substitute for incomplete or unknown data, it is standard practice in performing HRAs to err on the side of health protection to avoid underestimating or underreporting the risk to the public. In general, sources of uncertainty that may lead to an overestimation or an underestimation of the risk include extrapolation of toxicity data in animals to humans and uncertainty in the exposure estimates. In addition to uncertainty, there exists "a natural range or variability in measured parameters defining the exposure scenario," and that "the greatest quantitative impact is variation among the human population in such properties as height, weight, food consumption, breathing rates, and susceptibility to chemical toxicants" (OEHHA, 2015). As mentioned previously, it is typical to err on the side of health protection by assessing risk on the most sensitive populations, such as children and the elderly, by modeling potential impacts based on high-end breathing rates, by incorporating age sensitivity factors, and by not taking into account exposure reduction measures, such as mechanical air filtration building systems. These conservative assumptions were implemented in the analysis contained in this EIR and as detailed in Appendix B.

Operations

During long-term operations, TACs could be emitted as part of periodic maintenance operations, cleaning, painting, etc., periodic visits to the Project Site from delivery trucks and service vehicles. The SCAQMD recommends that operational HRAs be conducted for substantial sources of operational DPM (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions (SCAQMD, 2002). The Project would include a supermarket which would require a number of daily deliveries, however it is not expected that daily deliveries would average more than 22 per day (NAS, 2012). Therefore, operational Project emissions are expected to be occasional and result in minimal exposure to off-site and on-site sensitive receptors. As the Project consists of residential and commercial uses, the

Project would not include sources of substantive TAC emissions identified by SCAQMD or CARB siting recommendations (including the development of a high-volume roadway; distribution centers or land uses with more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units per day; dry cleaning operation using perchloroethylene; or gasoline dispensing facilities). Thus, a qualitative analysis is appropriate and utilized for this Project.

3.2.5 Environmental Impact Analysis

Impact AIR-1: The proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. (Potentially Significant Construction Impact. Less than Significant Operational Impact.)

Construction

Under this criterion, SCAQMD recommends that lead agencies demonstrate that a project would not directly obstruct implementation of an applicable air quality plan and that a project be consistent with the assumptions (typically land-use related, such as resultant employment or residential units) upon which the air quality plan is based. The Project would result in an increase in short-term construction employment compared to existing conditions. Being relatively small in comparison to regional employment, and temporary in nature, construction jobs under the Project would not conflict with the long-term employment projections upon which the AQMP is based. Control strategies denoted in the AQMP with potential applicability to short-term emissions from construction activities include strategies denoted in the AQMP as ONRD-04 and OFFRD-01, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment by accelerating replacement of older, emissions-prone engines with newer engines meeting more stringent emission standards. The Project would not conflict with implementation of these strategies. Additionally, the Project would comply with CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment. The Project would also comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403.

Compliance with these requirements is consistent with and meets or exceeds the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. During its construction, the Project would ensure compliance with CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment, and with SCAQMD's regulations for controlling fugitive dust and other construction emissions. As discussed under Impact AIR-2 below, the Project would result in a short-term and temporary significant regional NO_X emissions. Implementation of Mitigation Measure MM-AQ-1 would require that the construction contractor ensure that all off-road diesel equipment greater than 50 horsepower (hp) used for this Project meets USEPA Tier 4 final off-road emission standards. This mitigation measure would reduce NO_X emissions during construction activities to less than significant levels. **Therefore, the mitigation measures would reduce potentially significant impacts related to conflicting with or obstructing implementation of the applicable air quality plan to less-than-significant levels**.

Operation

The 2012 AQMP was prepared to accommodate growth, reduce the levels of pollutants within the areas under the jurisdiction of SCAQMD, return clean air to the region, and minimize the impact on the economy. Projects that are considered consistent with the AQMP would not interfere with attainment because this growth is included in the projections used in the formulation of the AQMP. Key elements of the 2016 AQMP include implementing fair-share emissions reductions strategies at the federal, state, and local levels; establishing partnerships, funding, and incentives to accelerate deployment of zero and near-zero-emissions technologies; and taking credit from co-benefits from greenhouse gas (GHG), energy, transportation and other planning efforts (SCAQMD, 2017). The strategies included in the 2016 AQMP are intended to demonstrate attainment of the NAAQS for the federal non-attainment pollutants O_3 and PM2.5 (SCAQMD, 2017). Similar to the 2012 AQMP, the 2016 AQMP relies on "…aggressive mobile source control strategy supplemented with focused and strategic stationary source control measures." The 2016 AQMP also recognizes the reduction in traditional air pollutants which occur as a "co-benefit" with the reduction in climate change-related pollutants achieved through GHG emission reduction programs and policies, and commercial building energy efficiency measures (SCAQMD, 2017).

As discussed in Section 3.11, *Population and Housing*, of this Draft EIR, the Project's 804 residents would comprise approximately 67 percent of the City's estimated population growth at buildout in 2023 but only 15 percent of SCAG's longer-term projected population increase for the City in 2040. The Project's 251 units (243 residential units, 8 live/work units) would comprise approximately 50 percent of the City's estimated growth at buildout in 2023 and only 11 percent of SCAG's longer-term projected housing increase for the City in 2040. The Project's 171 employees would comprise approximately 34 percent of the City's estimated growth at buildout in 2023 and only 8 percent of SCAG's longer-term projected employment increase for the City in 2040. As the Project's increases in population, housing, and employment would be within SCAG's projections for the City for both the near-term buildout year (2023) and for SCAG's projection horizon year (2040), the Project would not induce unplanned growth in the area directly through the development of new housing and employment opportunities. As such, the Project would be consistent with the growth projections as contained in the City's General Plan and thus be consistent with the growth projections in the AQMP. In addition, as discussed below under Impact AIR-2, Project operational-related maximum daily regional emissions for the criteria and precursor pollutants (VOC, NO_X, CO, SO_X, PM10, and PM2.5) would be below the SCAQMD thresholds of significance. **Therefore, Project-related operational emissions would result in a less than significant impact**.

Impact AIR-2: The proposed Project would not 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. (Potentially Significant Construction Impact. Less than Significant Operational Impact.)

Construction

The Project's worst-case daily construction emissions were calculated as maximum daily construction emissions (in pounds per day) for each Phase by year, as SCAQMD thresholds are for maximum daily construction emissions in pounds per day. Some Project construction subphases are anticipated to overlap (i.e., building construction and paving) within each Phase and between

Phase 1 and Phase 2. Therefore, the Project's maximum daily construction emissions are the predicted emissions for the worst-case emissions day, but, do not represent the emissions that would occur for each day of Project construction. These predicted emissions include appropriate dust control measures required to be implemented during each phase of development, as required by SCAQMD Rule 403 (Control of Fugitive Dust). Detailed emissions calculations are provided in Appendix B. Results of the criteria pollutant calculations are presented in **Table 3.2-5**. Maximum emissions within Phase and overlap between Phases are presented.

TABLE 3.2-5
MAXIMUM DAILY UNMITIGATED REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY)[A]

	VOC	NO_X	CO	SO_2	PM10 [b]	PM2.5 [b]
Source						
Phase 1 – Drainage/Utilities/Trenching + Grading/Excavation	3	51	21	<1	7	3
Phase 1 – Grading/Excavation + Foundation	4	62	26	<1	8	4
Phase 1 – Building Construction + Paving	3	24	27	<1	3	1
Phase 1 – Building Construction + Architectural Coating	18	16	18	<1	3	1
Phase 2 – Drainage/Utilities/Trenching + Grading/Excavation	3	51	21	<1	7	3
Phase 2 – Grading/Excavation + Foundation	4	64	26	<1	8	4
Phase 2 – Building Construction + Paving	3	25	28	<1	3	2
Phase 2 – Building Construction + Architectural Coating	22	16	18	<1	3	1
Phase 1 – Drainage/Utilities/Trenching + Grading/Excavation + Phase 2 – Drainage/Utilities/Trenching + Grading/Excavation[c]	6	**103**	43	<1	13	7
Phase 1 – Grading/Excavation + Foundation + Phase 2 – Grading/Excavation[c]	6	**106**	41	<1	14	7
Phase 1 – Building Construction + Paving + Phase 2 – Grading/Excavation + Foundation[c]	6	88	53	<1	11	5
Phase 1 – Building Construction + Paving + Phase 2 – Building Construction + Paving[c]	5	50	55	<1	6	3
Phase 1 – Building Construction + Architectural Coating + Phase 2 – Building Construction + Architectural Coating[c]	41	32	36	<1	5	2
Maximum Daily Emissions	41	**106**	55	<1	14	7
SCAQMD Regional Significance Thresholds	75	100	550	150	150	55
Over/ (Under)[d]	(34)	**6**	(495)	(150)	(136)	(48)
Exceeds Threshold?	No	**Yes**	No	No	No	No

NOTES:
[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B.
[b] Emissions include fugitive dust control measures consistent with SCAQMD Rule 403
[c] Daily emissions maximums of overlapping subphases within Phases may not add up to daily emissions maximums between Phases due to construction schedule timing. See Appendix B for more details.
[d] Exceedances shown in **bold**

SOURCE: ESA, 2019.

As shown in Table 3.2-5, Project construction-related maximum daily regional emissions for the criteria and precursor pollutants (VOC, CO, SO_X, PM10, and PM2.5) would be below SCAQMD thresholds of significance, except for regional NO_X emissions of 105 lbs/day exceeding the 100 lbs/day NO_X threshold during the overlapping of the grading/excavation subphase of Phase 1 and the grading/excavation and drainage/utilities/trenching subphases of Phase 2. Therefore, with respect to regional emissions from construction activities, impacts would be less than significant, except for NO_X emissions which would be potentially significant. **Implementation of Mitigation Measure MM-AQ-1 would reduce NO_x emissions during construction activities to a less than significant level, and therefore construction of the proposed Project would not 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.**

Mitigation Measure

The incorporation of the following Mitigation Measure MM-AQ-1 would reduce construction-related air quality impacts associated with the Project:

> **Mitigation Measure MM-AQ-1:** The construction contractor shall require that all off-road diesel equipment greater than 50 horsepower (hp) used during construction of the Project meets USEPA Tier 4 final off-road emission standards. Such equipment shall be outfitted with Best Available Control Technology (BACT) devices including a California Air Resources Board-certified Level 3 Diesel Particulate Filter or equivalent. Documentation of equipment emissions standards or Tier 4 certification shall be kept onsite at all times during construction activities.

As shown in **Table 3.2-6**, with the implementation of this mitigation measure, the regional emissions from Project construction activities would result in less than significant impacts.

Project construction and operation would result in the emission of criteria pollutants in a non-attainment area. A significant impact may occur if a project would add a cumulatively considerable contribution of emissions of a federal or state non-attainment pollutant. The Air Basin is currently in federal/state non-attainment for O_3, PM10, and PM2.5.

With the implementation of Mitigation Measure MM-AQ-1, Project construction emissions are not predicted to exceed any applicable SCAQMD regional or local impact threshold (as shown in Table 3.2-6 and Table 3.2-8), and therefore, are not expected to result in regional or ground-level concentrations that exceed the NAAQS or CAAQS. **Therefore, the Project would not result in a cumulatively considerable net increase for non-attainment pollutants or O_3 precursors, and therefore, would result in a less than significant cumulative impact for construction emissions**.

TABLE 3.2-6
MAXIMUM DAILY MITIGATED REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY) [A]

Source	VOC	NO_X	CO	SO_2	PM10 [b]	PM2.5 [b]
Phase 1 – Drainage/Utilities/Trenching + Grading/Excavation	1	29	23	<1	6	2
Phase 1 – Grading/Excavation + Foundation	2	39	28	<1	7	3
Phase 1 – Building Construction + Paving	1	10	30	<1	2	1
Phase 1 – Building Construction + Architectural Coating	18	8	19	<1	2	1
Phase 2 – Drainage/Utilities/Trenching + Grading/Excavation	1	29	23	<1	6	2
Phase 2 – Grading/Excavation + Foundation	2	41	29	<1	7	3
Phase 2 – Building Construction + Paving	1	10	30	<1	2	1
Phase 2 – Building Construction + Architectural Coating	22	9	19	<1	2	1
Phase 1 – Drainage/Utilities/Trenching + Grading/Excavation + Phase 2 – Drainage/Utilities/Trenching + Grading/Excavation[c]	3	59	46	<1	11	5
Phase 1 – Grading/Excavation + Foundation + Phase 2 – Grading/Excavation[c]	3	67	46	<1	12	5
Phase 1 – Building Construction + Paving + Phase 2 – Grading/Excavation + Foundation[c]	3	50	59	<1	9	4
Phase 1 – Building Construction + Paving + Phase 2 – Building Construction + Paving[c]	3	20	60	<1	4	2
Phase 1 – Building Construction + Architectural Coating + Phase 2 – Building Construction + Architectural Coating[c]	39	18	38	<1	4	2
Maximum Daily Emissions	39	67	60	<1	12	5
SCAQMD Regional Significance Thresholds	75	100	550	150	150	55
Over/ (Under)	(36)	(33)	(490)	(150)	(138)	(50)
Exceeds Threshold?	No	No	No	No	No	No

NOTES:
[a] Totals may not add up exactly due to rounding in the modeling calculations Detailed emissions calculations are provided in Appendix B.
[b] Emissions include fugitive dust control measures consistent with SCAQMD Rule 403
[c] Daily emissions maximums of overlapping subphases within Phases may not add up to daily emissions maximums between Phases due to construction schedule timing. See Appendix B for more details.

SOURCE: ESA, 2019.

Operation

Operational criteria pollutant emissions were calculated for mobile, area, and stationary sources for the Project buildout year (2023). Daily vehicle trip generation rates and VMT for the Project were provided by the Project's Circulation Study (Fehr & Peers, 2020) and include vehicle trips associated with the proposed uses. Results of the criteria pollutant calculations are presented in **Table 3.2-7**.

TABLE 3.2-7
MAXIMUM DAILY UNMITIGATED REGIONAL OPERATIONAL EMISSIONS (POUNDS PER DAY) [A]

Source	VOC	NO_X	CO	SO_2	PM10	PM2.5
Area	12	<1	21	<1	<1	<1
Energy	<1	2	1	<1	<1	<1
Mobile	9	15	87	<1	24	7
Maximum Daily Emissions	21	18	109	<1	25	7
SCAQMD Thresholds of Significance	**55**	**55**	**550**	**150**	**150**	**55**
Over/(Under)	(34)	(37)	(441)	(150)	(125)	(48)
Exceeds Thresholds?	No	No	No	No	No	No

NOTES:

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B.

SOURCE: ESA, 2019.

As shown in Table 3.2-7, Project operational-related maximum daily regional emissions for the criteria and precursor pollutants (VOC, NO_X, CO, SO_X, PM10, and PM2.5) would be below the SCAQMD thresholds of significance. Therefore, Project-related operational emissions would result in a less than significant impact.

Project operations would generate emissions of VOC, NOx, CO, PM10, and PM2.5, which would not exceed any applicable SCAQMD regional or local impact thresholds (as shown in Table 3.2-10), and therefore, would not be expected to result in regional or ground-level concentrations that exceed the NAAQS or CAAQS. The Project would not introduce any substantial stationary sources of emissions. For mobile sources, CO is the benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations. As indicated earlier, no violations of the state and federal CO standards are projected to occur for the Project, based on the relatively low amount of vehicle traffic the Project is anticipated to generate. Therefore, operation of the Project would not result in a cumulatively considerable net increase for non-attainment of criteria pollutants or O_3 precursors. **As a result, the Project would result in a less than significant cumulative impact for operational emissions**.

Impact AIR-3: The proposed Project would not expose sensitive receptors to substantial pollutant concentrations. (Potentially Significant Construction Impact. Less than Significant Operational Impact.)

Construction

Localized Construction Emissions

The Project's localized construction air quality analysis was conducted using the methodology described in the SCAQMD LST Methodology (SCAQMD, 2008). The screening criteria provided in the LST Methodology were used to determine localized construction emissions thresholds for

the Project. As previously discussed, SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Project.

Using the LST Methodology, the results of the analysis determined localized Project-related construction emissions would be below the SCAQMD thresholds of significance. Results of the pollutant calculations are presented in **Table 3.2-8**. As shown in Table 3.2-8, the daily localized construction-related emissions of criteria and precursor pollutants would be below the SCAQMD thresholds of significance for NO_X, CO, PM10, and PM2.5.

TABLE 3.2-8
UNMITIGATED LOCALIZED CONSTRUCTION EMISSIONS ANALYSIS (POUNDS PER DAY) [A]

Source	NO_X	CO	PM10 [b]	PM2.5 [b]
Phase 1 – Drainage/Utilities/Trenching + Grading/Excavation	24	14	3	2
Phase 1 – Grading/Excavation + Foundation	26	16	4	2
Phase 1 – Building Construction + Paving	21	22	1	1
Phase 1 – Building Construction + Architectural Coating	12	22	1	1
Phase 2 – Drainage/Utilities/Trenching + Grading/Excavation	24	14	3	2
Phase 2 – Grading/Excavation + Foundation	26	16	4	2
Phase 2 – Building Construction + Paving	21	22	1	1
Phase 2 – Building Construction + Architectural Coating	12	22	1	1
Phase 1 – Drainage/Utilities/Trenching + Grading/Excavation + Phase 2 – Drainage/Utilities/Trenching + Grading/Excavation[c]	48	29	7	5
Phase 1 – Grading/Excavation + Foundation + Phase 2 – Grading/Excavation[c]	43	25	7	4
Phase 1 – Building Construction + Paving + Phase 2 – Grading/Excavation + Foundation[c]	47	38	5	3
Phase 1 – Building Construction + Paving + Phase 2 – Building Construction + Paving[c]	42	45	2	2
Phase 1 – Building Construction + Architectural Coating + Phase 2 – Building Construction + Architectural Coating[c]	24	25	1	1
Maximum Daily Emissions	48	45	7	5
SCAQMD Regional Significance Thresholds	148	1540	12	7
Over/ (Under)	(100)	(1495)	(5)	(2)
Exceeds Threshold?	No	No	No	No

NOTES:

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B.

[b] Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

[c] Daily emissions maximums of overlapping subphases within Phases may not add up to daily emissions maximums between Phases due to construction schedule timing. See Appendix B for more details.

SOURCE: ESA, 2019.

In addition, while Project-related localized construction emissions would be below the SCAQMD thresholds of significance for NO_X, CO, PM10, and PM2.5, implementation of Mitigation Measure MM-AQ-1 as required to address a potentially significant impact with regards to regional construction-related emissions would also further reduce localized construction-related criteria and precursor pollutants emissions.

Health Effects of Criteria Pollutants

USEPA and CARB have established AAQS at levels above which concentrations could be harmful to human health and welfare, with an adequate margin of safety. Further, California air districts, like SCAQMD, have established emission-based thresholds that provide project-level estimates of criteria air pollutant quantities that air basins can accommodate without affecting the attainment dates for the AAQS.

Table 3.2-5 shows that all criteria pollutants, with the exception of NO_X, are below the SCAQMD's regulatory thresholds. Without mitigation, NO_X exceeds the daily construction threshold. Accordingly, elevated levels of criteria air pollutants as a result of a project's emissions could cause adverse health effects associated with this pollutant. However, implementation of Mitigation Measure MM-AQ-1 would reduce the Projects potential to result in regional health effects associated with O_3 precursors (VOC and NO_X), and would reduce both localized and regional project generated construction and operational emissions (with the exception of CO which increases slightly with mitigation but still remains below regulatory thresholds). As shown in Tables 3.2-6 and 3.2-7, mitigated Project construction emissions and unmitigated Project operational emissions, respectively, would not exceed regulatory thresholds. Therefore, they would not have the potential to result in additional quantifiable health impacts.

Health Risk Assessment

The process of assessing health risks and impacts includes a degree of uncertainty. The level of uncertainty is dependent on the availability of data and the extent to which assumptions are relied upon in cases where the data are incomplete or unknown. All HRAs rely upon scientific studies in order to reduce the level of uncertainty; however, it is not possible to completely eliminate uncertainty from the analysis. Where assumptions are used to substitute for incomplete or unknown data, it is standard practice in performing HRAs to err on the side of health protection in order to avoid underestimating or underreporting the risk to the public. In general, sources of uncertainty that may lead to an overestimation or an underestimation of the risk include extrapolation of toxicity data in animals to humans and uncertainty in the exposure estimates. In addition to uncertainty, there exists "a natural range or variability in the human population in such properties as height, weight, and susceptibility to chemical toxins. As mentioned previously, it is typical to err on the side of health protection by assessing risk on the most sensitive populations, such as children and the elderly.

Construction Health Risk

The greatest potential for TAC emissions would be related to DPM emissions associated with heavy equipment operations during grading and excavation, site preparation, and building construction activities. In addition, incidental amounts of toxic substances, such as oils, solvents, and paints

would be used. These products would comply with all applicable SCAQMD rules for their manufacture and use.

The Project would be subject to several SCAQMD rules designed to limit exposure to TACs during construction activities. The Project would be required to comply with the CARB ATCM that limits diesel-powered equipment and vehicle idling to no more than five minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction. The resulting health risk calculations were performed using a spreadsheet tool consistent with the OEHHA guidance. The spreadsheet tool incorporates the algorithms, equations, and a variable described above as well as in the OEHHA Guidance, and incorporates the results of the AERMOD dispersion model. **Table 3.2-9,** below summarizes the carcinogenic chronic risk for the maximum impacted sensitive receptors.

TABLE 3.2-9
UNMITIGATED MAXIMUM HEALTH IMPACTS FOR OFF-SITE SENSITIVE RECEPTORS

Construction Plan A	Maximum Cancer Risk (# in 1 million)	Chronic Hazard Index
Receptor Type		
Residential	**92**	0.08
Maximum Individual Cancer Risk Threshold	10.0	1.0
Exceeds Threshold?	**Yes**	No

SOURCE: ESA, 2019. Health risk calculations are provided in Appendix B.

For carcinogenic exposures, the cancer risk from DPM emissions from construction is estimated to result in a maximum carcinogenic risk at the residential uses to the south of the Project Site, south west of the intersection of E. Grand Avenue and S. Gladys Avenue. As discussed previously, the lifetime exposure under the OEHHA Guidance takes into account early life (3rd trimester fetus, infant and children) exposure.

The calculated cancer risk is estimated for outdoor exposure and assumes that sensitive receptors (residential uses) would not have any mitigation such as mechanical filtration and that residential uses would have continuously open windows during construction. As the maximum modeled impact would exceed the risk threshold of 10.0 in one million, impacts are considered potentially significant. Implementation of Mitigation Measures MM-AQ-1 and MM-AQ-2 would reduce DPM emissions during construction activities and thereby reduce health risk to a less than significant level, and therefore construction of the proposed Project would not expose sensitive receptors to substantial pollutant concentrations. Potential non-cancer effects of chronic (i.e., long term) DPM exposures were evaluated using the Hazard Index approach as described in the OEHHA Guidance. A hazard index equal to or greater than 1.0 represents a significant chronic health hazard. **As shown in Table 3.2-9 the hazard index for the Project is 0.08 and does not exceed the hazard index threshold of 1 and therefore the Project's chronic risk impact would be less than significant**.

Mitigation Measures

The incorporation of the following Mitigation Measures MM-AQ-1 and MM-AQ-2 would reduce construction-related air quality impacts associated with the Project:

> **Mitigation Measure MM-AQ-1:** (see measure description under Impact AIR-2 above)
>
> **Mitigation Measure MM-AQ-2:** The construction contractor shall ensure that all welders used during construction activities would use a non-diesel fuel sources (i.e. electricity, natural gas, propane, gasoline).

With the implementation of these mitigation measures, health risk from Project construction activities would be a less than significant impact. Implementation of one Mitigation Measure MM-AQ-1 reduces cancer risk to offsite sensitive receptors from 92 in one million to approximately 20 in one million, which would still be greater than the threshold of 10 in a million. Implementation of Mitigation Measure MM-AQ-2 (combined with MM-AQ-1), further reduces cancer risk to offsite sensitive receptors to approximately 4 in one million, below the 10 in a million threshold.

Operation

Localized Operational Emissions

The Project's localized operational air quality analysis was conducted using the methodology described in the SCAQMD LST Methodology (SCAQMD, 2008). The screening criteria provided in the LST Methodology were used to determine localized operational emissions thresholds for the Project. The maximum daily increase in localized emissions and localized significance thresholds are presented in **Table 3.2-10**.

TABLE 3.2-10
MAXIMUM UNMITIGATED LOCALIZED OPERATIONAL EMISSIONS (POUNDS PER DAY) [A]

Source	NO_X	CO	PM10[b]	PM2.5[b]
Area	<1	21	<1	<1
Energy	2	1	<1	<1
Total Localized Project Operational Emissions	2	22	<1	<1
SCAQMD Significance Thresholds	148	1540	3	2
Above/ (Under)	(146)	(1518)	(3)	(2)
Exceeds Thresholds?	No	No	No	No

NOTES:

[a] Totals may not add up exactly due to rounding in the modeling calculations Detailed emissions calculations are provided in Appendix B.

[b] Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2019.

As shown in Table 3.2-10, the maximum localized operational emissions would be below the localized thresholds for NO_X, CO, PM10, and PM2.5. **Therefore, with respect to localized operational emissions, impacts would be less than significant**.

Operational TAC Emissions

Project operations would generate only minor amounts of diesel emissions from mobile sources, such as delivery trucks (including to the grocery store) and occasional maintenance activities that would not exceed 100 trucks per day or more than 40 trucks with operating transport refrigeration units (TRUs), which, as stated in the methodology section, is used as a screening level threshold by the SCAQMD for when health risks would be required for operational activities. Furthermore, Project trucks are required to comply with the applicable provisions of the CARB Truck and Bus regulation to minimize and reduce PM and NO_X emissions from existing diesel trucks. In addition, Project operations would only result in minimal emissions of air toxics from maintenance or other ongoing activities, such as from re-applying architectural coatings and cleaning building surfaces. Therefore, the Project operations would not be considered a substantial source of diesel particulates.

The Project's land uses would not include installation of industrial-sized paint booths or require extensive use of commercial or household cleaning products. As a result, toxic or carcinogenic air pollutants are not expected to occur in any substantial amounts in conjunction with Project operation. No emergency back-up generators were anticipated as part of the Project description, however, even if emergency generators are implemented in the final build-out, emergency generators must be permitted through the SCAQMD and therefore would be required to meet emissions standards and would not result in exceedances to SCAQMD thresholds. Based on the expected uses on the Project Site, potential long-term operational impacts associated with the release of TACs would be minimal, regulated, and controlled, and therefore would not exceed the SCAQMD significance threshold. Therefore, impacts would be less than significant.

Typical sources of acutely and chronically hazardous TACs include industrial manufacturing processes and automotive repair facilities. The Project would not include any of these potential sources, although minimal emissions may result from the use of consumer products (e.g., aerosol sprays). **Therefore, the Project is not expected to release substantial amounts of TACs, and less than significant impacts on human health would occur**.

Carbon Monoxide Hotspots

The potential for the Project to cause or contribute to CO hotspots is evaluated by comparing Project intersections (both intersection geometry and traffic volumes) with prior CO modeling conducted by SCAQMD in support of their 2003 AQMP, and considering existing background CO concentrations. As discussed below, this comparison demonstrates that the Project would not cause or contribute considerably to the formation of CO hotspots, that CO concentrations at Project impacted intersections would remain well below the ambient air quality standards, and that no further CO analysis is warranted or required.

As shown previously in Table 3.3-2, CO levels in the Project area do not exceed the federal and state CO standards. Maximum CO concentrations in recent years (2016 – 2018) range from 1.5 – 2.2 ppm (one-hour average) and 1.0 – 1.7 ppm (eight-hour average) compared to the thresholds of

20 ppm (one-hour average) and 9.0 ppm (eight-hour average), respectively. As no recent exceedances of CO have been recorded at monitoring stations in the Air Basin, and the Air Basin is currently designated as a CO attainment area for both the CAAQS and NAAQS. Thus, it is not expected that CO levels at Project-impacted intersections would result in an exceedance of these CO standards.

Additionally, SCAQMD conducted CO modeling for the 2003 AQMP (SCAQMD, 2003) for the four worst-case intersections in the Air Basin: (1) Wilshire Boulevard and Veteran Avenue; (2) Sunset Boulevard and Highland Avenue; (3) La Cienega Boulevard and Century Boulevard; and (4) Long Beach Boulevard and Imperial Highway. In the 2003 AQMP, SCAQMD notes that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day. This intersection is located near the on- and off-ramps to Interstate 405 in West Los Angeles. The peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (one-hour average), and 3.2 ppm (eight-hour average) at the intersection of Wilshire Boulevard and Veteran Avenue (SCAQMD, 2003). When added to the existing background CO concentrations, the screening values would be 7.6 ppm (one-hour average) and 5 ppm (eight-hour average) (SCAQMD, 2003).

In comparison with the Project, based on the Project's Circulation Study (Fehr & Peers, 2020) of the studied intersections, one intersection would potentially have average traffic volumes of approximately 53,150 per day, which is less than the 2013 AQMP's most congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day. As a result, Project CO concentrations are expected to be less than those estimated in the 2003 AQMP, which would not exceed the thresholds. Thus, this comparison demonstrates that the Project would not contribute considerably to the formation of CO hotspots, and no further CO analysis is required. **The Project would result in less than significant impacts with respect to CO hotspots and therefore would not expose sensitive receptors to substantial pollutant concentrations**.

Impact AIR-4: The proposed Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. (Less than Significant Impact.)

Construction

Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents. SCAQMD Rule 1113 limits the allowable amount of VOCs from architectural coatings and solvents. Since compliance with SCAQMD Rules governing these compounds is mandatory, no construction activities or materials are proposed that would create objectionable odors. **Therefore, construction of the proposed Project would not result in other emissions adversely affecting a substantial number of people, and impacts would be less than significant**.

Operation

According to the SCAQMD CEQA Air Quality Handbook (SCAQMD, 1993), land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. Long-term Project operations including residential, commercial (restaurants), a market, a fitness center, and open space, would not introduce new sources of odors and would not create objectionable odors that could affect a significant number of nearby sensitive receptors. The Project does not include any uses identified by SCAQMD as being typically associated with objectionable or nuisance odors. Waste collection areas and disposal for the Project would be covered and situated away from the property line and sensitive off-site uses. Best management and good housekeeping practices would be sufficient to prevent nuisance odors**. Therefore, operation of the proposed Project would not result in other emissions adversely affecting a substantial number of people, and impacts would be less than significant**.

3.2.6 Cumulative Impacts

The geographic area for cumulative analysis for the discussion of air quality impacts is the Air Basin. As the analysis focused on emissions within the Air Basin, projects that are located outside of the Air Basin do not constitute the geographic area for this analysis. As shown in Table 3.0-1, of Chapter 3, *Environmental Analysis*, of this Draft EIR, there are 37 cumulative projects identified in the vicinity of the Project. Other projects will occur basin-wide, however identifying all basin-wide projects is not needed as the SCAQMD thresholds address emissions on a project basis and do not need to quantify emissions from all basin-wide projects to determine cumulative significance of an individual project.

The SCAQMD CEQA Air Quality Handbook states that the "Handbook is intended to provide local governments, project proponents, and consultants who prepare environmental documents with guidance for analyzing and mitigating air quality impacts of projects (SCAQMD, 1993). The Handbook also states that "[f]rom an air quality perspective, the impact of a project is determined by examining the types and levels of emissions generated by the project and its impact on factors that affect air quality. As such, projects should be evaluated in terms of air pollution thresholds established by the District" (SCAQMD, 1993). The Handbook has also provided guidance on an acceptable approach to addressing the cumulative impacts issue for air quality as discussed below:

> *"As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR… Projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."*

Because the City has not adopted specific Citywide significance thresholds for air quality impacts, it is appropriate to rely on thresholds established by SCAQMD (refer to CEQA Guidelines Section 15064.7). While it may be possible to add emissions from the list of cumulative projects and the Project, it would not provide meaningful data for evaluating cumulative impacts under CEQA

because neither the City nor SCAQMD have established numerical thresholds applicable to the summation of multiple project emissions for comparison purposes. Additionally, regional emissions from a project have the potential to affect the Air Basin as a whole, and unlike other environmental issues, such as aesthetics or noise, it is not possible to establish a geographical radius from a specific project site where potential cumulative impacts from regional emissions would be limited. Meteorological factors, such as wind, can disperse pollutants, often times tens of miles downwind from a project site. Therefore, consistent with accepted and established SCAQMD cumulative impact evaluation methodologies, the potential for the Project to results in cumulative impacts is assessed based on the SCAQMD thresholds.

Construction

With respect to the Project's short-term construction-related air quality emissions and cumulative conditions, SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to the federal CAA mandates. As such, construction of the Project would comply with SCAQMD Rule 403 requirements and the ATCM to limit heavy-duty diesel motor vehicle idling to no more than 5 minutes at any given time. In addition, the Project would utilize a construction contractor(s) that complies with required and applicable BACT and the In-Use Off-Road Diesel Vehicle Regulation. Per SCAQMD rules and mandates, as well as, the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects in the Air Basin, which would include each of the related projects in the Project area.

As discussed above under Impact AIR-2 and shown in Table 3.2-5, maximum regional daily unmitigated emissions from construction of the Project would exceed the applicable SCAQMD significance threshold for NO_X. Therefore, the Project's short-term cumulative construction impacts would be cumulatively significant before mitigation. However, as discussed Impact AIR-2 and shown in Table 3.2-6, after the implementation of Mitigation Measure MM-AQ-1, the Project's cumulative contribution to regional NO_X would be less than significant. Furthermore, as discussed above under Impact AIR-3, and shown in Table 3.2-8 and Table 3.2-9, the daily localized construction-related emissions of criteria and precursor pollutants would be below the SCAQMD thresholds of significance for NO_X, CO, PM10, and PM2.5. Therefore, the Project emissions during construction would not be cumulatively considerable, and would be less than significant with regard to regional and localized construction emissions.

As discussed under Impact AIR-3 and shown in Table 3.2-9, unmitigated construction air quality impacts for toxic air contaminants, DPM specifically, would exceed the SCAQMD's cancer risk threshold of 10 per million. With implementation of Mitigation Measures MM-AQ-1 and MM-AQ-2, construction air quality impacts would be reduced below the significance threshold. **Based on this, Project air quality impacts would not be cumulatively considerable for toxic air contaminants during construction**.

Operation

The SCAQMD's approach for assessing cumulative impacts related to operations or long-term implementation is based on attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. As discussed earlier, SCAQMD has developed a comprehensive plan, the AQMP, which addresses the region's cumulative air quality condition.

A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or state non-attainment pollutant. Because the Los Angeles County portion of the Air Basin is currently in nonattainment for O_3, PM10, and PM2.5, cumulative projects could exceed an air quality standard or contribute to an existing or projected air quality exceedance. Cumulative impacts to air quality are evaluated under two sets of thresholds for CEQA and the SCAQMD. In particular, Section 15064(h)(3) of the CEQA Guidelines provides guidance in determine the significance of cumulative impacts. Specifically, Section 15064(h)(3) states in part that:

> *"A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the land enforced or administered by the public agency…"*

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the Project's incremental contribution to cumulative air quality impacts is determined based on compliance with the SCAQMD adopted 2012 AQMP. The Project would not conflict with or obstruct implementation of AQMP and would be consistent with the growth projections in the AQMP.

Nonetheless, SCAQMD no longer recommends relying solely upon consistency with the AQMP as an appropriate methodology for assessing cumulative air quality impacts. The SCAQMD recommends that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality. As discussed above under Impact AIR-2 and Impact AIR-3, and as shown in Table 3.2-7 and Table 3.2-10, Project operational-related regional and localized maximum daily emissions for the criteria and precursor pollutants (VOC, NO_X, CO, SO_X, PM10, and PM2.5) would be below the SCAQMD thresholds of significance. Therefore, since operational emissions would be below regional and localized SCAQMD thresholds, the Project's cumulative contribution to operational significant impacts would not be cumulatively considerable, and would be less than significant.

As discussed in detailed under Impact AIR-3, Project operations would generate only minor amounts of diesel emissions from mobile sources and other operational activities (such as maintenance and cleaning activities). **Therefore, the Project is not expected to release substantial amounts of TACs and the Project's air quality impacts would not be cumulatively considerable for toxic air contaminants during operations**.

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3.3 Cultural Resources

This section of the EIR analyzes the potential effects of the proposed Project's impacts related to cultural resources that could result from implementation of the proposed Project. The analysis in this section is based, in part, on the *San Gabriel Nursery Historic Resources Assessment, San Gabriel Nursery* (HRA) (Onyx, 2018) and the *Pacific Square San Gabriel Mixed-Use Project, City of San Gabriel, California, Archaeological Resources Assessment Report* (ESA, 2018), which can be found in Appendices C-1 and C-2 to this EIR, respectively. This report satisfies the City's Historic Preservation and Cultural Resource Ordinance No. 636-C.S. (C)(1), and as no resources were identified requiring additional evaluation, a Phase II report is not required.

3.3.1 Existing Conditions

Setting

The Project Site is located in the San Gabriel Valley in the Eastern Los Angeles Basin. San Gabriel is located within the Peninsular Range Geomorphic Province, one of the major geomorphic provinces in Southern California. The Province consists of a series of northwest trending mountain ranges, and sub-parallel intervening valleys formed by faults branching from the San Andreas Fault. The San Gabriel Valley is generally underlain by surficial Quaternary-age alluvium and at depth by Tertiary-age marine and non-marine sedimentary deposits and Cretaceous to pre-Cretaceous-age igneous and metamorphic basement rock.

The Project Site is located in an urbanized area and consists of graded land with no present structures with minimal impervious surfaces (e.g. concrete sidewalks surrounding the perimeter of the Project Site) and limited landscaping (mainly a row of planted king palm trees located on the southeastern portion of the Project Site that were part of the former nursery). The adjacent surrounding blocks are comprised of various commercial business constructed post World War II. Immediately to the north of the Project Site is the operational retail location of the San Gabriel Nursery & Florist, which the Project Site formerly served. The portion of the Project Site that faces South San Gabriel Boulevard consists of public sidewalk and fencing. To the east is fencing and unpaved areas currently used for parking and Gladys Avenue and residential housing. To the south is fencing and Grand Avenue with multi-family residential across the street.

Prehistoric Setting

The earliest evidence of occupation in the Los Angeles area dates to at least 9,000 years before present (B.P.) and is associated with a period known as the Millingstone Cultural Horizon, which is an archaeological period in California involving extensive use of grinding technology (Wallace, 1955; Warren, 1968; Jones, 2007). Departing from the subsistence strategies of their nomadic big game hunting predecessors, Millingstone populations established more permanent settlements. These settlements were located primarily on the coast and in the vicinity of estuaries, lagoons, lakes, streams, and marshes where a variety of resources including seeds, fish, shellfish, small mammals, and birds were exploited. Early Millingstone occupations are typically identified by the presence of handstones (manos) and millingstones (metates), while those Millingstone occupations

dating later than 5,000 years B.P. contain a mortar and pestle complex as well, signifying the exploitation of acorns in the region.

Although many aspects of Millingstone culture persisted, by 3,500 years B.P. a number of socioeconomic changes occurred (Erlandson, 1994; Wallace, 1955; Warren, 1968). These changes are associated with the period known as the Intermediate Horizon (Wallace, 1955). Increased populations in the region necessitated the intensification of existing terrestrial and marine resources (Erlandson, 1994). This was accomplished in part through the use of the circular shell fishhook on the coast, and more abundant and diverse hunting equipment. Evidence for shifts in settlement patterns has been noted at a variety of locations at this time and is seen by many researchers as reflecting increasingly territorial and sedentary populations. The Intermediate Horizon marks a period in which specialization in labor emerged, trading networks became an increasingly important means by which both utilitarian and non-utilitarian materials were acquired, and travel routes were extended. Archaeological evidence suggests that the margins of numerous rivers, marshes, and swamps within the Los Angeles River Drainage served as ideal locations for prehistoric settlement during this period. These well-watered areas contained a rich collection of resources and are likely to have been among the more heavily trafficked travel routes.

The Late Prehistoric period, spanning from approximately 1,500 years B.P. to the mission era (beginning in 1770), is the period associated with the florescence of the contemporary Native American group known as the Gabrielino (Wallace, 1955). Coming ashore near Malibu Lagoon or Mugu Lagoon in October of 1542, Juan Rodriguez Cabrillo was the first European to make contact with the Gabrielino Indians. Occupying the southern Channel Islands and adjacent mainland areas of Los Angeles and Orange Counties, the Gabrielino are reported to have been second only to their Chumash neighbors in terms of population size, regional influence, and degree of sedentism (Bean and Smith, 1978). The Gabrielino are estimated to have numbered around 5,000 in the pre-contact period (Kroeber, 1925) and maps produced by early explorers indicate that at least 26 Gabrielino villages were within proximity to known Los Angeles River courses, while an additional 18 villages were reasonably close to the river (Gumprecht, 2001).

Ethnographic Setting

The Project Site is located in a region traditionally occupied by the Takic-speaking Gabrielino Indians. The term “Gabrielino” is a general term that refers to those Native Americans who were administered by the Spanish at the Mission San Gabriel Arcángel. Prior to European colonization, the Gabrielino occupied a diverse area that included: the watersheds of the Los Angeles, San Gabriel, and Santa Ana rivers; the Los Angeles basin; and the islands of San Clemente, San Nicolas, and Santa Catalina (Kroeber, 1925). Their neighbors included the Chumash to the north, the Juañeno to the south, and the Serrano and Cahuilla to the east. The Gabrielino are reported to have been second only to the Chumash in terms of population size and regional influence (Bean and Smith, 1978). The Gabrielino language is part of the Takic branch of the Uto-Aztecan language family.

The Gabrielino Indians were hunter-gatherers and lived in permanent communities located near the presence of a stable food supply. Subsistence consisted of hunting, fishing, and gathering. Small terrestrial game was hunted with deadfalls, rabbit drives, and by burning undergrowth, while larger

game such as deer were hunted using bows and arrows. Fish were taken by hook and line, nets, traps, spears, and poison (Bean and Smith 1978; Reid 1939 [1852]). The primary plant resources were the acorn, gathered in the fall and processed with mortars and pestles, and various seeds that were harvested in late spring and summer and ground with manos and metates. The seeds included chia and other sages, various grasses, and islay or holly leafed-cherry (Reid 1939 [1852]).

Community populations generally ranged from 50 to 100 inhabitants, although larger settlements may have existed. The Gabrielino are estimated to have had a population numbering around 5,000 in the pre-contact (before Spanish exploration) period (Kroeber, 1925). Gabrielino villages are reported by early explorers to have been most abundant near the Los Angeles River, in the area north of downtown, known as the Glendale Narrows, and those areas along the river's various outlets into the sea. Among those villages north of downtown are *Maawnga* in the Glendale Narrows; *Totongna* and *Kawengna,* in the San Fernando Valley; *Hahamongna,* northeast of Glendale; and the village of *Yaangna*, in the vicinity of present-day downtown Los Angeles (McCawley, 1996).

Historic Setting

The *Gabrielino* were virtually ignored between the time of Cabrillo's visit and the Spanish Period, which began in 1769 when Gaspar de Portola and a small Spanish contingent began an exploratory journey along the California coast from San Diego to Monterey. Passing through the Los Angeles area, they reached the San Gabriel Valley on August 2, 1769 and traveled west through a pass between two hills where they encountered the Los Angeles River and camped on its east bank near the present-day North Broadway Bridge and the entrance to Elysian Park. This location has been designated California Historic Landmark Number 655, the Portola Trail Campsite. Father Crespi (a member of Portola's party) indicated in his diaries that on that day they "entered a spacious valley, well grown with cottonwoods and alders, among which ran a beautiful river. This plain where the river runs is very extensive and…is the most suitable site for a large settlement" (The River Project 2011). He goes on to describe this "green, lush valley"; its "very full flowing, wide river"; the "riot of color" in the hills; and the abundance of native grapevines, wild roses, grizzly, antelope, quail and steelhead trout. Crespi observed that the soil was rich and "capable of supporting every kind of grain and fruit which may be planted." The river was named *El Rio y Valle de Nuestra Senora la Reina de Los Angeles de la Porciuncula*.

Gabrielino villages are reported by early explorers to have been most abundant near watercourses. Nine important Gabrielino villages are known to have been located within the San Gabriel Valley. Among those, the villages closest to the Project Site are:

- *Toviscangna*, located near the San Gabriel Mission (approximately 0.80 miles west of the Project Site); *Akuuronga*, located near La Presa Avenue and Huntington Drive (approximately 2.36 miles north of the Project Site); and
- *Sonaanga*, located on the present-day grounds of San Marino High School (approximately 2.16 miles north-northwest of the Project Site) (Lund, 1999; McCawley, 1996).

These communities were closely knit and shared a dialect, called *Simbanga*, as documented by Franciscan priests at the Mission (McCawley, 1996).

Missions were established in the years that followed the Portola expedition, the fourth being the first location of the *Mision San Gabriel Arcangel* founded in 1771 near the northeastern border of the present-day city of Montebello, near Whittier Narrows. The Mission was soon relocated in 1775 to its current location in San Gabriel (Dietler et al., 2015:19). By the early 1800s, the majority of the surviving Gabrielino population had entered the mission system. Gabrielino inhabiting Los Angeles County were under the jurisdiction of either *Mision San Gabriel* or *Mision San Fernando*. Mission life offered the Indians security in a time when their traditional trade and political alliances were failing and epidemics and subsistence instabilities were increasing (Jackson, 1999).

An agricultural settlement at its heart, San Gabriel Mission's garden, orchard, vineyard and winery, animal pens, and grazing lands, along with the aqueducts that watered them were essential. Due to its extensive and productive land holdings, including 24 associated ranchos, and its large pool of Native American neophyte labor, with more than 1,700 workers by 1817, San Gabriel Mission was among the most prosperous missions in Alta California (Dietler et al, 2015).

On September 4, 1781, twelve years after Crespi's initial visit, the *El Pueblo de la Reina de los Angeles* was established, approximately 8.6 miles southwest from the Project Site, where Portola and his men camped. Watered by the river's ample flow and the areas rich soils, the original pueblo occupied 28 square miles and consisted of a central square, surrounded by twelve houses, and a series of thirty-six agricultural fields occupying 250 acres, plotted to the east between the town and the river. Los Angeles' original central square was located near the present-day intersection on North Broadway and Cesar E. Chavez Boulevard in downtown Los Angeles. By 1786, the flourishing pueblo attained self-sufficiency and funding by the Spanish government ceased. Fed by a steady supply of water and an expanding irrigation system, agriculture and ranching grew, and by the early 1800s the pueblo produced 47 cultigens. Among the most popular were grapes used for the production of wine. By 1830 an estimated 100,000 vines were being cultivated at twenty-six Los Angeles vineyards (Gumprecht, 2001).

Alta California became a state when Mexico won its independence from Spain in 1821, and Los Angeles selected its first city council the following year. The authority of the California missions gradually declined, culminating with their secularization in 1834. Native Americans who had become dependent upon the missions were disenfranchised, and most *Gabrielino* neophytes either fled to the north or sought work as laborers for nearby private land owners. Former mission lands were quickly divided and granted to private citizens for use as agricultural and pastoral land (Reid 1939 [1852]).

As the possibility of a takeover of California by the United States loomed large in the 1840s, the Mexican government increased the number of land grants in an effort to keep the land in Mexican hands. More than 600 rancho grants were made between 1833 and 1846.

City of San Gabriel Early Development History

Located in the shadow of the San Gabriel Mountains and named for the Mission San Gabriel Arcángel founded there by Father Junipero Serra, the City of San Gabriel was instrumental in the founding of Los Angeles, as well as the state of California. San Gabriel holds historical significance, as Mission San Gabriel Arcángel served as the starting point for the original Spanish

settlers' (los Pobladores) nine-mile walk to Los Angeles in 1781 that initiated founding of Los Angeles. The late 1800s and early 1900s brought expansion and population growth to San Gabriel. Noted historical structures were built, such as the historical adobes, San Gabriel Cemetery, and the Church of Our Saviour. Among the first tourist destinations was Grapevine Arbor, which covered more than 10,000 square feet. Within Grapevine Arbor was Ramona's Home Inn. It was also during the late 19th century that Chinese, Japanese, Filipino and South Asian pioneers first settled in the area. Their arrival added ethnic diversity and culture that remain vibrant parts of San Gabriel today. In 1911 California poet laureate John Steven McGroarty wrote the legendary "Mission Play," chronicling the founding of the missions and touting the area's rich history. Given the play's early success, the Mission Playhouse was built, and it remains a cultural center yet today.

History of the Project Site

The Project Site was originally owned by Isaac Newton Van Nuys and Annie Spencer in the early 1900s. Records show that they began selling off lots in 1905-1908 and by 1918 it was developed as the Ransom Mitchell Nursery. In 1925 the nursery property was then sold to Imao Naydo who owned the it until it was sold to Raymond and Hayao Yoshimura in 1943. Raymond was the son of Fred Yoshimura who was interned at a Japanese Internment camp in Arizona with his wife and children. The family had also owned a nursery on a site located at 735 South San Gabriel Boulevard, across the street to the west from the Project Site. In addition, the Yoshimura family acquired the parcel immediately to the north that was used as the retail store location, which remains there today. The primary uses of the Project Site were to provide for the additional planting inventory for the nursery business which is still located at 632 South San Gabriel Boulevard (Onyx, 2018). The structures on the Project Site included greenhouses and associated structures, for growing and storing the additional plant inventory. as well as two residences which were built before 1948, and associated outbuildings, that were removed from the site in 2017.

As described above, the Project Site had been owned and maintained since 1943 by a Japanese family named the Yoshimuras. The patriarch of the Yoshimura family, Fred Yoshimura, immigrated to the United States from Japan in 1917 with him first arriving in San Francisco and eventually he relocated to San Gabriel in 1922. To make a living down in the local area he found work as a gardener where he developed his skills to grow and maintain various types of plants. He eventually met his future wife, Mitoko Naito, who was hired by one of the clients he worked for. They eventually married in 1924 and subsequently had four children. From reviewing records, the family owned and maintained their own nursery on a site located at 735 South San Gabriel Boulevard. During World War II the family was relocated to a Japanese internment camp in Arizona and sold their original nursery site at 735 South San Gabriel Boulevard. After the war they acquired the Project Site in addition to adjacent land to the north of it.

The primary use of the Project Site through records indicate it used to provide additional planting inventory they could sell at their main retail location at 632 South San Gabriel Boulevard. The nursery now outsources their inventory but continues to sell at the retail location.

Since 2017, the site contained vacant greenhouses and associated structures, eight of which were burned down by an act of arson on February 14, 2018, which left the site severely burned and in damaged condition with a large amount of debris. Since July 2018, the Project Site has been graded

and cleaned of all burnt debris. The Project Site currently consists of only graded land and some of the original landscaping on the south portion of the Project Site that was originally associated with the residences that have since been removed. There are no structures currently standing on the Project Site.

On October 30, 2017 ESA conducted a phone conversation with Andy Salas, Gabrielino Band of Mission Indians-Kizh Nation, regarding his family involvement with the Yoshimura family and the nursery. He stated that his second cousin, Gene Perez, worked for and was friendly with the family. As described above, in the 1940s, the Yoshimura's were sent to a Japanese internment camp, and while many Japanese business owners lost everything, the Yoshimura's were able to sell their business to a E. Manchester Boddy, publisher of the Los Angeles Daily News and previous owner of what is now the Descanso Gardens. While the Yoshimuras were in the internment camps, Mr. Perez and his wife, Elena Chowa, worked at the nursery for Mr. Boddy, and looked after the Yoshimura Family's personal belongings. Upon return, Mr. Perez helped the Yoshimura's start over again. In gratitude, the Yoshimura's gave Mr. Perez and his wife a house on the property (likely one of the residences formerly on the southern portion of the Project Site). More information regarding the history of the San Gabriel Nursery can be found on the business webpage (Salas, 2018 and San Gabriel Nursery, 2018).

Identification of Cultural Resources within the Project Site

South Central Coastal Information Center Records Search

A records search for the Project Site was conducted on July 9, 2018 at the South Central South Central Coastal Information Center (SCCIC) housed at the California State University, Fullerton. The records search included a review of all previously documented cultural resources and cultural resources investigations within a 0.5-mile radius of the Project Site. The records search also included a review of California Points of Historical Interest, California Historical Landmarks, the California Register, the National Register, the California State Historic Resources Inventory listings, and the Los Angeles Historic-Cultural Monument listings.

Previous Cultural Resources Investigations

The records search results indicate that 11 cultural resources studies have been conducted within a 0.5-mile radius of the Project Site. Less than 25 percent of the 0.5-mile records search radius has been included in previous cultural resources surveys. Of these 11 studies, one (LA- 5457) included portions of the Project Site.

Previously Recorded Cultural Resources

No archaeological resources have been previously recorded within the Project Site; however, one historic period resource (P-19-192334), the Mission Lodge Nursing Home, has been recorded immediately east of the Project Site across Gladys Avenue, and is described below. A total of 22 cultural resources have been previously recorded within the 0.5-mile records search radius. This includes 20 historic architectural resources and two historic-period archaeological resources.

Resource P-19-192334 is identified as the Mission Lodge Nursing Home, an Alzheimer's care facility that was first a sanitarium constructed in 1922. The Mission Lodge Nursing Home was originally owned by Joseph and Marion Teagle. The resource was evaluated and found ineligible

for listing in the National Register, California Register, or Local designation through survey evaluation in 2014 (Haas, 2014). In the 1940s, ownership passed to Fern and Elsie Hunt. Frank S. Whiting acquired ownership in 1958 before it was sold to Carol DeMarco (Ling 2013). The facility consisted of two stand-alone buildings. The entrance to the main building appeared to be original and was constructed in the Mission Revival style at the time of documentation. The exterior of the entrance was covered in white stucco with red tile roofs. Resource P-19-192334 was previously located approximately 75 feet east of the Project Site, across Gladys Avenue, and has since been demolished as of 2018 with the development of an assisted living community comprised of varying degrees of assisted living services, including memory care.

Sacred Lands File Search

The NAHC maintains a confidential Sacred Lands File (SLF) which contains sites of traditional, cultural, or religious value to the Native American community. The NAHC was contacted on July 5, 2018 to request a search of the SLF. The NAHC responded to the request in a letter dated July 6, 2018. The letter states that the SLF search yielded negative results and indicated that "the absence of specific site information…does not indicate the absence of Native American cultural resources" within a project site (Lienert, 2018). The City, as lead CEQA agency, is conducting consultation with tribes who are traditionally and culturally affiliated with the geographic area associated with the project site pursuant to Assembly Bill 52 and its relevant implementing regulations.

Historic Maps and Aerial Photographs

Historic maps and aerial photographs and other information found in the Phase I Environmental Site Assessment (EEI, 2016), which can be found in Appendix F-1 and the HRA (Onyx, 2018), in Appendix C-1, were examined to provide historical information about land uses of the Project Site and to contribute to an assessment of the Project Site's archaeological sensitivity. Review of the 1894 and the 1900 historic topographic maps indicate that the Project Site was undeveloped during these years. The Southern Pacific Railroad located 650 feet to the north of the Project Site is mapped as early as 1894, in the same alignment that it follows today. The nearest water resources indicated on the 1894 and 1900 topographic maps show that Kewen Lake was located approximately 1.62-miles northwest of the Project Site in what is now Lacy Park, and Lexington Wash, which was mapped approximately 2.34-miles southeast of the Project Site.

By 1923, topographic maps indicate increased development in the vicinity of the Project Site. Rubio Canyon is identified approximately 353 feet to the east of the Project Site, running north to south. This canyon was not depicted on earlier topographic maps. The Project Site itself was in its current configuration with the surrounding roads developed and it was subdivided. In addition, three buildings are depicted within the Project Site: one in the southwest corner and two adjacent structures on the east side of the southern half closer to the center of the Project Site. The 1948 topographic map shows the addition of one more structure in the southeast corner, for a total of four structures on the southern half of the Project Site. The greenhouses, which are depicted for the first time on the topographic maps, are located on the northern boundary of the Project Site. Also, in 1948, Rubio Canyon was now labeled as "Rubio Wash" and appeared to have been channelized by that time.

The 1953 topographic map depicts the entire Project Site as shaded in pink, which according to topographic map keys, indicates urban development. Additionally, the jurisdictional boundary between the City of San Gabriel and the City of Rosemead is labeled on the 1948 topographic map to the immediate east of the Project Site. The 1966, 1975, and 1982, 1985, 1994, 2012, and 2015 topographic maps show no changes to the Project Site since the 1953 topographic maps, and no individual building detail is indicated beyond the current road configuration and urban development.

The earliest available aerial photo dates to 1928 and shows that the northern portion of the Project Site as vacant and the middle and southern portions have been developed with what are likely greenhouses and at least two of the residences are discernable. Ten years later the entire Project Site appears developed with additional greenhouse structures in the northern portion of the site, with the remainder of the site covered with greenhouse structures, the residences on the southeastern corner, and rows of plants. In 1948 and 1952 there are five linear greenhouse structures at the northern boundary, what appears to be the residences on the southeast corner and the middle third of the site appears used for plant storage. By 1964 to 1977 there are two rows of linear structures on the north side, the middle third is undeveloped and the residences are visible on the southern portion. In the 1970's the residence on the southwest was replaced by greenhouses. Starting in 1981, the center of the site shows additional greenhouses have been added instead of open plant storage. In 1989, 1994, 2002, 2005, 2009, 2012 and 2016, other than the residences on the southeast portion, all of the remaining Project Site appears to contain only linear greenhouse structures.

Review of the 1925 Sanborn map does not detail the development on the Project Site at that time. The 1938 Sanborn map shows three greenhouse buildings labeled as "Mission Nursery" and a maintenance building (Onyx, 2018). Additionally, the residence at the southwest side is shown as well as a small structure labeled "flower stand" were identified (EEI, 2016).

The Phase I ESA indicates that the Project Site was mainly operated as the growing area of the San Gabriel Nursery and Florist, and is assigned the addresses 710, 718, 822 and 836 South San Gabriel Boulevard, and 705, 815, 817, 821 and 823 South Gladys Avenue. The two residences were located on the southeastern portion of the Project Site, along South Gladys Avenue and were addressed 827 and 839 South Gladys Avenue (EEI, 2016). Based on aerial photography, the residences were demolished after 2016. Since the Phase I ESA was prepared in May 2016, a fire damaged all structures at the Project Site (in February 2018). The Project Site was subsequently cleared of all debris for health and safety reasons, which was completed by July, 2018.

Historic Archival Research

Sources consulted to develop the historical context and architectural history of the Project Site include the California State Office of Historic Preservation (OHP), Sanborn Maps, City of San Gabriel Building Department, the Office of the Los Angeles County Assessor and the Los Angeles County of Department of Public Works, and online databases.

The California State OHP keeps statewide records on historic properties. Records for San Gabriel are indexed in the Los Angeles County Historic Property Data File (HPDF), which does not contain

an entry for the Project Site, suggesting the property has not been previously evaluated in a survey submitted to OHP.

The City of San Gabriel Building Department files were searched for historic building permits and planning records. The City has original building permits records for when the site was operated by the Yoshimura family, however, no plans were found accompanying the records. The records indicate the following:

1. A single-family residential building was constructed on the Project Site at 839 Gladys Avenue (APN 5373-030-002 + 5373-030-003) in 1944 by E. Manchester under permit no. 4014 and it was later remodeled by Fred Yoshimura in 1952 under permit B5727.
2. In 1954 permit B179 was issued to construct a greenhouse.
3. In 1956, permit B1730 was issued to Raymond Yoshimura for the construction of another single-family residential building on the Project Site at 827 Gladys Avenue (APN 5737-030-009).

In addition, the Office of the Los Angeles County Assessor and t Los Angeles County Department of Public Works were searched for records and permits. The Los Angeles County Department of Public Works keeps building permits on microfilm from 1933 onward. A request resulted in no permit records being found.

There were records found for single-family residential buildings fronting Gladys Avenue and located at the southeast corner of the Project Site. The records indicate that three single-family residential buildings were constructed post World War II in the mid-1940s to the 1970s. The permits for two of the buildings were submitted to the City by Fred Yoshimura and Raymond Yoshimura and it is likely that the single-family residential buildings early on were occupied by members of the immediate Yoshimura family, but it should be noted that Fred Yoshimura, the patriarch of the family, did not live on the subject property. As noted above, the Perez family lived in one of these homes at some point. Photos of the buildings indicate that they were standard single-family residential buildings of the era with no unique defining architectural elements (see Appendix C-1 for photos). The remaining residences on the subject property were demolished and removed from the Project Site.

Historic Resources Survey

A site visit was conducted on January 4, 2018 to photograph and document the existing buildings and conditions at the Project Site and surrounding area. At the time of the survey there were five buildings on the Project Site including a one-story maintenance building constructed in the 1950s (no specific permit associated with the building were found), and four greenhouse buildings, one of which was constructed in 1954. The three remaining greenhouses were constructed before the 1940s, and no permits or additional information was available for those greenhouses. The Project Site was not in use at the time of survey and, as a result of the fire, there was significant debris across the site and the greenhouses were in a state of disrepair.

The former greenhouses on the Project Site were typical framed buildings with no artistic expression of the buildings and did not strongly represent any particular architectural style.

Additionally, the maintenance building had no distinct architectural style and was a simple wood framed building with exterior stucco walls to house tools and equipment to protect them from the elements when they were not in use. The only uses of existing buildings were either for growing plants or securing tools and equipment. Thus, the buildings were determined to not possess an architectural style (Onyx, 2018). The Project Site, with its former structures (in their fire-damaged condition), was deemed ineligible for the National Register, California Register, and Local Register (Onyx, 2018).

At the time of the survey conducted in support of the HRA, there were four existing greenhouses, two of which appeared to have been originally constructed in the 1930s. However, there was no distinctive architectural style maintained, and the framing and materials had been replaced over the years to maintain the buildings. There was also one existing maintenance building observed, that was constructed adjacent to the greenhouses. The wood framed maintenance building was a non-descript building without windows, one existing doorway into the building, the stucco walls, and a single hip roof with metal decking with an attic vent facing South San Gabriel Boulevard (Onyx, 2018).

Historic Resources Assessment Conclusions

The HRA found that the Project Site is not eligible for listing in the National or California Registers, or as a San Gabriel City Landmark or Historic Resource per Chapter 153 of the Municipal Code (Onyx, 2018). The Project Site was evaluated for its historical associations with early owners and tenants, architectural style, and representation of a pattern of residential development in the city. The Project Site consisted of peripheral buildings used to support the Nursery's retail shop, and did not appear to have been developed by nor associated with the important work of any important early landowners, tenants, or persons of significance to the history of the City. The Project Site was evaluated for its architectural merit. However, neither the buildings or landscape at the Project Site well represented any particular style. Finally, the Project Site was evaluated as representing an important pattern of early commercial development in the City of San Gabriel. Initially developed in 1920s, during a time when the City and southern California overall were experiencing expansion and population growth. The former uses on the Project Site were an example of commercial industrial development from the period. However, the Project Site did not appear to be an important example of nursery development, or the only one of its kind, nor did it appear to be part of a district. Furthermore, there was no evidence that any important events took place at the Project Site (Onyx, 2018). The HRA recommended as a condition of approval that the City have the Applicant document the former buildings on the Project Site with digital photography adhering to specifications of the digital image format. These photographs were taken in April of 2018 and are currently on-file with the City. Because it was determined that there would be no impact to historic resources, given the condition of the site and its threat to safety following the fire, the Project Site was subsequently cleared of all building and debris.

Archaeological Resources Survey

An archaeological resources survey of the Project Site was conducted on July 17, 2018 by ESA archaeologist Amber-Marie Madrid, B.A. The survey was aimed at identifying surface evidence of archaeological resources within the Project Site. In addition to this survey, ESA conducted archaeological monitoring, with a Native American monitor during the demolition and removal of

a vault that was part of the previous boiler room vault and foundation that was present at the northern portion of the Project Site. The boiler room that was identified by a qualified archaeologist during site clearing was determined to not qualify as a significant resource and is no longer extant. The majority of the Project Site, approximately 60 percent, was obscured by non-native gravel fill. Approximately 95 percent of the Project Site was surveyed. The soils observed on the surface included a red-brown loamy sand, often characterized as historic fill soils to about one-foot below ground surface (bgs). Soil observed below the fill line included a light-brown to brown fine-grained sand to approximately 6-feet bgs. As discussed, all previous structures at the Project Site had been destroyed by fire or removed from the site, with the exception of the boiler room vault. The survey did not yield the identification or archaeological resources, though the boiler room vault and foundation were documented on a California Department of Parks and Recreation (DPR) Archaeological Form appended to the *Archaeological Resources Assessment* in Appendix C-2.

3.3.2 Regulatory Framework

Federal Level

National Historic Preservation Act

The principal federal law addressing historic properties is the National Historic Preservation Act (NHPA), as amended, and its implementing regulations. Section 106 requires a federal agency with jurisdiction over a proposed federal action (referred to as an "undertaking" under the NHPA) to take into account the effects of the undertaking on historic properties, and to provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on the undertaking.

The term "historic properties" refers to "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register". The implementing regulations describe the process for identifying and evaluating historic properties, for assessing the potential adverse effects of federal undertakings on historic properties, and seeking to develop measures to avoid, minimize, or mitigate adverse effects. The Section 106 process does not require the preservation of historic properties; instead, it is a procedural requirement mandating that federal agencies take into account effects to historic properties from an undertaking prior to approval.

The steps of the Section 106 process are accomplished through consultation with the State Historic Preservation Office (SHPO), federally-recognized Indian tribes, local governments, and other interested parties. The goal of consultation is to identify potentially affected historic properties, assess effects to such properties, and seek ways to avoid, minimize, or mitigate any adverse effects on such properties. The agency also must provide an opportunity for public involvement. Consultation with Indian tribes regarding issues related to Section 106 and other federal authorities must recognize the government-to-government relationship between the Federal government and Indian tribes, as set forth in Executive Order 13175, 65 FR 87249 (Nov. 9, 2000), and Presidential Memorandum of Nov. 5, 2009.

National Register of Historic Places

The National Register was established by the NHPA of 1966, as "an authoritative guide to be used by federal, State, and local governments, private groups and citizens to identify the Nation's historic resources and to indicate what properties should be considered for protection from destruction or

impairment". , The National Register recognizes a broad range of cultural resources that are significant at the national, state, and local levels and can include districts, buildings, structures, objects, prehistoric archaeological sites, historic-period archaeological sites, traditional cultural properties, an d cultural landscapes. As noted above, a resource that is listed in or eligible for listing in the National Register is considered "historic property" under Section 106 of the NHPA.

Criteria

To be eligible for listing in the National Register, a property must be significant in American history, architecture, archaeology, engineering, or culture. Properties of potential significance must meet one or more of the following four established criteria:

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

B. Are associated with the lives of persons significant in our past;

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

D. Have yielded, or may be likely to yield, information important in prehistory or history.

Context

To be eligible for listing in the National Register, a property must be significant within a historic context. National Register Bulletin #15 states that the significance of a historic property can be judged only when it is evaluated within its historic context. Historic contexts are "those patterns, themes, or trends in history by which a specific...property or site is understood and its meaning... is made clear." A property must represent an important aspect of the area's history or prehistory and possess the requisite integrity to qualify for the National Register.

Integrity

In addition to meeting one or more of the criteria of significance, a property must have integrity. Integrity is defined as "the ability of a property to convey its significance". The National Register recognizes seven qualities that, in various combinations, define integrity. The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance.

Criteria Considerations

Certain types of properties, including religious properties, moved properties, birthplaces or graves, cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years are not considered eligible for the National Register unless they meet one of the seven categories of Criteria Consideration A through G, in addition to meeting at least one of the four significance criteria discussed above, and possess integrity as defined above. Criteria Consideration G states that "a property achieving significance within the last 50 years is eligible if it is of exceptional importance". This is intended to prevent the listing of properties for which insufficient time may have passed to allow the proper evaluation of its historical importance.

State Level

California Environmental Quality Act

CEQA is the principal statute governing environmental review of projects occurring in the state and is codified at Public Resources Code (PRC) Section 21000 et seq. CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on historical or unique archaeological resources. Under CEQA (Section 21084.1), a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

The CEQA Guidelines (Title 14 California Code of Regulations [CCR] Section 15064.5) recognize that historical resources include: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register (California Register; (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 and Section 15064.5 of the CEQA Guidelines apply. If an archaeological site does not meet the criteria for a historical resource contained in the CEQA Guidelines, then the site may be treated in accordance with the provisions of PRC Section 21083, if it meets the criteria of a unique archaeological resource. As defined in PRC Section 21083.2 a "unique" archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or,
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource as defined in PRC Section 21083.2, then the site is to be treated in accordance with the provisions of PRC Section 21083.2, which state that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place. If preservation in place is not feasible, mitigation measures shall be required. The CEQA Guidelines note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment.

A significant effect under CEQA would occur if a project results in a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5(a). Substantial adverse change is defined as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired". According to CEQA Guidelines Section 15064.5(b)(2), the significance of a historical resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics that:

A. Convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

B. Account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

C. Convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a Lead Agency for purposes of CEQA.

In general, a project that complies with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Standards) is considered to have mitigated its impacts to historical resources to a less-than-significant level. In effect, CEQA has a "safe harbor" by providing either a categorical exemption or a negative declaration for a project which meets the Standards.

California Register of Historical Resources

The California Register is "an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change." The criteria for eligibility for the California Register are based upon National Register criteria. Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.

To be eligible for the California Register, a prehistoric or historic-period property must be significant at the local, state, and/or federal level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must meet one of the criteria of significance described above, and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

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

- California properties listed on the National Register and those formally determined eligible for the National Register;
- California Registered Historical Landmarks from No. 770 onward; and,
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- Historical resources with a significance rating of Category 3 through 5 (those properties identified as eligible for listing in the National Register, the California Register, and/or a local jurisdiction register);
- Individual historical resources;
- Historical resources contributing to historic districts; and,
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

California Health and Safety Code

California Health and Safety Code sections 7050.5, 7051, and 7054 address the illegality of interference with human burial remains (except as allowed under applicable sections of the Public Resource Code), and the disposition of Native American burials in archaeological sites. These regulations protect such remains from disturbance, vandalism, or inadvertent destruction, and establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, including treatment of the remains prior to, during, and after evaluation, and reburial procedures.

Local Level

City of San Gabriel General Plan

The General Plan defines goals and policies related to cultural resources within the City, most notably in the General Plan Cultural Resources chapter (Chapter 11). Those goals and targets applicable to the Project are identified below. The Project Site is not within a defined culturally sensitive area (i.e., it is outside of the Mission District & Archaeological Resource Area, the Early Development Area and Conservation Zone, the Period Revival Residential Neighborhood (1920-1940), or a Cultural Landscape, as identified on Figure 11-1 of the City's General Plan.

Community Design

Goal 10.17: Respect the value of historic landmark structures by requiring that the design of adjoining buildings embrace them.

Target 10.17.1: Establish a 100-foot zone immediately surrounding any historic structure appearing on the City's register of historic and cultural resources, within which new construction must respect the architectural and historical integrity, viewscape, landscaping and other features associated with that structure.

Cultural Resources

Goal 11.1: Preserve and protect valuable but threatened resources.

Goal 11.2: Celebrate San Gabriel's connection to the culture of the Tongva People.

Goal 11.9 Preserve and protect our cultural landscapes from damage and degradation.

City of San Gabriel Ordinance No. 636-C.S.

The City of San Gabriel updated Chapter 153 of the San Gabriel Municipal Code, deleted section 153.410-413 and replaced it with 153.600-630 thereby updating the historic preservation and cultural resource ordinance.

153.602 Purpose

The purpose of the Historic Preservation and Cultural Resource Ordinance, which was adopted in 2017) is to promote the public health, safety, and general welfare by providing for the identification, designation, protection, enhancement, and ongoing use of Cultural Resources that represent the City's cultural, architectural, social, historical, economic, and political heritage. It is the intent and purpose of the San Gabriel City Council in passing this Chapter to:

A. Preserve, maintain, and safeguard the City's heritage and character, for the enjoyment of present and future generations, by providing for the protection and thoughtful management of cultural resources as defined in this article;

B. Foster awareness, recognition, and stewardship of the City's archaeological and Native American Cultural Resources;

C. Encourage public knowledge and appreciation of the City's heritage and foster civic and neighborhood pride and sense of identity through the recognition of Cultural Resources;

D. Encourage the maintenance and preservation of cultural landscapes that contribute to the historic character of our neighborhoods and built environment;

E. Recognize the City's Cultural Resources as economic assets;

F. Stabilize and improve property values within the City and increase economic and financial benefits to the City and its inhabitants through preservation, rehabilitation, and ongoing use of Cultural Resources;

G. Integrate the conservation of Cultural Resources into the public and private development process;

H. Implement the goals and policies of the General Plan Cultural Resources Element;

I. Facilitate the City's compliance with the National Historic Preservation Act and California Environmental Quality Act and their provisions for cultural and historical resources;

J. Preserve diverse and significant architectural styles and property types reflecting the City's history and encourage complementary new construction and design, to maintain the City's historic scale and character;

K. Adopt and encourage the use of historic preservation incentives, both regulatory and economic, that promote the retention, rehabilitation, and protection of Cultural; Resources.

153.630 Identification, Documentation, and Management of Archaeological, Native American, and Paleontological Resources.

A. Purpose. In keeping with the goals and policies of the General Plan Chapter 11 (Cultural Resources), this section outlines the procedures and criteria for the identification, documentation, and management of archaeological, Native American, and paleontological Cultural Resources.

B. Scope and Applicability. Potential project impacts to those Cultural Resources that are significant archaeological, Native American, and paleontological resources shall be addressed during project review as described in this Section. This shall be accomplished though the identification of potential significant Cultural Resources, the evaluation of those resources' significance, and, where necessary and appropriate, the mitigation of substantial adverse impacts through data recovery/salvage by qualified professionals as defined in Section 153.603 of this Chapter. The provisions of this policy shall apply to all activities including but not limited to proposed structures, expansions, additions, alterations, grading, excavation, trenching, and/or demolition on properties containing archaeological, Native American, or paleontological resources classified as follows:

   1. Listed on the Register or Inventory;

   2. Listed on the California Register of Historical Resources or on the National Register of Historic Places;

   3. Determined by the Director or the State Historic Preservation Officer to be eligible for listing on the California Register of Historical Resources, the National Register of Historic Places, or the Register;

   4. Or are located in areas with a high or medium potential for the presence of Cultural Resources; in order to make this determination, the City shall prepare or cause to be prepared a Cultural Resource Sensitivity Map.

C. Report Preparation.

   1. All development applications satisfying the above criteria shall be required to submit a Phase I Cultural Resources inventory report and/or a paleontological resource inventory report to the City as a part of their application. Applications for properties that contain potential Cultural Resources that have not been evaluated for significance shall be shall be required to submit a Phase II Cultural Resources evaluation report to the City as part of their application. A development application shall not be considered complete until said report(s) as required by this Chapter is submitted to the City.

   2. If the Director determines that the proposed project could potentially affect a known or suspected cultural resource adjacent to the project site, then the applicant will be required to submit a Phase I Cultural Resources inventory report in order to determine whether the project has the potential to impact the cultural resource.

3. Cultural resources reports and paleontological resources reports shall be the responsibility of the applicant. The reports shall be prepared by qualified archaeologists or paleontologists as defined in Section 153.603 of this Chapter.
4. Cultural resources reports shall be prepared in a standard format: The California Office of Historic Preservation *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format*. All Cultural Resources reports and appended resource records shall be filed with the local California Historical Resources Information System (CHRIS) Information Center.
6. The report shall include a description and map indicating location of specific sites, features, isolates, and fossils analyzed within the report. The mapped location of archaeological sites, Native American resources, and fossil localities is confidential information, not to be released for public view. It is to be provided to the City as an appendix to the main report.

3.3.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to cultural resources if it would:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5;

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section15064.5; or

c) Disturb any human remains, including those interred outside of formal cemeteries.

3.3.4 Methodology

The following describes the methodology used to determine the aesthetic characteristics and impact potential for the Project Site.

Historical Resources

Analysis of impacts to historic architectural resources that qualify as historical resources (as defined in CEQA Guidelines Section 15064.5) requires that a lead agency shall first determine whether a building, structure, object or feature is a historical resource. If the lead agency determines a historic architectural resource is a historical resource, its significance may be materially impaired for the reasons outlined below. Typically, the significance of a historical resource of an architectural or structural nature is materially impaired through demolition or alteration. The resource may also be materially impaired by incompatible adjacent new construction that alters the setting of the resource, thereby diminishing its integrity and significance.

According to the CEQA guidelines, a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment (CEQA Guidelines Section 15064.5(b)). A substantial adverse change means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings, resulting in material impairment of the historical resource (*CEQA Guidelines* Section 15064.5(b)(1)).

According to CEQA Guidelines Section 15064.5(b)(2), the significance of a historical resource is materially impaired when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

There are no built resources on the Project Site that could qualify as a historical resource, and all previous development was removed (prior to the issuance of the NOP). The greenhouses, utility building, and other associated structures with the operation of the nursery were previously determined to be not eligible as historical resources (Onyx, 2018).

Archaeological Resources

Analysis of impacts to archaeological resources includes consideration of archaeological resources that qualify as historical resources (as defined in CEQA Guidelines Section 15064.5) and as unique archaeological resources (as defined in PRC Section 21083.2). Per CEQA Guidelines Section 15064.5(c), a lead agency shall first determine whether a site is a historical resource. If the archaeological site does not meet the criteria for historical resource, it is then assessed for significance as a unique archaeological resource.

CEQA Guidelines Section 15126.4(b)(3) states that the lead agency should seek to avoid damaging effects on historical resources of an archaeological nature, and shall consider preservation in place as the preferred manner of mitigating impacts. If preservation in place is not feasible, mitigation must be developed to minimize significant adverse impacts. For resources eligible under California Register Criterion 4 (information potential), data recovery through excavation should be undertaken to recover the scientifically consequential information contained within the archaeological resource. For resources eligible under Criterion 1 (significant events), Criterion 2 (important persons), or Criterion 3 (design/workmanship) other types of mitigation may be necessary to address those elements of the resource. CEQA Guidelines Section 15370 provides guidance on the types of mitigation that may be considered, and includes: avoiding impacts altogether; minimizing impacts; rectifying impacts through repair, rehabilitation, or restoration; reducing impacts through preservation; and compensating for impacts by providing substitute resources. For resources eligible under Criteria 1-3, applicable mitigation could include documentary/archival research, oral history, public interpretation, etc., depending on the nature of the resource and the type/degree of impact.

If an archaeological site does not meet the criteria for a historical resource contained in the CEQA Guidelines, then the site may be treated in accordance with the provisions of PRC Section 21083.2, which is as a unique archaeological resource. Similar to as described for historical resources of an archaeological nature, impacts to unique archaeological resource can occur from project-related ground disturbance, and vandalism and unauthorized collection as a result of increased human presence during construction and/or operation of a project. PRC Section 21083.2(b) states that if the project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. If avoidance is not feasible, then mitigation measures, such as data recovery excavation, shall be required (PRC Section 21083.2(c)). It should be noted that the time and cost limitations of PRC Section 21083.2 only apply to unique archaeological resources (CEQA Guidelines Section15064.5(c)(2)).

Human Remains

A project may also cause a significant environmental effect if it disturbs human remains, including those interred outside of formal cemeteries. As with archaeological resources, impacts to human remains occur mainly as a result of project-related ground disturbance. Impacts to human remains can be mitigated by following the procedures outlined in California Health and Safety Code Section 7050.5 and PRC Section 5097.98.

3.3.5 Environmental Impact Analysis

Impact CUL-1: The proposed Project could cause a substantial adverse change in the significance of a historic resource pursuant to Section 15064.5. (Potentially Significant Construction Impact. No Operational Impact.)

Construction

According to the HRA and *Archaeological Resource Assessment*, there are no historical or archaeological resources which could be considered historical resources under CEQA, identified within the Project Site, or known resources identified adjacent to the Project Site or in the immediate area. As such, the Project would not result in an impact to known historical resources. The site has been cleared of all development other than limited mature landscaping that was related to the residences formerly on-site (the king palm trees). The boiler room vault and foundation were the only archaeological resources identified within the Project Site, however it was documented and determined to not be an eligible resource and would not be impacted by the Project.

However, given the history of the Project Site and surrounding area, there is a medium to high potential for subsurface resources to exist. Construction of the proposed Project, which includes subterranean parking, would require excavation at depths of up to 35 feet below existing surface. During these ground disturbing activities, previously buried prehistoric and/or historic-period archaeological resources could be disturbed. **Therefore, ground-disturbing activities may impact cultural resources that could qualify as historical resources and unique archaeological resources, and impacts would be potentially significant. Mitigation measures MM-CUL-1 through MM-CUL-5 developed for Impact CUL-2 below, would reduce potentially significant impacts to archaeological resources to less-than-significant levels.**

Operation

Operation of the proposed Project development would not result in any additional ground disturbing activities such as grading or excavation; or impact the built environment outside of the Project Site, therefore, there is no potential to encounter, alter, or disturb historical resources. **No operational impacts would occur.**

Impact CUL-2: The proposed Project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. (Potentially Significant Construction Impact. Less than Significant Operational Impact.)

This section discusses archaeological resources that are potentially historical resources according to CEQA Guidelines Section 15064.5.

Construction

The boiler room vault and foundation were potential archaeological resources identified during clearing of the Project Site; however, they have since been documented, determined to not be eligible, and removed and therefore would not be impacted by the Project.

Archival research indicated that the Project Site is located near an important Gabrielino village site, *Toviscangna*, near the San Gabriel Mission (approximately 0.80 miles west of the Project Site) and several others which are located within 3 miles or less of the Project Site. The Project Site lies between the San Gabriel Mission to the west, which was the location of a village site, and had nearby water resources, including the San Gabriel Wash (previous Rubio Canyon Wash and Lexington Wash) to the east. Prehistoric sites tend to be located near water sources on flat or elevated terrain, similar to those conditions observed on the Project Site. Prehistoric archaeological resources (e.g., hearths, burials, stone tools, shell and faunal bone remains, etc.), should they exist, could be related to the nearby villages and the mission occupation. Therefore, it is possible that the Project could encounter subsurface prehistoric archaeological resources.

In addition, review of historic aerials and topographic maps indicate that other than the regular operation of the nursery, the Project Site has experienced little development since the 1950's. Subsurface historic-period archaeological resources, (e.g., bottles, foundations, refuse dumps/privies, railroads, etc.) should they exist within the Project Site, could be related to the previous land uses associated with historic residences and the early occupation of the nursery. Therefore, it is possible that foundations of structures, building materials, and trash scatters could be found.

Since Project-related excavation is expected to extend to approximately 35 feet below existing surface, it could encounter prehistoric and/or historic-period archaeological resources and such ground-disturbing activities, may significantly impact cultural resources that could qualify as historical resources and unique archaeological resources under CEQA.

No archaeological resources were identified within the Project Site during the archival research, and the boiler room vault and foundation that was identified by a qualified archaeologist during site clearing was determined to not be significant and is no longer extant, and therefore the Project

would not result in an impact to known archaeological resources. However, the archaeological sensitivity assessment indicates that the Project Site has medium to high sensitivity. alluvial sedimentary deposits dating back to the late Pleistocene and Holocene existed within the Project Site. These sediments have the potential to contain prehistoric archaeological resources based on their age (they are contemporaneous with human occupation of Southern California). **Since construction of the proposed Project would include ground disturbing activities and excavations of up to 35 feet bgs, construction activities could potentially encounter subsurface archaeological resources, and impacts would be potentially significant. Implementation of Mitigation Measures MM CUL-1 through MM CUL-5, which would provide for resource sensitivity training of Project construction workers and procedures to follow in the event of a discovery, would reduce potentially significant impacts to archaeological resources to less-than-significant levels.**

Mitigation Measures

Based on the results of the archaeological assessment (ESA, 2018), no known archaeological resources are known to exist within the Project Site. However, there is a medium to high potential for encountering previously unknown buried prehistoric and historic-period archaeological resources. Based on these results, the following mitigation measures are provided and are consistent with the City of San Gabriel's cultural resource ordinance, in order to ensure that potentially significant impacts to archaeological resources are reduced to a less than significant level under CEQA:

> **Mitigation Measure MM-CUL-1:** In accordance with Ordinance 153.630, The Building and Safety Division shall be provided with an executed consultant services contract with the individual responsible for supervising onsite archaeological monitoring, who shall be a qualified archaeologist selected from approved list of qualified archaeologists to be maintained by the City. The archaeological monitor shall be present during construction activities on the Project Site such as clearing/grubbing, grading, trenching, or any other construction excavation activity associated with the Project, and the monitor may be a qualified cross-trained archaeological/paleontological monitor working under the supervision of the qualified archaeologist. Prior to commencement of excavation activities, an Archaeological Sensitivity Training shall be given for construction personnel. The training session, to be led by the qualified Archaeologist, will focus on how to identify archaeological resources that may be encountered during earthmoving activities, or if neither the archaeologist nor Native American monitors are on site, and the procedures to be followed in such an event. The activities to be monitored shall also include any off-site improvements in the vicinity of the Project Site, such as utility, sidewalk, or road improvements. The monitor shall have the authority to direct the pace of construction equipment in areas of higher sensitivity. The frequency of monitoring shall be based on the rate of excavation and grading activities, the materials being excavated (younger sediments vs. older sediments), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time archaeological monitoring may be reduced to part-time inspections, or ceased entirely, if determined adequate by the qualified Archaeologist in consultation with the City.

> **Mitigation Measure MM-CUL-2:** Prior to issuance of construction permits the Applicant, through their archaeological consultant, shall retain a Native American sub-consultant to provide monitoring for the Project from a California Native American tribe that has

informed the City they are traditionally and culturally affiliated with the geographic area of the Project Site and who were engaged in consultation for this Project. The Native American monitor will work in tandem with the archaeological monitor, and will be required on-site when ground disturbance is occurring. The frequency of monitoring shall be based on the rate of grading and excavation, the size of the disturbed area at any given time, the materials being excavated (younger sediments vs. older sediments), the depth of excavation, and if encountered, the abundance and type of archaeological resources encountered. Full-time Native American monitoring may be reduced to part-time inspections, or ceased entirely, if determined appropriate in consultation with the Tribe, the qualified archaeologist, the City, and based on a lack of resources or resource potential as result of observations made during the course of monitoring.

Mitigation Measure MM-CUL-3: In the event that historic (e.g., bottles, foundations, refuse dumps/privies, railroads, etc.) or prehistoric (e.g., hearths, burials, stone tools, shell and faunal bone remains, etc.) archaeological resources are unearthed, the archaeologist shall take immediate steps to stop all ground-disturbing activities within 25 feet of the cultural material. The Community Development Director shall be immediate informed of the situation. If it is determined that the find is an isolated occurrence or that the remaining construction activity will not significantly impact the Cultural Resource, work shall be permitted to continue on the site.

Mitigation Measure MM-CUL-4: All archaeological resources unearthed by project construction activities shall be evaluated by a qualified Archaeologist and a determination of their significance and eligibility for listing in the California Register of Historical Resources or as a unique archaeological resources as defined in Sections15064.5(a) and 21083.2(g) of the Public Resources Code, respectively will be made. A recommendation will be prepared by the qualified archaeologist indicating whether the find is potentially significant and the recommended course of action for its protection or further evaluation. The Community Development Director shall determine if the City should retain the services of a separate consulting archaeologist to provide an independent recommendation of site significance. On the Community Development Director's recommendation, reports relating to the discovery of significant archaeological or Native American resources shall be referred to the Commission at their next available meeting. Notice of the hearing by the Commission shall be given not less than 10 days prior to any action taken on the matter to be considered and in accordance with Ordinance 153.630 F.6-7 and will determine if work can continue or if additional testing is necessary. If found to be significant, the procedures outlined for Commission and City Council recommendations in Ordinance 153.630 F.7-11 will then apply.

Mitigation Measure MM-CUL-5: The qualified Archaeologist shall prepare a final report and appropriate California Department of Parks and Recreation (DPR) 523 Site Forms at the conclusion of archaeological monitoring. The report shall include applicable findings including but not limited to a description of resources unearthed, treatment of the resources, results of the artifact processing, analysis, research, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. The report will include daily monitoring reports from the archaeological and Native American monitors as an appendix. The report and any DPR 523 forms shall be submitted by the Project applicant to the City, the South Central Coastal Information Center, the Native American tribes that consulted on this Project, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the development and required mitigation measures. If significant features or artifacts are allowed to be removed the owner shall

make these features available to local historic interest or Native American groups. The expense of the removal and storage of the recovered features are to be borne by the historic interest or Native American groups. The owner may also be required to document the cultural resource through photographs and historic narrative. These records will become the property of the City and also filed with the SCCIC appended to the final report.

Operation

Operation of the proposed Project development would not result in any additional ground disturbing activities such as grading or excavation; therefore, there is no potential to encounter, alter, or disturb archaeological resources. **No operational impacts would occur**.

Impact CUL-3: The proposed Project could disturb human remains, including those interred outside of formal cemeteries. (Potentially Significant Construction Impact. No Operational Impact.)

Construction

No dedicated cemeteries or human remains were identified within the Project Site as a result of the archival research, review of historic aerials, topographic maps, and surveys. Project-related excavation is expected to extend to 35 feet below ground surface and therefore, could encounter unanticipated human remains or unmarked cemeteries. **In the event that human remains are discovered during construction of the proposed Project, impacts would be potentially significant. However, with implementation of Mitigation Measure MM-CUL-6 impacts to human remains would be less than significant.**

Mitigation Measures

The incorporation of the following Mitigation Measure MM-CUL-6 would reduce construction-related human remains impacts associated with the Project:

Mitigation Measure MM-CUL-6: If human remains are encountered unexpectedly during implementation of the Project, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the land owner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the land owner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable,

taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

Whenever the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.

Operation

Operation of the proposed development would not result in any ground disturbing activities such as grading or excavation; therefore, there is no potential to encounter, alter, or disturb human remains. **No operational impacts would occur.**

3.3.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the proposed Project in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts.

Historical Resources

Given the long history in San Gabriel and large number of historic-age buildings and structures throughout the City it is possible that historical resources may be significantly impacted as a result of at least one of the 31 projects in the City of San Gabriel that constitute the cumulative context. Therefore, the cumulative impact on historic architectural resources would be potentially significant. However, the current Project does not have any resources on site and would not have a direct impact on historical resources within the Project Site. The records search did not reveal any previously identified extant historical resources or districts within a 0.5-mile of the Project Site. **Based on these findings, the Project would have less-than-significant direct and indirect impacts on historical resources and would not contribute to cumulative impacts on historical resources or districts in the immediate vicinity.**

Archaeological Resources

Multiple projects, mostly development within urban settings, are proposed throughout the geographic scope of analysis. Cumulative impacts to archaeological resources could occur if any of these projects, in conjunction with the proposed Project, would have impacts on resources that, when considered together, would be significant; however, the current Project would not affect known archaeological resources. Further, while there is the potential for impacts to unknown archaeological resources, such as those that might be discovered during ground-disturbing activities during Project construction and demolition, Mitigation Measures MM-CUL-2 through 6, which provide for retention of a qualified archaeologist, cultural resources sensitivity training, archaeological monitoring, Native American monitoring, and treatment of unanticipated discoveries, would ensure that impacts are reduced to a less-than-significant level. **Taken together,**

implementation of these mitigation measures would ensure that the Project would not have an impact on archaeological resources. Therefore, the cumulative effects to archaeological resources from this Project are considered less than significant.

Human Remains

No dedicated cemeteries or human remains were identified within the Project Site as a result of the archival research, review of historic aerials, and topographic maps. Project-related excavation is expected to extend to 35 feet below existing surface and therefore, could encounter previously unknown burials or unmarked cemeteries. In the event that human remains are encountered during project implementation, Mitigation Measure MM-CUL-6 would ensure that the remains are treated in accordance with relevant state laws and that impacts would be reduced to a less-than-significant level. It is assumed that any other projects in the geographic scope of analysis would also follow state law. **Therefore, the cumulative effects to human remains from this Project are considered less than significant.**

3.3.7 References

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3.4 Energy

This section analyzes the potential effects of the proposed Project's impacts on energy resources. The analysis in this section is based on the Project's anticipated energy needs, impacts, and conservation measures during construction and operation of the proposed Project. Appendix E of this Draft EIR contains modeling outputs based on the detailed construction information and operational calculations based on the Project's development program.

3.4.1 Existing Conditions

Existing Project Site Energy Use

The Project Site is currently vacant and unoccupied as all previously existing greenhouses and associated structures on-site were removed after an act of arson in 2018. The Project Site was previously occupied by San Gabriel Nursery & Florist, which continues to operate on a 2-acre parcel just north of the Project Site as a retail garden and florist shop. The Project Site is not currently in use and therefore does not consume electricity, natural gas, or fossil fuels for transportation. Therefore, all construction and operational energy consumption associated with the Project are considered to be net new.

Energy consumption is measured in three main sectors: electricity, natural gas, and transportation. Each of these are described below.

Electricity

Southern California Edison (SCE) is the electricity provider for the City of San Gabriel. SCE provides electrical services to approximately 15 million people, 180 incorporated cities, 15 counties, 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area (SCE, 2019). In 2018, SCE's total electricity sales in the SCE service area was estimated to be 87,143 gigawatt hours (GWh) (SCE, 2018a).

SCE produces and purchases their energy from a mix of conventional and renewable generating sources. **Table 3.4-1** shows the electric power mix that was delivered to retail customers for SCE compared to the statewide power mix for 2018, the most recent year in which data is available. Total electricity sales/usage for SCE is shown in Table 3.4-1 compared to the statewide electricity sales/usage from the most recent year for which data is available (2018).

TABLE 3.4-1
ELECTRIC POWER MIX DELIVERED TO RETAIL CUSTOMERS IN 2018

Energy Resource	2018 SCE	2018 Statewide Power Mix
Total Sales/Total Usage (million kilowatt-hours)	**87,143**	**285,488**
Eligible Renewable	**36%**	**31%**
Biomass & bio-waste[a]	1%	2%
Geothermal	8%	5%
Small hydroelectric	1%	2%
Solar	13%	11%
Wind	13%	11%
Coal	**0%**	**3%**
Large Hydroelectric	**4%**	**11%**
Natural Gas	**17%**	**35%**
Nuclear	**6%**	**9%**
Other	**0%**	**<1%**
Unspecified sources of power[b]	**37%**	**11%**
Total	**100%**	**100%**

[a] The Eligible Renewables category is further delineated into the specific sources: biomass & waste, geothermal, small hydroelectric, solar, and wind

[b] "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

SOURCES: SCE, 2018b; California Energy Commission (CEC), 2018a.

SCE is required to commit to the use of renewable energy sources for compliance with the Renewables Portfolio Standard (RPS). Specifically, SCE must meet the requirement to secure at least 33 percent of its energy portfolio from renewable sources by 2020 through the procurement of energy from eligible renewable resources. SB 350 (Chapter 547, Statutes of 2015) further increases the RPS to 50 percent by 2030 and includes interim targets of 40 percent by 2024 and 45 percent by 2027. Eligible renewable resources are defined in the RPS to include biodiesel; biomass; hydroelectric and small hydro (30 Mega Watts [MW] or less); aqueduct hydro power plants; digester gas; fuel cells; geothermal; landfill gas; municipal solid waste; ocean thermal, ocean wave, and tidal current technologies; renewable derived biogas; multi-fuel facilities using renewable fuels; solar photovoltaic (PV); solar thermal electric; wind; and other renewables that may be defined later. SB 100 (Chapter 312, Statutes of 2018) further increases the RPS to 50 percent by December 31, 2026 and to achieve 60 percent by December 31, 2030. SB 100 also states that eligible renewable energy sources and zero-carbon resources supply 100 percent of retail sales of electricity and 100 percent of electricity procured to serve state agencies by December 31, 2045. As shown in Table 3.4-1, SCE provided approximately 36 percent of its 2018 electric supply from renewable power, which exceeds the 33 percent by 2020 goal.

Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs and delivered through high-pressure transmission pipelines. Natural gas provides almost one-third of the State's total energy requirements. Natural gas is measured in terms of both cubic feet (cf) or British thermal units (Btu).

Natural gas is used for cooking, space heating, water heating, electricity generation, and as an alternative transportation fuel. The City of San Gabriel is served by the Southern California Gas Company (SoCalGas), which is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.6 million customers in more than 500 communities encompassing approximately 20,000 square miles throughout central and southern California (SoCalGas, 2019).

SoCalGas, along with five other California utility providers, released the *2018 California Gas Report*, presenting a forecast of natural gas supplies and requirements for California through the year 2035. This report predicts gas demand for all sectors (residential, commercial, industrial, energy generation and wholesale exports) and presents best estimates, as well as scenarios for hot and cold years. Overall, SoCalGas predicts a decrease in natural gas demand in future years due to a decrease in per capita usage, energy efficiency policies, and the State's transition to renewable energy displacing fossil fuels including natural gas (California Gas and Electric Utilities, 2018).

Gas supply available to SoCalGas from California sources averaged approximately 2,350 million cf per day or 2,434,600 million Btu (MMBtu) in 2018, the most recent year for which data are available. This equates to an annual average of 857,750 million cf per year or 888,629,000 MMBtu per year.

Transportation Energy

The annual transportation fuel consumption of diesel and gasoline in 2018 in California (the most recent year for which statewide data is available) is approximately 1,602 million gallons and 13,475 million gallons, respectively. Transportation fuel consumption of diesel and gasoline for Los Angeles County in 2018 is 475 million gallons and 3,169 million gallons, respectively. The estimated Los Angeles County and Statewide transportation fuel consumption is based on retail sale data from the California Energy Commission (CEC) (CEC, 2018b).

The State is now working on developing flexible strategies to reduce petroleum use. Over the last decade, California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and greenhouse gas emissions (GHGs) from the transportation sector, and reduce vehicle miles traveled (VMT). Accordingly, diesel and gasoline consumption in California has declined. The CEC predicts that the demand for gasoline will continue to decline over the next 10 years, and there will be an increase in the use of alternative fuels (CEC, 2017).

3.4.2 Regulatory Framework

Federal

State

Executive Order S-14-08

In 2008, Executive Order (EO) S-14-08 expanded the state's RPS goal to 33 percent renewable power by 2020. In 2009, EO S-21-09 directed the California Air Resources Board (CARB) (under its AB 32 authority) to enact regulations to help the state meet the 2020 goal of 33 percent

renewable energy. The 33 percent by 2020 RPS goal was codified with the passage of Senate Bill (SB) X1-2. This new RPS applied to all electricity retailers in the state, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. As shown in Table 3.4-1, SCE provided approximately 36 percent of its 2018 electric supply from renewable power, which exceeds the 33 percent by 2020 goal.

SB 100 (De León) (Chapter 312, Statutes of 2018)

In 2018, SB 100 established that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by the end of 2045. SB 100 also creates new standards for the RPS, increasing required energy from renewable sources for both investor-owned utilities and publicly-owned utilities from 50 percent to 60 percent by the end of 2030. Incrementally, these energy providers must also have a renewable energy supply of 44 percent by the end of 2024, and 52 percent by the end of 2027. The updated RPS goals are considered achievable, since many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

SB 350 (Chapter 547, Statues of 2015)

SB 350 increased the RPS to 50 percent by 2030, and requires the CEC to establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas final end uses of retail customers by 2030. These targets may be achieved through energy efficiency savings and demand reductions from a variety of programs, including but not limited to appliance and building energy efficiency standards and a comprehensive program to achieve greater energy efficiency standards in existing buildings.

Title 24, Building Standards Code and California Green Building Standards (CALGreen) Code

The CEC first adopted the Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the State. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The California Building Standards Commission (CBSC) adopted Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality." The CALGreen Code establishes mandatory measures for new residential and non-residential buildings, which include requirements for energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential as well as nonresidential uses. The new measures took effect on January 1, 2020. Buildings constructed under the Project would be required to comply with the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance.

California Air Resources Board Airborne Toxic Control Measure

In 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel PM and other TACs. The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given time. While intended to reduce construction criteria pollutant emissions, compliance with the anti-idling regulation would also result in efficient use of construction-related energy and the minimization or elimination of wasteful and unnecessary consumption of energy.

Regional

Southern California Association of Governments

2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

In 2016, Southern California Association of Governments (SCAG) Regional Council adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) (SCAG, 2016). This long-range vision plan balances future mobility and housing needs with economic, environmental, and public health goals. The 2016 RTP/SCS outlines over $556.5 billion in transportation investments. The 2016 RTP/SCS aims at reducing GHG emissions per capita by eight percent by 2020, and 18 percent by 2035. Additionally, the 2016 RTP/SCS calls for reducing regional VMT per capita by seven percent and vehicle hours traveled per capita by 17 percent (for automobiles and light/medium duty trucks).

Local

City of San Gabriel, Comprehensive General Plan

The Comprehensive General Plan of the City of San Gabriel (General Plan), adopted in 2004 (City of San Gabriel, 2004), provides a long-range policy guide to address changes to the City and a roadmap for future development. The General Plan outlines goals and actions that are applicable to energy conservation and the Project as follows:

Chapter 2: Housing and Demographics

Goal 2.1: Expand the supply of housing in accordance with the land use designations and policies in the Land Use Element.

Action 2.1.5: Through subdivision and zoning ordinances, and through the permit process, encourage the use of innovative construction techniques, design standards, and energy conservation methods in new housing developments.

Goal 2.2: Promote and encourage the provision of adequate housing to meet the needs of the community.

Action 2.2.1.3: Support the development of cost saving and energy conserving construction techniques.

Chapter 7: Open Space

Goal 7.3: Develop a system of bicycle and pedestrian trails that are sustainable.

Target 7.3.2: Develop new bicycle and pedestrian trails in commercial and residential neighborhoods, parks, or rail corridors that create "walkable" close-knit neighborhoods that will reduce air pollution and energy consumption.

Chapter 8: Environmental Resources

Target 8.6.2: Encourage the use of mass transit, carpooling, bicycling, and other alternative transportation options.

Target 8.6.4: Enhance the functionality and expand the size of the City's network of Park and Ride Lots.

Target 8.6.7: Investigate the feasibility of expanding a City operated bus service.

Chapter 10: Community Design

Goal 10.3: Create designs that live and breathe with San Gabriel's neighborhood as they themselves live and breathe.

Target 10.3.3: Encourage the application of sustainable design principles and materials that do not consume irreplaceable resources. The City shall:

- Promote energy efficient construction
- Support code modifications that encourage the use of recycled and regenerated materials
- Orient new development to transit wherever possible Permit "vertically integrated" mixed uses, meaning traditional patterns of development that permit people to live over their places of business
- Promote traditional street patterns that allow high levels of pedestrian circulation and promote short walking distances to necessary services
- Support the principles for sustainable development recommended by the American Planning Association's policy guide, Planning for Sustainability. These practices include renewable and recycled building materials, energy efficient design, transit oriented development, neighborhood livability, pedestrian friendly design, drought tolerant and native plant materials, and other techniques for sustainable communities.

City of San Gabriel Energy Action Plan

The City's Energy Action Plan (EAP) (City of San Gabriel, 2012) was approved in 2012 in partnership with the San Gabriel Valley Council of Governments and SCE. The EAP aims to accomplish several goals that include:

1. Make it easier for residents and businesses to finance energy efficient improvements and save money on energy bills.
2. Provide a roadmap for reducing the City's energy bills.
3. Reduce the City and community's impact on the environment.

4. Provide the City with critical baseline data that the State requires for cities to address greenhouse gas emissions.
5. Enable the City to get additional grants.
6. Serve as a foundation for future planning efforts such as general plan updates, climate action plans, Housing Element updates and zoning code updates, among others.

The EAP provides more specific energy reduction targets and describes a number of goals to reach their reduction targets. The EAP includes reduction targets such as achieving a 15 percent reduction in baseline GHG emissions by 2020, reducing household energy use by 5 percent and nonresidential energy use by 7 percent by 2020, move toward net zero electricity use, and achieve Platinum-level status in SCE's Energy Leader Partnership Model by reduction electricity use at municipal facilities by 20 percent by 2020. The following goals were identified to achieve the City's energy reduction targets (excluding goals specific to municipal operations):

Goal 1: Optimize the energy efficiency of the City's housing stock with a focus on enhancing the energy efficiency of the City's homes constructed pre-1970

Policy 1.1: Educate the community on opportunities for behavioral change

Policy 1.2: Support residential upgrades to more energy-efficient appliances and equipment

Policy 1.3: Support retrofits in 1% of the City's single-family housing stock by 2014, 5% by 2017, and 7% by 2020 through a customized, local outreach effort that supports regional efforts, such as Energy Upgrade California

Policy 1.4: Encourage home energy benchmarking

Policy 1.5: Increase energy efficiency and improve the quality and value of the City's rental housing stock by encouraging retrofits in 5% of the City's renter-occupied housing stock by 2017 and 8% by 2020 through property owner education and promotion of energy efficiency financing

Goal 2: Achieve a vibrant energy-efficient economy that maximizes business revenue and reduces operational costs

Policy 2.1: Integrate energy efficiency into the City's long-term business development strategy

Policy 2.2: Support the use of energy-efficient appliances and equipment in the nonresidential building stock

Policy 2.3: Educate businesses about financing opportunities for energy efficiency improvements to achieve retrofits in 5% of the nonresidential building stock by 2015 and 8% by 2020

Policy 2.4: Support regional business collaboration and cost-sharing tactics to reduce operational costs and enhance profitability

Policy 2.5: Provide tools that support the energy efficiency improvements of renter-occupied businesses

Goal 3: Support the construction of new buildings that will have no net impact on community-wide energy demand by 2020

Policy 3.1: The City will maximize the energy efficiency of buildings

Policy 3.2: Encourage the use of smart grid and energy star appliances in new development

Policy 3.3: Work with regional partners to develop an effective approach to achieve energy efficiency in new development

Goal 4: Create a local business and regulatory environment that fosters, incentivizes, and prioritizes energy efficiencies

Policy 4.1: Integrate energy efficiency into the City's discretionary permit review framework

Policy 4.2: Create development incentives to encourage energy efficiency improvements and net zero energy in new development and remodels

Policy 4.3: Diversify the City's tax base through workforce development and fostering local financing programs for energy efficiency retrofits

Policy 4.4: Collaborate with historic building owners in the mission district and throughout the cultural resource areas designated in the General Plan to improve the energy efficiency of historic properties without compromising the character and integrity of the building

Goal 5: Maximize use of shading and cooling to sustain a comfortable and energy-efficient urban environment.

Policy 5.1: Maximize the cooling of buildings through tree planting and shading to reduce building electricity demands

Policy 5.2: Reduce building electricity demands through voluntary standards and outreach to promote cool roofs and surfaces

Goal 6: Integrate water and energy conservation and efficiency practices in new and existing development to reduce electricity use for water pumping, treatment, and conveyance.

Policy 6.1: Promote water-efficient practices through educational efforts to promote the conservation of electricity for water pumping and treatment.

Policy 6.2: Encourage the use of energy- and water-efficient water fixtures for indoor water us to reduce electricity use for water pumping.

Policy 6.3: Support water-efficient landscaping to reduce the electricity demand for water transport and treatment.

3.4.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to energy if it would:

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

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

3.4.4 Methodology

Construction

Construction of the Project would result in energy demand as a result of the use of heavy-duty construction equipment, on-road trucks, and workers commuting to and from the Project Site. Based on the proposed Project and engineering estimates that form the basis of the construction-related impact analyses, heavy-duty construction equipment would be primarily diesel-fueled. The assumption that diesel fuel would be used for all equipment represents the most conservative scenario for maximum potential energy use during construction. Energy demand from heavy-duty construction equipment is estimated based on the equipment analyzed in the California Emissions Estimator Model (CalEEMod), consistent with the air quality analysis in Section 3.2, *Air Quality*, and Section 3.6, *Greenhouse Gas Emissions*, of this EIR, and fuel consumption data from CARB's OFFROAD2017 model.

The proposed Project would be executed in multiple phases. Phase 1, the 700 Plaza, would take place from approximately May 2021 to September 2023. Construction for Phase 2, the 800 Plaza, would take place from August 2021 to December 2023. Subphases of construction would include site preparation, grading, infrastructure installation, foundation, building construction, paving and architectural coatings. Approximately 192,000 cubic yards of soil would be exported due to required excavation, requiring daily haul truck activity on the site during the grading phase.

Section 3.2, *Air Quality*, and Appendix B of this Draft EIR, contains detailed construction information related to the demolition debris and soil excavation quantities, as well as the number of trucks required to transport demolition debris and soil off-site. Fuel consumption was based on the number of trucks trips and trip lengths.

Operations

Operation of the Project would consume energy in the form of electricity and natural gas for building heating, cooling, cooking, lighting, water demand and wastewater treatment, consumer electronics, electric vehicle charging, and other energy needs; transportation-fuels, primarily gasoline, for vehicles traveling to and from the Project.

Annual electricity and natural gas usage for the Project's buildings were estimated using CalEEMod. Building energy consumption was based on the size of the proposed development, energy use factors, and energy demand factors for water use (purification and transportation). The

energy usage takes into account building energy standards pursuant to the 2019 Title 24 Building Standards Code and CALGreen Code.

Gasoline and diesel consumption for transportation from residents, employees, and visitors to the Project Site was estimated based on the predicted number of trips to and from the Project Site and the estimated VMT from the Project's Circulation Study (Fehr & Peers, 2020). The estimated fuel economy for vehicles is based on fuel consumption factors from CARB's EMission FACtors model (EMFAC) model (specifically EMFAC 2017 was incorporated into CalEEMod and used for the analysis). Fuel consumption factors were based on the Project's operational year of 2023. As discussed above, EMFAC is incorporated into CalEEMod, which is a state-approved emissions model used for the Project's air quality and GHG emissions assessment. Therefore, this energy assessment is consistent with the modeling approach used for other environmental analyses in this EIR and consistent with general CEQA standards. Calculation details are provided in Appendix E of this EIR.

3.4.5 Environmental Impact Analysis

Impact ENERGY-1: The proposed Project would not 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.)

Construction

Construction of the Project would result in energy consumption from the use of heavy-duty construction equipment, on-road trucks, and workers commuting to and from the Project Site. Energy demand from heavy-duty construction equipment is estimated based on the equipment analyzed in CalEEMod, consistent with the Project's air quality and GHG emissions assessment, and fuel consumption data from the CARB OFFROAD2017 model and CARB on-road vehicle emissions model, EMFAC2017. Project construction fuel usage for heavy-duty construction equipment is shown in **Table 3.4-2**. Calculation details are provided in Appendix E of this EIR.

TABLE 3.4-2
PROJECT CONSTRUCTION FUEL USAGE

Source	Total Gallons of Diesel Fuel	Total Gallons of Gasoline Fuel
Construction:		
Onsite Construction Equipment	152,482	—
Haul Trucks	106,135	—
Vendor Trucks	48,197	—
Worker Trips	—	62,721
Total (over the approximately 3.1-year construction duration)	**306,815**	**62,721**

NOTE: Totals may not add directly due to rounding.
SOURCE: ESA, 2019.

An estimated maximum of approximately 33,613 one-way truck trips would be required to haul the material to off-site reuse and disposal facilities over the approximately 32-month construction period. The Project is estimated to generate approximately 54,910 one-way vendor truck trips for the delivery of building materials and supplies to the Project Site over the construction period. Based on the CARB on-road vehicle emissions model, EMFAC2017, heavy-duty haul trucks and vendor trucks operating in the South Coast Air Basin (where the Project is located) would have an estimated average fuel economy of approximately 6.4 and 7.9 miles per gallon (mpg) in 2021. Although construction would occur over 32 months, 2021 fuel economy values were used to provide a conservative assessment as fuel economies would increase in future years.

The number of construction workers that would be required would vary based on the phase of construction and activity taking place. The transportation fuel required by construction workers to travel to and from the Project Site would depend on the total number of worker trips estimated for the duration of construction activity. The total gasoline fuel estimated for workers is also shown in Table 3.4-2.

The Project's construction energy demand from transportation fuel is compared to the Los Angeles County transportation fuel sales in **Table 3.4-3**. As shown in Table 3.4-3, the Project would represent a very small fraction of the County's total fuel consumption. Furthermore, construction of the Project would result in short-term and temporary energy demand lasting approximately 3.1 years.

TABLE 3.4-3
COMPARISON OF PROJECT CONSTRUCTION AND COUNTY FUEL USAGE

Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Los Angeles County (in 2018)	475,000,000	3,169,000,000
Annual Project Construction	114,977	23,504
Project Percent of the County	0.024%	0.0007%

SOURCE: CEC, 2018b, ESA 2019.

Electricity used during construction to provide temporary power for lighting and electronic equipment (e.g., computers, etc.) and to power certain construction equipment (e.g., hand tools or other electric equipment) would generally not result in a substantial increase in on-site electricity use. Electricity use during construction would be variable depending on lighting needs and the use of electric-powered equipment, and would be temporary for the duration of construction activities. It is expected that construction electricity use would generally be considered as temporary and negligible over the long-term.

Construction of the Project would require the consumption of energy for necessary on-site activities and to transport materials, soil, and debris to and from the Project Site. The amount of energy used would not represent a substantial fraction of the available energy supply in terms of equipment and transportation fuels. Compliance with the anti-idling and emissions regulations discussed under Section 3.4.2, *Regulatory Framework*, and the temporary nature of construction would result in a

more efficient use of construction-related energy and the minimization or elimination of wasteful and unnecessary consumption of energy. As such, Project construction would not result in the wasteful, inefficient, and unnecessary consumption of energy, and would not increase the need for new energy infrastructure. **Therefore, Project construction energy impacts would be less than significant.**

Operation

Operational energy consumption would occur as a result of each building's energy needs, and the use of transportation fuels (e.g., diesel and gasoline) associated with vehicles traveling to and from the Project Site. This analysis estimates the maximum operational energy consumption to evaluate the Project's associated impacts on energy resources.

Electricity and Natural Gas Energy Consumption

Daily operation of the Project would consume energy in the form of electricity and natural gas. Additionally, energy would be consumed for the conveyance and treatment of water, wastewater, and the disposal of solid waste off-site. Building energy use factors and water demand factors from CalEEMod, consistent with the Project analyses conducted for air quality and GHG emissions, are used to estimate building energy use. The Project's estimated net operational electricity demand, including from water demand, is provided in **Table 3.4-4**. As discussed above, the Project would incorporate green building design features consistent with the energy efficiency standards in the 2019 Title 24 Building Standards Code and CALGreen Code (see Section 3.6, *Greenhouse Gas Emissions*, for additional details) that would reduce Project electricity consumption and the Project would have no impact on SCE's electricity generation.

TABLE 3.4-4
PROJECT OPERATIONAL ELECTRICITY USAGE

Source	Electricity Per Year (million kWh)
SCE Electricity Sales (2018) [a]	87,143
Project Operations:	
Building Electricity	5.07
Water Electricity [b]	0.42
Project Operations Total	5.50
Project Percent of SCE	0.006%

NOTES:

[a] Refer to Table 3.4-1.

[b] Electricity for water supply, treatment, distribution, and wastewater treatment.

SOURCE: SCE, 2018; ESA 2019.

The Project's estimated net operational natural gas demand is provided in **Table 3.4-5**. The Project results in an increase in natural gas use over the existing conditions, largely due to the new residential component of the Project. However, the Project would incorporate energy-efficient HVAC that meet the 2019 California Title 24 Building Energy Efficiency Standards which would

reduce the net energy drawn from SoCalGas. Therefore, the Project would not result in the wasteful, inefficient, and unnecessary consumption of energy and would not increase the need for new energy infrastructure. **Operational energy impacts associated with electrical and natural gas use would be less than significant.**

TABLE 3.4-5
PROJECT OPERATIONAL NATURAL GAS USAGE

Source	Natural Gas Per Year (million kBtu)
SoCalGas Natural Gas Sales (2018)	515,607
Project Operations:	9.08
Project Percent of SoCalGas	0.002%

SOURCE: CEC, 2018c; ESA 2019.

Operational Transportation Energy Consumption

Operation of the Project would result in transportation energy use. Transportation fuels, primarily gasoline and diesel, would be consumed by local or regional suppliers and vendors of the retail uses. The Project's estimated operational transportation fuel demand is provided in **Table 3.4-6**. Calculation details are provided in Appendix E of this EIR.

With respect to operational transportation-related fuel usage, the Project would support statewide and local efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles. The Project would support sustainable mobility options by locating residential and retail/restaurant land uses at an infill location in close proximity to existing off-site commercial, entertainment, office, retail, and residential destinations. The Project site is also located in an established residential and commercial area with access to public transportation, which minimizes trips and trip lengths reducing mobile source emissions. The Project is located less than 0.25 mile from the Metro 176 route which provides direct access to the Metrolink at the El Monte Station. Furthermore, the Project would provide bicycle parking consistent with the City's General Plan requirements at the ground level for commercial users and at the subterranean level for residential users that would also reduce vehicular trips.

TABLE 3.4-6
PROJECT OPERATIONAL FUEL USAGE

Source	Gallons of Diesel Fuel Per Year	Gallons of Gasoline Fuel Per Year
Los Angeles County (2018)	475,000,000	3,169,000,000
Project Operations [a]	69,855	389,309
Percent of County	0.01%	0.01%

NOTES:

[a] Project operational fuel calculations is based on trip rates from the Project's Circulation Study (Fehr & Peers, 2020).

SOURCE: ESA, 2020.

Operation of the Project would result in energy usage from building energy demand and transportation-related energy associated with vehicles traveling to and from the Project Site. The amount of energy used would not represent a substantial fraction of the available energy supply in terms of building energy or transportation fuels and would not increase the need for new energy infrastructure. As stated above, the Project would provide bicycle parking consistent with the City's General Plan requirements to reduce vehicular trips. In addition, the Project Site is located near existing public transit stops such that vehicle trips and VMT would be minimized and the Project would be consistent with and support the goals and benefits of the SCAG 2016 RTP/SCS, which seeks improved access and mobility. Furthermore, the Project would incorporate green building measures consistent with the 2019 Title 24 Building Standards Code and CALGreen Code (see Section 3.6, *Greenhouse Gas Emissions*, for additional details) that would support the City of San Gabriel General Plan and EAP and reduce Project energy consumption with features including, but not limited to: energy-efficient/energy star certified appliances and energy-efficient HVAC, reduced indoor and outdoor water use through water conserving fixtures, appliances and irrigation controllers. **Therefore, the Project would not result in the wasteful, inefficient, and unnecessary consumption of building energy or transportation energy usage and operation of the Project would not result in the wasteful, inefficient, and unnecessary consumption of energy and would not increase the need for new energy infrastructure or preempt opportunities for future energy conservation. Project operational energy impacts would be less than significant.**

Impact ENERGY-2: The proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Less than Significant Impact.)

As discussed in Impact ENERGY-1, the Project would incorporate green building design features consistent with the energy efficiency standards in the 2019 Title 24 Building Standards Code and CALGreen Code (see Section 3.6, *Greenhouse Gas Emissions*, for additional details) that would support the energy conservation goals and actions of the City of San Gabriel General Plan and EAP and reduce Project energy consumption with features including, but not limited to: energy-efficient/energy star certified appliances and energy-efficient HVAC, reduced indoor and outdoor water use through water conserving fixtures, appliances and irrigation controllers. As operation of the Project would incorporate measures that would improve energy efficiency consistent with regulatory requirements, the Project would clearly reduce the wasteful, inefficient, and unnecessary consumption of energy and would not increase the need for new energy infrastructure. Construction and operational energy impacts would be less than significant.

Given that the Project Site is located in an urban area within proximity to existing public transit stops such that vehicle trips and VMT would be minimized, the Project would be consistent with and support the goals and benefits of SCAG's 2016 RTP/SCS, which seeks improved access and mobility by placing "destinations closer together, thereby decreasing the time and cost of traveling between them," and would be consistent with and support local efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles (SCAG, 2016). As discussed above, the Project Site would provide and is close to jobs, housing, shopping and restaurant uses, and in close proximity to existing public transit stops, which would result in reduced VMT, as compared to a project of similar size and land uses at a

location without close and walkable access to off-site destinations and public transit stops. In addition, the Project would provide bicycle parking consistent with the City's General Plan requirements that would further reduce vehicular trips. The number of destinations available for non-motorized trips within the City shows that the existing infrastructure and built environment is sufficiently developed such that projects located in the area would be expected to achieve substantial and credible reductions in trip distances and overall VMT and would have a greater level of transportation efficiency when compared to the Citywide and statewide averages. The Project would therefore be consistent with the SCAG 2016 RTP/SCS goals and benefits intended to improve mobility and access to diverse destinations, provide better "placemaking," provide more transportation choices, and reduce vehicular demand and associated emissions (refer to Section 3.6, *Greenhouse Gas Emissions*, for a detailed discussion regarding the Project's VMT reducing land use characteristics and consistency with the SCAG 2016 RTP/SCS).

As a result, the Project would support Statewide efforts to improve transportation energy efficiency and reduce wasteful or inefficient transportation energy consumption with respect to private automobiles. **Overall the Project's features would support and promote the use of renewable energy and energy efficiency, therefore, the Project impacts would be less than significant.**

3.4.6 Cumulative Impacts

The geographic scope for impacts related to energy is based on the service area for each respective utility provider. Cumulative development inclusive of the Project would contribute to impacts on energy resources from the SCE and SoCalGas, as well as regional fuel consumption due to increased VMT. The list of 37 cumulative projects including their land use and size is included in Table 3.0-1, of Chapter 3, *Environmental Analysis,* of this Draft EIR. All cumulative projects are located within the same service areas as the proposed Project.

Electricity

The geographic context for the cumulative analysis of electricity is SCE's service area. Growth within this service area is anticipated to increase the demand for electricity and the need for infrastructure, such as, new or expanded facilities.

Buildout of the Project and other projects within the City and the larger SCE service area would increase electricity consumption during Project construction and operation, and cumulatively increase the need for energy supplies. The CEC forecasts that SCE's total energy consumption in the Project buildout year of 2023 would be approximately 118,294 GWh (CEC, 2018d). The Project would consume a net increase of 5,497 MWh on an annual basis. In comparison to the SCE's total energy consumption of 118,294 GWh for 2023, the Project would represent approximately 0.005 percent of SCE's total energy consumption.

Future development would result in the irreversible use of electricity resources that could limit future energy availability. However, the utility provider for the Project and cumulative projects in the vicinity have determined that the use of such resources would be minor compared to existing supply and infrastructure within the SCE service area and would be consistent with growth expectations. Furthermore, like the Project, other future development projects would be expected

to incorporate energy conservation features, comply with applicable regulations including CALGreen Code and State energy standards under Title 24, and incorporate mitigation measures, as necessary. As discussed above and based on evidence from the CEC, the Project would not have a cumulatively considerable impact on existing energy resources either individually or incrementally when considered with the anticipated growth in the service area. Accordingly, the impacts related to electricity consumption would not be cumulatively considerable, and thus would be less than significant.

Natural Gas

The geographic context for the cumulative analysis of natural gas is the SoCalGas service area. While growth within this geographic region is anticipated to increase the demand for new natural gas hookups and meters, efficiency upgrades and the transition away from natural gas as a source of energy generation is expected to decrease the overall natural gas demand in future years.

Though electricity usage is predicted to rise, natural gas demand is expected to decline overall from 2016-2035 accounting for population and economic growth as well as efficiency improvements and the State's transition away from fossil fuel-generated electricity to increased renewable energy. SoCalGas predicts a decline in every sector (residential, industrial, commercial, electricity generation, and vehicular), with the exception of wholesale and international gas sales to Mexico. As previously stated, the 2016 California Gas Report reported a decline of SoCalGas projects total gas demand at an annual rate of 0.6 percent from 2016 to 2035, which is linked to modest economic growth, mandated energy efficiency standards and programs, and renewable electricity goals.

Buildout of the Project, the other projects within the City and in the SoCalGas service area, as well as growth within the larger SoCal Gas service area, is expected to increase natural gas consumption and the need for natural gas supplies. According to the 2018 California Gas Report, SoCalGas is forecasted to require 937,787 million kBTU in the year 2023, the Project's build out year (California Gas and Electric Utilities, 2018). The Project is estimated to increase natural gas demand by 9.08 million kBTU per year, accounting for approximately 0.001 percent of SoCalGas' projected natural gas demand for the year 2023.

Although future development projects within the service area would result in the use of nonrenewable natural gas resources which could limit future availability, the use of such resources would be on a relatively small scale and would be consistent with regional and local growth expectations for SoCalGas's service area. Further, like the Project, other future development projects would be expected to incorporate required energy conservation features, including compliance with applicable regulations including CALGreen and State energy standards in Title 24, and incorporate mitigation measures, as necessary. While overall growth and consumption could result in increased natural gas demand compared to existing uses on each specific project site, the overall demand for natural gas over time is expected to decline due to increases in regional natural gas efficiencies and the transition to renewable energy on a statewide basis displacing fossil fuels including natural gas. Therefore, the Project would not have a cumulatively considerable impact related to natural gas consumption, and impacts would be less than significant.

Transportation Energy

Buildout of the Project and the 37 cumulative projects in the region would increase overall VMT; however, the effect on transportation fuel demand would be minimized by future improvements to vehicle fuel economy pursuant to federal and state regulations. By 2025, vehicles will be required to achieve 54.5 mpg (based on USEPA measurements), which is a 54 percent increase from the 35.5 mpg standard in the 2012-2016 standards. As discussed previously, the Project would support sustainable mobility options by locating residential and retail/restaurant land uses at an infill location in close proximity to existing off-site commercial, entertainment, office, retail, and residential uses. In addition, the Project Site is also located in an established residential and commercial area with access to public transportation, which minimizes trips and trip lengths reducing mobile source emissions as the Project is located less than 0.25 mile from the Metro 176 bus route, which provides direct access to the Metrolink train at the El Monte Station. Siting land use development projects at infill sites is consistent with the State's overall goals to reduce VMT pursuant to SB 375, and as outline in the SCAG 2016 RTP/SCS for the region, which seeks improved access and mobility by placing "destinations closer together, thereby decreasing the time and cost of traveling between them (SCAG, 2016)". Related projects that would also be consistent with these goals and would also contribute to transportation energy efficiency. Furthermore, according to the U.S. Energy Information Administration (USEIA)'s International Energy Outlook 2016, the global supply of crude oil, other liquid hydrocarbons, and biofuels is expected to be adequate to meet the world's demand for liquid fuels through 2040 (USEIA, 2016). Therefore, as the Project would incorporate land use characteristics consistent with state goals for reducing VMT, the Project would not have a cumulatively considerable impact related to transportation energy, and impacts would be less than significant.

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3.5 Geology and Soils

This section evaluates potential geologic and soils hazards associated with the proposed Project including fault rupture, ground shaking, liquefaction, expansive soils, landslides, and landforms. It is based, in part, on information and findings presented in the Limited Geologic Evaluation (Geosyntec, 2018) and the Preliminary Geotechnical Investigation (Albus-Keefe, 2019), which are provided in Appendix D of this Draft EIR. It also considers potential impacts to paleontological resources based on information presented in the Paleontological Resources Assessment Report (ESA, 2019) prepared for the Project as found in Appendix D-3 to this EIR.

3.5.1 Existing Conditions

Regional Geology and Faulting

The Project Site is located in the San Gabriel Valley in the eastern part of the Los Angeles Basin, specifically in the Central Block where sediments range from 32,000 to 35,000 feet thick (ESA, 2019). San Gabriel is located within the Peninsular Range Geomorphic Province, one of the major geomorphic provinces in Southern California. The province consists of a series of northwest trending mountain ranges, and sub-parallel intervening valleys formed by faults branching from the San Andreas Fault. The San Gabriel Valley is generally underlain by surficial Quaternary-age alluvium and by Tertiary-age marine and non-marine sedimentary deposits and Cretaceous to pre-Cretaceous-age igneous and metamorphic basement rock (Geosyntec, 2018).

Geologic literature and field exploration do not indicate the presence of active faulting within the site. The site does not lie within an "Earthquake Fault Zone" as defined by the State of California in the Alquist-Priolo Earthquake Fault Zoning Act. **Table 3.5-1** presents a summary of all the known seismically active faults within 10 miles of the Project Site.

TABLE 3.5-1
ACTIVE FAULTS IN THE PROJECT VICINITY

Fault Name	Distance (miles)	Slip Rate (mm/year)	Slip Sense	Fault Length (km)
Elysian Park (Upper)	1.86	1.3	Reverse	20
Raymond	2.27	1.5	Strike Slip	22
Verdugo	4.46	0.5	Reverse	29
Sierra Madre Connected	5.77	2	Reverse	76
Sierra Madre	5.77	2	Reverse	76
Elsinore	7.23	2.5	Strike Slip	241
Clamshell-Sawpit	7.76	0.5	Reverse	16
Hollywood	8.23	1	Strike Slip	17
Puente Hills	8.88	0.7	Thrust	22

SOURCE: Albus-Keefe, 2019

Project Site Geology and Soils

As described in Chapter 2, *Project Description*, of this EIR, the Project Site currently consists of graded land and no structures present. Approximately 50 percent of the Project Site is impervious (paved) due to compacted soil and gravel found on the Project Site (Fuscoe Engineering, Inc., 2019). Erosion control measures have been installed and are regularly maintained throughout the Project Site to ensure there is no erosion or runoff from the exposed dirt surfaces, in its current condition. Measures include stabilized ingress/egress, a gravel bag barrier along the entire perimeter of the Project Site, sediment traps, and storm drain inlet protection.

Based on regional geologic mapping, the Project Site is primarily underlain by Quaternary-age, slightly elevated and locally dissected alluvium (Geosyntec, 2018). However, a queried geologic contact is mapped at the southeast corner of the Project Site indicating the presence of younger alluvium materials. Based on a review of historical aerial photographs and topographic maps dating back to 1940, it appears that significant grading has not occurred at the Project Site and that therefore grades have remained relatively unchanged. Therefore, it is anticipated that only minor, unmapped fill soils, topsoil, and disturbed soils are present at the site overlying the alluvium. Topographically, the Project Site is relatively flat with elevations ranging from approximately 380 feet above mean sea level (MSL) to approximately 373 feet above MSL, descending to the southwest (Albus-Keefe, 2019).

Geotechnical testing within the Project Site determined that based on eight exploratory borings drilled to maximum depths of 51.5 feet below ground surface (bgs), there is between 2 to 6 feet of fill on the site (Albus-Keefe, 2019). These materials may represent a disturbance layer rather than imported fill. The sediments found underlying the fill layers are classified as alluvium, and these were observed to a maximum depth of 51.5 feet. The description of soils found in the borings is consistent with that of the older alluvial sediments described above; however, the report does not qualify the age of the sediments nor note a change in formation to depth in the logs.

Soil materials encountered at the Project Site consist of alluvial deposits overlain by undocumented artificial fills associated with the previous site development. Based on exploratory borings, the artificial fill materials typically measure 2 to 6 feet below existing grades. Thicker portions of the artificial fill were generally observed within the central and east half of the Project Site. However, artificial fills of greater thickness may be present within portions of the Project Site. The artificial fill materials are generally comprised of brown silty sand and sandy silt. These materials are typically damp to very moist and loose to medium dense.

The alluvial deposits were encountered below the artificial fill materials to the maximum depth of exploration, 51.5 feet bgs. The alluvial deposits are comprised of predominantly coarse-grained soils with occasional fine-grained layers typically encountered at depths of 20 to 30 feet bgs. The fine-grained layers varied in thickness and were generally not consistent throughout the Project Site. The coarse-grained soils typically consist of brown sand with varying amounts of silt. These deposits are typically damp to very moist, and loose to medium dense but become dense to very dense at a depth of about 10 feet beneath the ground surface. The fine-grained soils typically consist of light brown and reddish-brown sandy silt, silty clay, and clayey silt. These deposits are typically damp to wet, and stiff to hard.

Groundwater

According to groundwater contour mapping by Main San Gabriel Watermaster, groundwater at the Project Site is located approximately 230 feet bgs (Geosyntec, 2018). Although no site specific recorded historical high groundwater data was available at the time of this evaluation, a review of previous documents for the area suggests that groundwater in the San Gabriel Basin has varied in depth up to 120 feet between historic high and historic low levels. It is typical that groundwater elevations at the Project Site would vary, especially during and after periods of sustained precipitation.

Seasonal perched groundwater could be encountered locally, and was observed at one location at 28 feet bgs (Albus & Keefe, 2019). This encountered water was likely due to percolation of rainfall rather than the groundwater table. Given the granular permeable surface conditions, groundwater is not considered an engineering restriction at the Project Site (Geosyntec, 2018).

Paleontological Resources

The Project Site was the subject of thorough background research and analysis. The research included a paleontological records search conducted by the Natural History Museum of Los Angeles County (LACM), as well as geologic map and literature reviews conducted by ESA paleontologist Alyssa Bell, Ph.D.

Geological Map & Literature Review

Geologic mapping by Dibblee and Ehrenspeck (1999) indicates that the surface of the Project Site is covered with Pleistocene-aged older alluvial sediments. These sediments consist of slightly elevated and dissected sands and gravels deposited during the Pleistocene, at least 11,700 years ago (Dibblee and Ehrenspeck, 1999). These sediments are of an age to preserve fossil resources (i.e., over 5,000 years old [SVP, 2010]), and have a rich fossil history in Los Angeles (Brattstrom and Sturn, 1959; Steadman, 1980) and throughout southern California (Jefferson 1991a and b, Miller 1971, Scott and Cox 2008). The most common fossils include the bones of mammoth, bison, horse, lion, cheetah, wolf, camel, antelope, peccary, mastodon, capybara, and giant ground sloth, as well as small animals such as rodents and lizards (Graham and Lundelius, 1994). In addition to illuminating the striking differences between Southern California in the Pleistocene and today, this abundant fossil record has been vital in studies of extinction (e.g. Sandom, et al., 2014; Scott, 2010), ecology (e.g. Connin et al., 1998), and climate change (e.g. Roy et al., 1996).

LACM Records Search

On July 5, 2018, ESA requested a database search from the LACM for records of fossil localities in and around the Project Site. The purpose of the museum records search was to: (1) determine whether any previously recorded fossil localities occur in the Project Site, (2) assess the potential for disturbance of these localities during construction, and (3) evaluate the paleontological sensitivity within the Project Site and vicinity. The records search returned no known localities within the Project Site; however, a number of vertebrate fossils are known from similar sedimentary deposits in Los Angeles and are identified below (McLeod, 2018).

The closest locality known to the LACM is approximately 5 miles northwest of the Project Site in Pasadena, where a mammoth fossil (*Mammuthus*) was recovered from an unrecorded depth at LACM 2207 (McLeod, 2018). To the southwest, a horse fossil (*Equus*) was collected from LACM 3363, approximately 5 miles from the Project Site (McLeod, 2018). Approximately 7 miles west of the Project Site in Eagle Rock, fossil specimens of turkey (*Parapavo californicus*) and mammoth (*Mammuthus*) were collected at LACM(CIT) 342 (McLeod, 2018). Further to the southwest, approximately 8 miles from the Project Site, fossil specimens of three-spine stickleback (*Gasterosteus aculeatus*), salamander (*Batrachoseps*), common snake (*Colubridae*), rabbit (*Sylvilagus*), deer mouse (*Microtus*), pocket gopher (*Thomomys*), and pocket mouse (*Reithrodontomys*) were collected from depths between 11 and 33 feet below the surface at LACM 7701 and 7702 (McLeod, 2018).

Paleontological Sensitivity Analysis

The review of the scientific literature and geologic mapping, as well as the records search from LACM, were used to assign paleontological sensitivities following the guidelines of the SVP (1995, 2010) indicate that the surficial sediments of the Project Site identified as older alluvial sediments are assigned high paleontological sensitivity. Substantial excavation within the Project Site during construction for subterranean parking, deep excavation for excavation shoring, and ancillary uses or improvements is planned, which would impact older alluvium determined to have a high sensitivity for fossils, as per the guidelines of the SVP (2010). This classification indicates a high potential for fossils to be present in the subsurface.

3.5.2 Regulatory Framework

State Level

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code [PRC] Section 2621 et seq.) was enacted by the State of California in 1972 to address the hazard of surface faulting to structures for human occupancy. The primary purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent the construction of buildings intended for human occupancy on the surface traces of active faults. The Alquist-Priolo Earthquake Fault Zoning Act is also intended to provide citizens with increased safety and to minimize the loss of life during and immediately following earthquakes by facilitating seismic retrofitting to strengthen buildings against ground shaking.

The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish regulatory zones, known as "Earthquake Fault Zones." These are zones that lie within 500 feet on either side of the surface traces of active faults. The State Geologist is also required to issue appropriate maps to assist cities and counties to assist them in regulating new construction and renovations. Local agencies enforce the Alquist-Priolo Earthquake Fault Zoning Act as part of the development permit process, where applicable, and may be more restrictive than State law requires. According to the Alquist-Priolo Earthquake Fault Zoning Act, before a project that is located within an Alquist-Priolo Earthquake Fault Zone can be permitted, cities and counties shall require a geologic investigation prepared by a licensed geologist to demonstrate that buildings will not be constructed across active faults. If an active fault is found, a building for human occupancy cannot be placed

over the trace of the fault and must be set back. Although setback distances may vary, a minimum 50-foot setback is required. The Alquist-Priolo Earthquake Fault Zoning Act and its regulations are presented in the CGS's Special Publication 42, Fault Rupture Hazard Zones in California (CGS, 2007).

Seismic Hazards Mapping Act

To address the effects of strong ground shaking, liquefaction, landslides, and other ground failures due to seismic events, the State of California passed the Seismic Hazards Mapping Act of 1990 (PRC Sections 2690-2699). Under the Seismic Hazards Mapping Act, the State Geologist is required to delineate "seismic hazard zones." Cities and counties must regulate certain development projects within these zones until the geologic and soil conditions of the project sites have been investigated and appropriate mitigation measures, if any, have been incorporated into development plans.

The State Mining and Geology Board provides additional regulations and policies to assist municipalities in preparing the Safety Element of their General Plan and encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety. Under the Seismic Hazards Mapping Act, cities and counties must require, prior to the approval of a project located in a seismic hazard zone, submission of a geotechnical report defining and delineating any seismic hazard. Each city or county is required to submit one copy of each geotechnical report, including mitigation measures, to the State Geologist within 30 days of its approval.

State publications supporting the implementation of requirements of the Seismic Hazards Mapping Act include the CGS's Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California (CGS, 2008) and Special Publication 118, Recommended Criteria for Delineating Seismic Hazard Zones in California (CGS, 2004). The objectives of Special Publication 117A are to assist in the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations and to promote uniform and effective Statewide implementation of the evaluation and mitigation elements of the Seismic Hazards Mapping Act. Special Publication 118 implements the requirements of the Seismic Hazards Mapping Act in the production of Probabilistic Seismic Hazard Maps for the State.

Title 24 California Building Code

The 2016 California Building Code (CBC), Title 24 of the California Code of Regulations, is a compilation of building standards, including seismic safety standards for new buildings. CBC standards are based on building standards that are adopted without change from the most recently adopted International Building Code; building standards based on the national model code that have been changed to address particular California conditions; and building standards authorized by the California legislature but not covered by the national model code, such as certain American Society of Civil Engineers standards. The CBC applies to all occupancies in California, except where stricter standards have been adopted by local agencies. Chapter 16 of the CBC contains provisions for structural design which includes, among others, soil lateral loads (Section 1610) and earthquake loads (Section 1613). Provisions for soils and foundations which include geotechnical explorations

(Section 1803), excavation, grading and fill (Section 1804), and foundations (sections 1808-1810), among others, are presented in Chapter 18. Appendix J of the code applies to grading.

California Code of Regulations

Title 14, Division 3, Chapter 1, Section 4307 states, in part that "no person shall destroy, disturb, mutilate or remove ... paleontological features." California PRC Section 5097.98, as amended by Assembly Bill 2641, protects cultural resources on public lands and provides procedures in the event human remains of Native American origin are discovered during project implementation. PRC Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery is adequately protected according to generally accepted cultural and archaeological standards, and that further activities take into account the possibility of multiple burials. PRC Section 5097.98 further requires the NAHC, upon notification by a County Coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. Once the MLD has been granted access to the site by the landowner and inspected the discovery, the MLD then has 48 hours to provide recommendations to the landowner for the treatment of the human remains and any associated grave goods.

In the event that no descendant is identified, or the descendant fails to make a recommendation for disposition, or if the land owner rejects the recommendation of the descendant, the landowner may, with appropriate dignity, reinter the remains and burial items on the property in a location that will not be subject to further disturbance.

Public Resources Code Section 5097.5 and Section 30244

Other state requirements for paleontological resource management are included in PRC Section 5097.5 and Section 30244. These statutes prohibit the removal of any paleontological site or feature from public lands without permission of the jurisdictional agency, define the removal of paleontological sites or features as a misdemeanor, and require reasonable mitigation of adverse impacts to paleontological resources from developments on public (state, county, city, district) lands.

Public Resources Code, Section 5097.5

PRC Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands.

California Environmental Quality Act

Paleontological resources are afforded protection by environmental legislation set forth under CEQA. Appendix G (part V) of the CEQA Guidelines provides guidance relative to significant impacts on paleontological resources, stating that "a project will normally result in a significant impact on the environment if it will …disrupt or adversely affect a paleontological resource or site or unique geologic feature." The Guidelines do not define "directly or indirectly destroy," but it can be reasonably interpreted as the physical damage, alteration, disturbance, or destruction of a paleontological resource. The Guidelines also do not define the criteria or process to determine whether a paleontological resource is significant or "unique."

Local Level

City of San Gabriel General Plan

The Comprehensive General Plan of the City of San Gabriel (General Plan), adopted in 2004 (City of San Gabriel, 2004), provides a long-range policy guide to address changes to the City of San Gabriel (City) and a roadmap for future development. The General Plan contain goals and targets that are applicable to the Project:

Chapter 5: Public and Environmental Safety

Goal 5.1 Minimize the potential for loss of life and property from geologic and seismic hazards.

Target 5.1.1 Ensure that the buildings and structures are adequately retrofitted and maintained for seismic shaking in accordance with State regulations.

Target 5.1.2 Protect life, safety, and essential lifelines; reduce the potential for property damage from liquefaction; and promote the collection of more complete information on liquefaction susceptibility throughout the City.

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Action 8.6.2.2 Require buildings in these areas to undergo an investigation that is more stringent, to reduce the potential for injury or loss of life.

Goal 8.7 Minimize the harmful effects of seismic and geological hazards to people and property.

Measure Enhanced Seismic and Geological Safety: Create a standard condition on all new construction for projects within the liquefaction zone that requires the construction to conform to the recommendations found in a geological technical study.

City of San Gabriel Ordinance No. 636-C.S.

In keeping with Goal 11.3 of the General Plan, the City updated Chapter 153 of the San Gabriel Municipal Code (SGMC), deleted section 153.410-413 and replaced it with 153.600-630 thereby updating the historic preservation and cultural resource ordinance.

153.602 Purpose

The City, as birthplace of the Los Angeles metropolitan region, is home to a wide range of significant Cultural Resources that reflect our shared heritage and history. Cultural Resources in the City encompass a range of resource types. These include paleontological resources, archaeological and Native American resources, buildings, structures, objects, historic districts, sites, public art and parks, cultural landscapes, and natural features. The retention and stewardship of Cultural Resources is of vital importance to retain and protect our heritage. The City Council also recognizes the right of private property owners to the use of their property and seeks to balance historic preservation important to the community as a whole with the rights of the property owner.

The purpose of the Historic Preservation and Cultural Resource Ordinance is to promote the public health, safety, and general welfare by providing for the identification, designation, protection, enhancement, and ongoing use of Cultural Resources that represent the City's cultural,

architectural, social, historical, economic, and political heritage. It is the intent and purpose of the San Gabriel City Council in passing this Chapter to:

A. Preserve, maintain, and safeguard the City's heritage and character, for the enjoyment of present and future generations, by providing for the protection and thoughtful management of cultural resources as defined in this article;

B. Foster awareness, recognition, and stewardship of the City's archaeological and Native American Cultural Resources;

C. Encourage public knowledge and appreciation of the City's heritage and foster civic and neighborhood pride and sense of identity through the recognition of Cultural Resources;

D. Encourage the maintenance and preservation of cultural landscapes that contribute to the historic character of our neighborhoods and built environment;

E. Recognize the City's Cultural Resources as economic assets;

F. Stabilize and improve property values within the City and increase economic and financial benefits to the City and its inhabitants through preservation, rehabilitation, and ongoing use of Cultural Resources;

G. Integrate the conservation of Cultural Resources into the public and private development process;

H. Implement the goals and policies of the General Plan Cultural Resources Element;

I. Facilitate the City's compliance with the National Historic Preservation Act and California Environmental Quality Act and their provisions for cultural and historical resources;

J. Preserve diverse and significant architectural styles and property types reflecting the City's history and encourage complementary new construction and design, to maintain the City's historic scale and character;

K. Adopt and encourage the use of historic preservation incentives, both regulatory and economic, that promote the retention, rehabilitation, and protection of Cultural; Resources.

153.630 Identification, Documentation, and Management of Archaeological, Native American, and Paleontological Resources.

A. Purpose. In keeping with the goals and policies of the General Plan Chapter 11 (Cultural Resources), this section outlines the procedures and criteria for the identification, documentation, and management of archaeological, Native American, and paleontological Cultural Resources.

B. Scope and Applicability. Potential project impacts to those Cultural Resources that are significant archaeological, Native American, and paleontological resources shall be addressed during project review as described in this Section. This shall be accomplished though the identification of potential significant Cultural Resources, the evaluation of those resources' significance, and, where necessary and appropriate, the mitigation of substantial adverse impacts through data recovery/salvage by qualified professionals as defined in Section 153.603 of this Chapter. The provisions of this policy shall apply to all activities including but not limited to proposed structures, expansions, additions, alterations, grading, excavation, trenching, and/or demolition on properties containing archaeological, Native American, or paleontological resources classified as follows:

   1. Listed on the Register or Inventory;

   2. Listed on the California Register of Historical Resources or on the National Register of Historic Places;

3. Determined by the Director or the State Historic Preservation Officer to be eligible for listing on the California Register of Historical Resources, the National Register of Historic Places, or the Register;

4. Or are located in areas with a high or medium potential for the presence of Cultural Resources; in order to make this determination, the City shall prepare or cause to be prepared a Cultural Resource Sensitivity Map.

C. Report Preparation.

1. All development applications satisfying the above criteria shall be required to submit a Phase I Cultural Resources inventory report and/or a paleontological resource inventory report to the City as a part of their application. Applications for properties that contain potential Cultural Resources that have not been evaluated for significance shall be required to submit a Phase II Cultural Resources evaluation report to the City as part of their application. A development application shall not be considered complete until said report(s) as required by this Chapter is submitted to the City.

2. If the Director determines that the proposed project could potentially affect a known or suspected cultural resource adjacent to the project site, then the applicant will be required to submit a Phase I Cultural Resources inventory report in order to determine whether the project has the potential to impact the cultural resource.

3. Cultural resources reports and paleontological resources reports shall be the responsibility of the applicant. The reports shall be prepared by qualified archaeologists or paleontologists as defined in Section 153.603 of this Chapter.

4. Cultural resources reports shall be prepared in a standard format: The California Office of Historic Preservation Archaeological Resource Management Reports (ARMR): Recommended Contents and Format. All Cultural Resources reports and appended resource records shall be filed with the local California Historical Resources Information System (CHRIS) Information Center.

5. The report shall include a description and map indicating location of specific sites, features, isolates, and fossils analyzed within the report. The mapped location of archaeological sites, Native American resources, and fossil localities is confidential information, not to be released for public view. It is to be provided to the City as a confidential appendix to the main report.

Society for Vertebrate Paleontology Guidelines

The Society of Vertebrate Paleontology (SVP) has established guidelines for the identification, assessment, and mitigation of adverse impacts on nonrenewable paleontological resources. Most practicing paleontologists in the nation adhere closely to the SVP's assessment, mitigation, and monitoring requirements outlined in these guidelines, which were approved through a consensus of professional paleontologists and are the standard. The SVP outlined criteria for screening the paleontological potential of rock units (High, Undetermined, Low) and established assessment and mitigation procedures tailored to such potential.

As defined by the SVP (2010:11) significant nonrenewable paleontological resources are:

> *Fossils and fossiliferous deposits here restricted to vertebrate fossils and their taphonomic and associated environmental indicators. This definition excludes*

> *invertebrate or paleobotanical fossils except when present within a given vertebrate assemblage. Certain invertebrate and plant fossils may be defined as significant by a project paleontologist, local paleontologist, specialists, or special interest groups, or by lead agencies or local governments.*

As defined by the SVP (1995:26), significant fossiliferous deposits are:

> *A rock unit or formation which contains significant nonrenewable paleontologic resources, here defined as comprising one or more identifiable vertebrate fossils, large or small, and any associated invertebrate and plant fossils, traces, and other data that provide taphonomic, taxonomic, phylogenetic, ecologic, and stratigraphic information (ichnites and trace fossils generated by vertebrate animals, e.g., trackways, or nests and middens which provide datable material and climatic information). Paleontologic resources are considered to be older than recorded history and/or older than 5,000 years BP [before present].*

Based on the significance definitions of the SVP (1995, 2010), all identifiable vertebrate fossils are considered to have significant scientific value. This position is adhered to because vertebrate fossils are relatively uncommon, and only rarely will a fossil locality yield a statistically significant number of specimens of the same genus. Therefore, every vertebrate fossil found has the potential to provide significant new information on the taxon it represents, its paleoenvironment, and/or its distribution. Furthermore, all geologic units in which vertebrate fossils have previously been found are considered to have high sensitivity. Identifiable plant and invertebrate fossils are considered significant if found in association with vertebrate fossils or if defined as significant by project paleontologists, specialists, or local government agencies.

A geologic unit known to contain significant fossils is considered to be "sensitive" to adverse impacts if there is a high probability that earth-moving or ground-disturbing activities in that rock unit will either directly or indirectly disturb or destroy fossil remains. Paleontological sites indicate that the containing sedimentary rock unit or formation is fossiliferous. The limits of the entire rock formation, both areal and stratigraphic, therefore define the scope of the paleontological potential in each case.

Fossils are contained within surficial sediments or bedrock, and are therefore not observable or detectable unless exposed by erosion or human activity. Therefore, without to natural erosion or human-caused exposure, paleontologists cannot know either the quality or quantity of fossils. As a result, even in the absence of surface fossils, it is necessary to assess the sensitivity of rock units based on their known potential to produce significant fossils elsewhere within the same geologic unit (both within and outside of the study area), a similar geologic unit, or based on whether the unit in question was deposited in a type of environment that is known to be favorable for fossil preservation. Monitoring by experienced paleontologists greatly increases the probability that fossils will be discovered during ground-disturbing activities and that, if the fossils are significant, that successful mitigation and salvage efforts may be undertaken.

3.5.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to geology and soils if it would:

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 based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.[1]
    ii. Strong seismic ground shaking.
    iii. Seismic-related ground failure, including liquefaction.
    iv. Landslides.
b. Result in substantial soil erosion or the loss of topsoil;
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;
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property;
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 wastewater; or
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

3.5.4 Methodology

The following describes the methodology used to determine the geological and soil, and paleontological characteristics and impact potential for the Project Site.

The analysis of impacts associated with geology and soils is based on the Preliminary Geotechnical Report prepared for the Project by Albus-Keefe and provided in Appendix D-1 of this Draft EIR. The Preliminary Geotechnical Report was based on review of relevant maps and reports, and geotechnical analysis and evaluation. The Preliminary Geotechnical Report concluded, based on geotechnical analysis of the collected data, that Project development on the Project Site is feasible from a geotechnical standpoint, provided that the recommendations included in the report are incorporated into Project plans and specifications and followed during site grading and construction.

The analysis of impacts associated with paleontological resources is based on the Paleontological Resources Assessment Report prepared for the Project by ESA and provided in Appendix D-3 of

[1] The California Geological Survey was formerly called the California Division of Mines and Geology (CDMG).

this Draft EIR. The Paleontological Resources Assessment Report was based on a paleontological records search conducted by the Natural History Museum of Los Angeles County (LACM), as well as geologic map and literature reviews. CEQA indicates that a project may cause a significant environmental effect where the project could result in damage to or destroy a unique paleontological resource or site or unique geologic feature. The CEQA threshold of significance for a significant impact to paleontological resources is reached when a project is determined to "directly or indirectly destroy a significant paleontological resource or unique geologic feature." Impacts to these types of resources can be mitigated through scientific removal, analysis, and curation.

3.5.5 Environmental Impact Analysis

Impact GEO-1: The proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving earthquake faulting, strong seismic shaking, seismic-related ground failure, or landslides (Less than Significant Impact.)

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issues by the State Geologist for the area based on other substantial evidence of a known fault

The Project Site is not located within a designated Alquist-Priolo Earthquake Fault Zone, and no active faults are mapped projecting through the Project Site. The nearest known active earthquake fault is the Elysian Park (Upper) Fault located 1.86 miles from the Project Site (Albus-Keefe, 2019). Because the Project Site lies more than 500 feet outside of the Fault Rupture Study Area, the possibility of impacts due to ground rupture from earthquake fault rupture is considered low. Therefore, the Project would not locate people or structures into areas that are susceptible to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault. **Project impacts would be less than significant.**

ii. Strong seismic shaking

Southern California, including the Project Site, is a seismically active area and is subject to periodic ground shaking resulting from seismic activity on regional faults. Ground shaking associated with nearby and regional faults should be anticipated during the lifespan of the Project. Within the City, potential ground motion levels are considered moderate to high. However, design and construction are required to be performed in accordance with the current California Building Code (CBC) requirements, which are proven to adequately address potential impacts related to ground shaking. **Therefore, impacts related to strong seismic shaking would be less than significant.**

iii. Seismic-related ground failure, including liquefaction

Seismically-induced soil liquefaction can be described as a significant loss of strength and stiffness due to cyclic pore water pressure generation from seismic shaking or other large cyclic loading. The material types considered most susceptible to liquefaction are saturated, loose to medium dense granular soils and low-plasticity fine grained soils.

According to Chapter 5 of the General Plan as well as CGS seismic hazard mapping (CGS, 2017), the Project Site is not located in an area with potential for liquefaction. Considering the absence

of regional groundwater within the upper 50 feet bgs and the relatively dense nature of the alluvial deposits underlying the Project Site, the probability of soil liquefaction or seismic settlement at the site is low. Therefore, the Project would not expose people or structures to areas that are susceptible to potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction. **Project impacts would be less than significant.**

iv. Landslides

The Project Site topography is generally flat with surface elevations descending slightly to the southwest. Ground surface elevations range from approximately 380 feet above MSL in the northwest corner of the site to 373 feet above MSL in the southwest corner. According to geologic mapping, landslides are not present in the area, and evidence of landsliding has not been encountered during research activities. In addition, the Project Site is not mapped within an Earthquake-Induced Landslide Zone (CGS, 2017). Further, the Project would not create new significant slopes on the Project Site that would be subject to landslide hazards. Therefore, the Project would not locate people or structures into an area that is susceptible to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides or other forms of natural slope instability. **Project impacts would be less than significant.**

Impact GEO-2: The proposed Project would not result in substantial soil erosion or the loss of topsoil. (Less than Significant Impact.)

Construction

Approximately 50 percent of the Project Site is impervious (paved) due to compacted soil and gravel found on the Project Site. Erosion control measures have been installed and regularly maintained throughout the Project Site in the existing condition to ensure there is no erosion or runoff from these exposed dirt surfaces. Measures include stabilized ingress/egress, a gravel bag barrier along the entire perimeter of the Project Site, sediment traps, and storm drain inlet protection.

During construction, the 5.85-acre Project Site would be subject to ground-disturbing activities (e.g., excavation, grading, soil stockpiling, foundation construction, the installation of utilities). These activities would expose additional soils and create the potential for soil erosion. However, site activities would continue to be conducted in accordance with an approved Stormwater Pollution Prevention Plan (SWPP) and Best Management Practices (BMPs) would be implemented to prevent erosion and stormwater runoff. In accordance with the BMPs, to reduce wind-related erosion, wetting of soil surfaces, covering exposed round areas and soil stockpiles, and tackifiers would be considered during construction operations, as appropriate. Implementation of BMPs would ensure that water- and wind-related erosion would be confined to the construction area and not transported off-site. **Therefore, Project construction impacts as it relates to soil erosion and loss of topsoil are considered be less than significant.**

Operation

Following completion of construction activities, the Project Site would be developed with a mixture of impervious surfaces (buildings, parking lots, plaza area) and landscaping. The overall potential

for soil erosion would be substantially reduced from existing conditions as there would be limited to no exposed soils onsite. The Project would include Low Impact Development (LID) BMPs to treat storm water runoff, including infiltration drywells that would intercept low flows and provide water quality treatment. Such improvements would reduce the potential for any erosion. **Therefore, the Project would not result in substantial soil erosion or the loss of topsoil and impacts would be less than significant.**

Impact GEO-3: The proposed Project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, potentially resulting in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. (Less than Significant Impact.)

The Project Site does not contain any unstable geological conditions. In general, the artificial fill that is located within the top 4 to 6 feet across the Project Site is considered unsuitable for support of proposed engineered fill and site improvements; however, this is typical of artificial fill, and is remedied by employing standard best engineering practices and meeting the requirements of the CBC. The alluvium at depths of 12 feet bgs or more could result in settlements that affect structures. However, again, standard engineering and execution of the earthwork, including compacting soils, would ensure no geologic impacts. The necessary excavations for subterranean parking would remove the majority of any unsuitable materials, and existing soils are anticipated to be relatively easy to excavate with conventional earthmoving equipment (Albus-Keefe, 2019).

As discussed previously, the Project Site is generally flat, and no significant slopes are proposed or located nearby. The proposed improvements are therefore, not likely to result in on- or off- site landsliding. The Project Site is not located within an area of known subsidence (ground surface settlement) associated with fluid withdrawal, peat oxidation, or hydrocompaction. Groundwater elevations well below the maximum depth of proposed excavations (35 feet bgs) indicate that dewatering would not be necessary. Alluvial soils within the Project Site are generally anticipated to possess a very low expansion potential. Therefore, the proposed improvements are not anticipated to cause geologic hazard conditions related to subsidence.

With adherence to the CBC, City grading codes, and the California Division of Occupational Safety and Health Administration (Cal/ OSHA), including supervision and review of final grading plans by a qualified engineer as is standard practice, the Project would not be developed on a geologic unit or soil that is unstable, or that would become unstable, and Project impacts would be less than significant.

Impact GEO-4: The proposed Project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property. (Less than Significant Impact.)

Expansive soils generally have a substantial amount of clay particles, which can give up water (shrink) or absorb water (swell). The change in the volume exerts stress on buildings and other loads placed on these soils. The extent or range of the shrink/swell is driven by the amount and type of clay present in the soil. Expansive soils are commonly very fine-grained with a high to very high percentage of plastic clays. Mitigation of expansive soils generally includes removing clay

materials from the area of the proposed improvements and/or moisture conditioning clayey soils to well above optimum moisture content prior to recompaction and/or as recommended by the project geotechnical report.

It is anticipated that site materials possess a very low to low expansion potential (Expansion Index of less than 51 as defined by the California Building Code Table 18-I-B) (Albus-Keefe, 2019; Geosyntec, 2018). **Therefore, the Project would not be located on expansive soil conditions and Project impacts would be less than significant.**

Impact GEO-5: The proposed Project would not 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 wastewater. (No Impact.)

The Project Site is located in a geologic environment that could potentially contain soil conditions that are corrosive to concrete and metal (Geosyntec, 2018); however, the Project would be served by the municipal wastewater system and would not require septic tanks or alternative wastewater systems. **Therefore, there would be no impacts related to septic or alternative waste water disposal systems.**

Impact GEO-6: The proposed Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Potentially Significant Impact Construction Impact. No Operational Impact.)

Construction and Demolition

There are no known unique geologic features within the Project Site. The surficial sediments of the Project Site, identified as older alluvial sediments are assigned high paleontological sensitivity. Excavation within the Project Site during construction of the proposed Project is currently planned to extend up to 35 feet bgs. Excavation within the Project Site during construction includes excavation for subterranean parking, deep excavation for excavation shoring, and ancillary uses or improvements. These excavations have the potential to impact older alluvium determined to have a high sensitivity for fossils, as per the guidelines of the SVP. **With implementation of Mitigation Measures MM-GEO-1, -2 -3, and -4, which require retention of a Qualified Paleontologist to oversee implementation of paleontological resources mitigation, construction worker paleontological resources sensitivity training, paleontological resources monitoring, and procedures to follow in the event of paleontological resources discoveries, impacts to unique paleontological resources or sites would be less than significant.**

Operation

Operation of the new facilities on the Project Site would not result in any further ground disturbing activities such as grading or excavation; therefore, there is no potential to encounter, alter, or disturb paleontological resources. **No operational impacts would occur.**

Mitigation Measures

The incorporation of the following Mitigation Measures MM-GEO-1 through MM-GEO-4 would reduce construction-related paleontological resources impacts associated with the Project:

Mitigation Measure MM-GEO-1: Retention of a Qualified Paleontologist. A qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) Standards (SVP, 2010) (Qualified Paleontologist) shall be retained prior to the approval of demolition or grading permits. The Qualified Paleontologist shall provide technical and compliance oversight of all work as it relates to paleontological resources, shall attend the Project kick-off meeting, and shall report to the Project Site in the event potential paleontological resources are encountered.

Mitigation Measure MM-GEO-2: Construction Worker Paleontological Resources Sensitivity Training. The Qualified Paleontologist shall conduct construction worker paleontological resources sensitivity training at the Project kick-off meeting prior to the start of ground disturbing activities (including vegetation removal, pavement removal, etc.). In the event construction crews are phased, additional training shall be conducted for new construction personnel for all phases of the Project. The training session shall focus on the recognition of the types of paleontological resources that could be encountered within the Project Site and the procedures to be followed if they are found. Documentation shall be retained by the Qualified Paleontologist demonstrating that the appropriate construction personnel attended the training.

Mitigation Measure MM-GEO-3: Paleontological Resources Monitoring. Paleontological resources monitoring shall be performed by a qualified paleontological monitor (meeting the standards of the SVP, 2010), the monitor may be a qualified cross-trained archaeological/paleontological monitor working under the direction of the Qualified Paleontologist. Paleontological resources monitoring shall be conducted for all ground disturbing activities of previously undisturbed sediments (below two to six feet). Depending on the conditions encountered, full-time monitoring within these sediments can be reduced to part-time inspections or ceased entirely if determined adequate by the Qualified Paleontologist. The Qualified Paleontologist shall spot check the excavation on an intermittent basis and recommend whether the depth of required monitoring should be revised based on his/her observations. The monitor(s) shall have the authority to temporarily halt or divert work away from exposed fossils or potential fossils. The monitor(s) shall prepare daily logs detailing the types of activities and soils observed, and any discoveries.

Mitigation Measure MM-GEO-4: Inadvertent Discovery of Paleontological Resources. Any significant fossils collected during project-related excavations shall be prepared to the point of identification and curated into an accredited repository with retrievable storage. The Qualified Paleontologist shall prepare a final monitoring and mitigation report for submittal to the City in order to document the results of the monitoring effort and any discoveries. If there are significant discoveries, fossil locality information and final disposition will be included with the final report which will be submitted to the appropriate repository and the City.

3.5.6 Cumulative Impacts

The geographic scope of cumulative geological and paleontological impacts is the Los Angeles Basin, specifically in the Central Block where sediments range from 32,000 to 35,000 feet thick. The proposed project site is located in an area that has potential geotechnical and soils constraints, as the entire Southern Californian region contains a number of major regional and local faults, as described above. Development at the Project Site and elsewhere in the region could expose

additional people and structures to potentially adverse effects associated with earthquakes, including seismic ground shaking. However, site-specific geotechnical and paleontological studies required by local agencies in accordance with current building code standards would determine how future development projects must be designed to minimize the risk of loss, injury, or death involving earthquakes, and individual projects do not contribute to a cumulative impact.

More specifically, nearby related projects within the City could potentially have cumulative effects. Ground disturbing activities for the Project would be separate from any excavation needed for those related projects. Additionally, the related projects would be designed and constructed per the recommendations and mitigation requirements of their respective required geotechnical and paleontological investigations as applicable, the latest seismic safety and building standards, and applicable state and local building codes. There would be no potential for combined geology and soil impacts between the Project and the related projects.

Furthermore, with regard to the nearby related projects, the related projects could include subterranean excavation closer to the Project. Excavations for both projects could potentially lead to adverse geologic and soil interactions during excavation and other construction activities. However, Project construction-related excavation activities that would be adjacent to other related projects' excavation activities and tunnels would occur in accordance with recommendations included in the preliminary geotechnical report, which must be included in the final geotechnical report, as well as any new recommendations in the final geotechnical report. Compliance with these requirements and recommendations would avoid substantial adverse cumulative geology and soils interactions between the two projects during construction.

Additionally, projects with the potential for substantial excavation would be subject to environmental review. Because of the potential for significant impacts on paleontological resources resulting from the Project, Mitigation Measures MM-GEO-1 through 4 are required. These measures include retention of a qualified paleontologist, paleontological resources sensitivity training, paleontological resources monitoring, and treatment and curation of discoveries, if encountered. Implementation of these measures would reduce the potential for adverse effects on fossil resources individually and cumulatively; and would preserve and maximize the potential of these resources to contribute to the body of scientific knowledge. Therefore, the cumulative effects to paleontological resources from this Project are considered less than significant.

The Project, considered together with other cumulative development, would not result in significant geologic, seismic, or paleontological impacts. Therefore, the cumulative impacts would be less than significant.

3.5.7 References

Albus-Keefe & Associates, Inc., 2019. Preliminary Geotechnical Investigation, Proposed Mixed-Use Development, 700 and 800 San Gabriel Boulevard, San Gabriel, CA, 91776. March 25, 2019. Provided in Appendix D-1 of this Draft EIR.

California Geologic Survey (CGS), 2004. Special Publication 118, Recommended Criteria for Delineating Seismic Hazard Zones in California, May 1992, Revised April 2004. Available at: http://www.conservation.ca.gov/cgs/shzp/webdocs/Documents/sp118_revised.pdf. Accessed October 22, 2018.

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CGS, 2017. Earthquake Fault Zones and Seismic Hazard Zones, Earthquake Zones of Required Investigation, EL Monte Quadrangle.

Environmental Science Associates (ESA), 2019. Pacific Square San Gabriel Mixed-Use Project, City of San Gabriel, California – Paleontological Resources Assessment Report. November 2019. Provided in Appendix D-3 of this Draft EIR.

Fuscoe Engineering, Inc., 2019. Preliminary Hydrology Study for Tract No. 82733, Pacific Square. Provided in Appendix G-1 of this Draft EIR.

Geosyntec Consultants, 2018, Limited Geologic Evaluation, Pacific Square San Gabriel Mixed-Use Project, San Gabriel, California. September 12, 2018. Provided in Appendix D-2 of this Draft EIR.

3.6 Greenhouse Gas Emissions

This section analyzes the potential effects of the proposed Project's impacts on greenhouse gas (GHG) emissions. The analysis in this section is based on the Project's construction and operational GHG emissions inclusive of mandatory and voluntary energy and resource conservation measures that have been incorporated into the Project to reduce GHG emissions and associated impacts. The analysis also addresses the consistency of the Project with applicable regulations, plans, and policies set forth by the State of California and the County to reduce GHGs. The Project's potential contributions to global climate change impacts are identified. GHG emission calculations prepared for the Project are provided in Appendix E of this Draft EIR.

3.6.1 Greenhouse Gas Emissions Background

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation and storms. The term GHG refers to gases that trap long-wave radiation or heat in the atmosphere, which heats the surface of the Earth.

The most common GHG that results from human activity is carbon dioxide (CO_2), which represents approximately 76 percent of total anthropogenic (human activity-generated) GHG emissions in the atmosphere (IPCC, 2014), followed by methane (CH_4) and nitrogen dioxide (N_2O). However, each type of GHG has varying potency to absorb and re-emit long-wave radiation. Therefore, Global Warming Potential (GWP) rations have been established by the Intergovernmental Panel on Climate Change (IPCC). The GWP of a GHG is determined using CO_2 as the reference GHG with a GWP of 1 over 100 years. For example, a GHG with a GWP of 10 is 10 times more potent than CO_2 over 100 years. The sum of each GHG multiplied by its associated GWP is referred to as carbon dioxide equivalents (CO_2e), which is used to quantify the combined potency of GHG emissions.

GHG emission inventories have been calculated using the GWPs from the IPCC's Assessment Report (AR). In 2013, IPCC updated the GWP values of GHGs based on the latest science in its Fifth Assessment Report (AR5) (IPCC, 2013). However, United Nations Framework Convention on Climate Change reporting guidelines for national inventories require the use of GWP values from the AR4. To comply with these international reporting standards, official emission estimates for California and the United States are reported using AR4 GWP values. Therefore, statewide and national GHG inventories have not yet updated their GWP values to the AR5 values. By applying the GWP ratios, project-related CO_2e emissions can be tabulated in metric tons per year. Typically, the GWP ratio corresponding to the warming potential of CO_2 over a 100-year period is used as a baseline. Regulated GHGs are discussed below with their respective GWPs in the IPCC AR4:

> **Carbon Dioxide (CO_2):** CO_2 is the most abundant GHG in the atmosphere and is primarily generated from fossil fuel combustion from stationary and mobile sources. CO_2 is the reference gas (GWP of 1) for determining the GWPs of other GHGs.

Methane (CH_4): CH_4 is emitted from biogenic sources (i.e., resulting from the activity of living organisms), incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. The GWP of CH_4 is 25.

Nitrous Oxide (N_2O): N_2O produced by human-related sources including agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The GWP of N_2O is 298.

Hydrofluorocarbons (HFCs): HFCs are fluorinated compounds consisting of hydrogen, carbon, and fluorine, typically used as refrigerants in both stationary refrigeration and mobile air conditioning systems. The GWPs of HFCs ranges from 124 for HFC-152a to 14,800 for HFC-23.

Perfluorocarbons (PFCs): PFCs are fluorinated compounds consisting of carbon and fluorine, primarily created as a byproduct of aluminum production and semiconductor manufacturing. The GWPs of PFCs range from 7,390 to 17,700.

Sulfur Hexafluoride (SF_6): SF_6 is a fluorinated compound consisting of sulfur and fluoride, which is colorless, odorless, nontoxic, and nonflammable, most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. SF_6 has a GWP of 22,800.

The California Air Resources Board (CARB) compiles the State's GHG emissions inventory, the most updated is the 2018 edition, which reports the State's GHG emissions inventory from 2016. In 2016, California emitted 429.4 million metric tons of CO_2e ($MMTCO_2e$) including emissions resulting from imported electrical power (CARB, 2018). Between 1990 and 2016, the population of California grew by approximately 9.5 million (from 29.8 to 39.3 million) (United States Census Bureau, 2009; California Department of Finance, 2018; State of California Department of Finance, 2018), which represents an increase of approximately 32 percent from 1990 population levels. In addition, the California economy, measured as gross state product, grew from $773 billion in 1990 to $2.62 trillion in 2016 representing an increase of approximately 239 percent (just over three times the 1990 gross state product) (California Department of Finance, 2018). Despite the population and economic growth, California's net GHG emissions decreased from 431 $MMTCO_2e$ in 1990 to 429 $MMTCO_2e$ in 2016. According to CARB, California is on track to meet the 2020 GHG reduction target codified in California Health and Safety Code (HSC), Division 25.5, also known as The Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) as demonstrated by the declining trend coupled with implementation of the state's GHG reduction programs (such as the Renewables Portfolio Standard [RPS], Low Carbon Fuel Standard [LCFS], vehicle efficiency standards, and declining caps under the Cap and Trade Program) (CEC, 2006). **Table 3.6-1** identifies and quantifies the net statewide anthropogenic GHG emissions including sinks (i.e., reductions; e.g., carbon sequestration due to forest growth) in 1990 and 2016. As shown in Table 3.6-1, the transportation sector is the largest contributor to statewide GHG emissions at 39 percent in 2016.

TABLE 3.6-1
STATE OF CALIFORNIA GREENHOUSE GAS EMISSIONS

Category	Total 1990 Emissions ($MMTCO_2e$)	Percent of Total 1990 Emissions	Total 2016 Emissions ($MMTCO_2e$)	Percent of Total 2016 Emissions
Transportation	150.7	35%	169.38	39%
Electric Power	110.6	26%	68.58	16%
Commercial	14.4	3%	13.73	4%
Residential	29.7	7%	25.63	5%
Industrial	103.0	24%	89.61	21%
Recycling and Waste[a]	–	–	8.81	2%
High GWP/Non-Specified[b]	1.3	<1%	19.78	5%
Agriculture/Forestry	23.6	6%	33.84	8%
Forestry Sinks	-6.7	–	–[c]	–
Net Total (IPCC SAR)	**426.6**	**100%**	–	–
Net Total (IPCC AR4) [d]	**431**	**100%**	**429.4**	**100%**

[a] Included in other categories for the 1990 emissions inventory.
[b] High GWP gases are not specifically called out in the 1990 emissions inventory.
[c] Forestry sinks was not calculated for 2016 pending a revised methodology under development.
[d] CARB revised the State's 1990 level GHG emissions using GWPs from the IPCC AR4.

SOURCES: CARB, 2007; CARB, 2018

3.6.2 Existing Conditions

The Project Site is currently vacant and unoccupied as all previously existing greenhouses and associated structures on-site were removed after an act of arson in 2018. The Project Site was previously occupied by San Gabriel Nursery & Florist, which continues to operate on a 2-acre parcel just north of the Project Site as a retail garden and florist shop. Because the Project Site is currently vacant, development of the Project would not remove any current uses emitting GHGs. Therefore, all construction and operational emissions are considered to be net new.

3.6.3 Regulatory Framework

Federal Level

United States Environmental Protection Agency

Voluntary Programs. The U.S. Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address global climate change. The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated by the U.S. These programs focus on energy efficiency, renewable energy, methane and other non-CO_2 gases, agricultural practices, and implementation of technologies to achieve GHG reductions. USEPA implements several voluntary programs that substantially contribute to the reduction of GHG emissions:

- The State Climate and Energy Partner Network that allows for the exchange of information between federal and state agencies regarding climate and energy,

- The Climate Leaders program for companies,
- The Energy Star labeling system for energy-efficient products, and
- The Green Power Partnership for organizations interested in buying green power.

All of these programs play a significant role in encouraging voluntary reductions from large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

Light-duty Vehicle GHG and Fuel Efficiency Standards. In 2012, USEPA and U.S. Department of Transportation (USDOT) adopted standards for model year 2017 through 2025 for passenger cars and light-duty trucks. By 2020, these vehicles are required to achieve a combined standard of 41.7 miles per gallon (mpg) and 213 grams of CO_2 per mile. By 2025, these vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO_2 per mile. According to USEPA, a model year 2025 vehicle would emit one-half of the GHG emissions from a model year 2010 vehicle (USEPA, 2012). In 2017, USEPA recommended no change to the GHG standards for light-duty vehicles for model years 2022-2025. In 2018, the USEPA Administrator signed the Mid-term Evaluation Final Determination that finds that the model year 2022-2025 GHG standards are not appropriate in light of the record before USEPA and, therefore, should be revised. While not a final USEPA action, the Mid-term Evaluation Final Determination initiates a rulemaking process whose outcome will be the final agency action, however, until that rulemaking has been completed, the current standards remain in effect (USEPA, 2018).

Heavy-duty Engines and Vehicles Fuel Efficiency Standards. In 2010, USEPA and USDOT proposed the first national standards to reduce GHG and improve fuel efficiency of heavy-duty trucks and buses (also known as "Phase 1"). For combination tractors, the agencies proposed engine and vehicle standards beginning in the 2014 model year to achieve up to a 20 percent reduction in CO_2 emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies proposed separate gasoline and diesel truck standards, which phase in starting in the 2014 model year to achieve up to a 10 percent reduction for gasoline vehicles and up to a 15 percent reduction for diesel vehicles by 2018 model year (12 percent and 17 percent, respectively, if accounting for air conditioning leakage). Lastly, for vocational vehicles (i.e., other vehicles; e.g., buses, refuse trucks, and concrete mixers), the agencies proposed engine and vehicle standards starting in the 2014 model year, which would achieve up to a 10 percent reduction in fuel consumption and CO_2 emissions by the 2018 model year. Building on the success of these standards, USEPA and USDOT jointly finalized additional "Phase 2" standards for medium- and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and reduce carbon pollution. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion metric tons.

State Level

California Air Resources Board

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California. CARB conducts research, sets California Ambient Air Quality Standards (CAAQS),

compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (e.g., hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. CARB also sets fuel specifications to further reduce vehicular emissions. CARB has the primary responsibility for the development of California's State Implementation Plan (SIP) for non-attainment area's (e.g., ozone), for which CARB works closely with the federal government and the local air districts. The SIP is required for the State to take over implementation of the federal Clean Air Act in California. CARB also has primary responsibility for adopting regulations to meet the State's goal of reducing GHG emissions to 1990 levels by 2020.

AB 32

In 2006, AB 32 (codified in the California Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006) focuses on reducing GHG emissions in California to 1990 levels by 2020. AB 32 defines GHGs as CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6, and represents the first enforceable statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. AB 32 further requires that reduction measures be technologically feasible and cost effective. Under AB 32, CARB has the primary responsibility for reducing GHG emissions. CARB is required to adopt rules and regulations directing state actions that would achieve GHG emissions reductions equivalent to 1990 statewide levels by 2020.

Senate Bill 32

In 2016, Senate Bill (SB) 32 and its companion bill, AB 197, amended AB 32, establishing a new GHG reduction target of 40 percent below 1990 levels by 2030, and include provisions to ensure the benefits of state climate policies reach into disadvantaged communities.

2017 Climate Change Scoping Plan

The 2017 Scoping Plan outlines the strategies the State will implement to achieve the 2030 GHG reduction target of 40 percent below 1990 levels, which build on the Cap-and-Trade Regulation; the LCFS; improved vehicle, truck and freight movement emissions standards; and increasing renewable energy, and strategies to reduce methane emissions from agricultural and other wastes to meet California's energy needs. CARB's projected Statewide 2030 emissions takes into account 2020 GHG reduction policies and programs (CARB, 2017).

Under the Scoping Plan Scenario, the majority of the reductions would result from the continuation of the Cap-and-Trade regulation. Additional reductions would be achieved from electricity sector standards (i.e., utility providers to supply 50 percent renewable electricity by 2030), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the mobile source strategy and sustainable freight action plan. The alternatives are designed to consider various combinations of these programs, as well as consideration of a carbon tax in the event the Cap-and-Trade regulation is not continued. However, in 2017, the Cap-and-Trade regulation was extended to 2030.

The 2017 Scoping Plan discusses the role of local governments in meeting the State's GHG reductions goals because local governments have jurisdiction and land use authority related to: community-scale planning and permitting processes, local codes and actions, outreach and

education programs, and municipal operations (CARB, 2017). Furthermore, local governments may have the ability to incentivize renewable energy, energy efficiency, and water efficiency measures (CARB, 2017).

For individual projects under CEQA, the 2017 Scoping Plan states that local governments can support climate action when considering discretionary approvals and entitlements. According to the 2017 Scoping Plan, lead agencies have the discretion to develop evidence-based numeric thresholds consistent with the Scoping Plan, the State's long-term goals, and climate change science (CARB, 2017).

A summary of the GHG emissions reductions required under AB 32 is provided in **Table 3.6-2**.

TABLE 3.6-2
ESTIMATED GREENHOUSE GAS EMISSIONS REDUCTIONS REQUIRED BY AB 32

Emissions Scenario	GHG Emissions ($MMTCO_2e$)
2008 Scoping Plan (IPCC SAR)	
2020 Forecast (CARB 2008 Scoping Plan Estimate)	596
2020 Emissions Target Set by AB 32 (i.e., 1990 level)	427
Reduction below Business-As-Usual necessary to achieve 1990 levels by 2020	169 (28.4%) [a]
2011 Scoping Plan (IPCC AR4)	
2020 Forecast (CARB 2011 Scoping Plan Estimate)	509.4
2020 Emissions Target Set by AB 32 (i.e., 1990 level)	431
Reduction below Business-As-Usual necessary to achieve 1990 levels by 2020	78.4 (15.4%) [b]
2017 Scoping Plan Update	
2030 Forecast ("Reference Scenario" which includes 2020 GHG reduction policies and programs)	389
2030 Emissions Target Set by HSC Division 25.5 (i.e., 40% below 1990 Level)	260
Reduction below Business-As-Usual Necessary to Achieve 40% below 1990 Level by 2030	129 (33.2%) [c]

$MMTCO_2e$ = million metric tons of carbon dioxide equivalents
[a] 596 – 427 = 169 / 596 = 28.4%
[b] 509.4 – 431 = 78.4 / 509.4 = 15.4%
[c] 389 – 260 = 129 / 389 = 33.2%

SOURCE: CARB, 2011; CARB, 2014; CARB, 2017.

Under the Scoping Plan Scenario, continuation of the Cap-and-Trade regulation (or carbon tax) is expected to cover approximately 34 to 79 $MMTCO_2e$ of the 2030 reduction obligation (CARB, 2017). The State's short-lived climate pollutants strategy, which, is for GHGs that remain in the atmosphere for shorter periods of time compared to longer-lived GHGs like CO_2e, is expected to cover approximately 17 to 35 $MMTCO_2e$ of the obligation. The RPS with 50 percent renewable electricity by 2030 is expected to cover approximately 3 $MMTCO_2e$. The mobile source strategy and sustainable freight action plan includes maintaining the existing vehicle GHG emissions

standards, increasing the number of zero emission vehicles and improving the freight system efficiency, and is expected to cover approximately 11 to 13 $MMTCO_2e$. Under the Scoping Plan Scenario, CARB expects that the reduction in GHGs from doubling of the energy efficiency savings in natural gas and electricity end uses in the CEC 2015 Integrated Energy Policy Report by 2030 would cover approximately 7 to 9 $MMTCO_2e$ of the 2030 reduction obligation. The other strategies would be expected to cover the remaining 2030 reduction obligations.

Senate Bill 375

In 2008, SB 375 (Chapter 728, Statutes of 2008) established mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the State's Metropolitan Planning Organizations (MPOs), to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. In 2011, CARB adopted the final GHG emissions reduction targets for the State's MPOs, including the Southern California Association of Governments (SCAG), which is the MPO for the region, in which, the City of San Gabriel is located. CARB updated these targets in 2018 (CARB, 2018). Of note, the reduction targets explicitly exclude emission reductions expected from the AB 1493 (Pavley standards) and the LCFS regulations.

SB 375 requires MPOs such as SCAG to incorporate a "sustainable communities strategy" (SCS) in their regional transportation plans (RTPs) that will achieve GHG emission reduction targets set by CARB. Certain transportation planning and programming activities would then need to be consistent with the RTP/SCS; however, SB 375 expressly provides that the SCS does not regulate the use of land, and further provides that local land use plans and policies (e.g., general plan) are not required to be consistent with either the RTP or SCS.

Title 24, Building Standards (CALGreen) Code

In 1978, the Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) were adopted in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standards. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods.

Part 11 of Title 24 is referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality" (California Building Standards Commission, 2010). In 2019, the CALGreen Code was updated to include new mandatory measures for residential and nonresidential uses including energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality (California Building Standards Commission, 2010). The 2019 CALGreen Code took effect in January 2020.

Senate Bill X1-2 and Renewables Portfolio Standard (RPS)

In 2011, SB X1-2 increased California's RPS to 33 percent by 2020. SB 350 (Chapter 547, Statues of 2015) further increased the RPS to 50 percent by 2030. SB X1-2 also included interim targets of 40 percent by 2024 and 45 percent by 2027.

Senate Bill 100

In 2018, SB 100, known as the 100 Percent Clean Energy Act of 2018, declares that CARB should plan for 100 percent total retail sales of electricity in California come from eligible renewable energy resources and zero-carbon resources by the end of 2045. SB 100 also set interim goals, accelerating the RPS, to 50 percent from renewable energy sources by 2026 and 60 percent by 2030.

Executive Order B-55-18

In 2018, EO B-55-18 set a new statewide goal to achieve carbon neutrality no later than 2045 and achieve and maintain net negative emissions thereafter. This goal is in addition to existing statewide GHG reduction targets.

Senate Bill 1383

SB 1383 (Chapter 395, Statutes of 2016) creates goals for short-lived climate pollutant (SLCP) reductions in various industry sectors. The SLCPs included under this bill – including methane, fluorinated gases, and black carbon – are GHGs that are much more potent than carbon dioxide and can have detrimental effects on human health and climate change. SB 1383 requires the CARB to adopt a strategy to reduce CH_4 by 40 percent, HFC gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The CH_4 emission reduction goals include a 75 percent reduction in the level of statewide disposal of organic waste from 2014 levels by 2025. In 2017, CARB adopted a SLCP Reduction Strategy to implement SB 1383 (CARB, 2017).

Regional Level

South Coast Air Quality Management District

As detailed in Section 3.2, *Air Quality*, the South Coast Air Quality Management District (SCAQMD) is responsible for air quality planning in the Air Basin and developing rules and regulations to bring the area into attainment of the ambient air quality standards. In 2008, SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds (CARB, 2008). The SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for stationary source/industrial projects where SCAQMD is Lead Agency. However, SCAQMD has not adopted a GHG significance threshold for land use development projects (e.g., mixed-use/commercial projects). A GHG Significance Threshold Working Group was formed in 2008 to further evaluate potential GHG significance thresholds (SCAQMD, 2008); however, the Working Group has been inactive since 2011, and SCAQMD has not formally adopted any GHG significance threshold for land use development projects.

SCAG Regional Transportation Plan/Sustainable Communities Strategy

In 2016, SCAG adopted the 2016 RTP/SCS, which is an update to the previous 2012 RTP/SCS (SCAG, 2016). Using growth forecasts and economic trends, the 2016 RTP/SCS provides a vision for transportation throughout the region for the next 25 years. The 2016 RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2016 RTP/SCS describes how the region can exceed the GHG emission-reduction targets set by CARB by achieving an eight percent reduction by 2020, 18 percent reduction by 2035, and 21 percent reduction by 2040 compared to the 2005 level on a per capita basis (SCAG, 2016). Compliance with and implementation of 2016 RTP/SCS policies and strategies would not only reduce GHG emissions from vehicle emissions that include CO_2, CH_4 and N_2O that come as a result of burning petroleum-based fuels, but also have co-benefits of reducing per capita emissions associated with reduced per capita vehicle miles traveled (VMT).

To reach the reduction target set by CARB mentioned above, SCAG's 2016 RTP/SCS provides specific strategies for successful implementation. These strategies include supporting projects that encourage diverse job opportunities for a variety of skills and education, recreation and cultures and a full-range of shopping, entertainment and services all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a "Complete Streets" policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles.

In addition, the 2016 RTP/SCS includes new strategies to promote active transportation, supports local planning and projects that serve short trips, expand understanding and consideration of public health in the development of local plans and projects, and supports improvements in sidewalk quality, local bike networks, and neighborhood mobility areas. It also proposes increasing access to the California Coast Trail, light rail and bus stations, and promoting corridors that support biking and walking, such as through a regional greenway network and local bike networks. The 2016 RTP/SCS proposes to better align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for federal and state funding, and to expand the potential for all people to use active transportation. CARB has accepted the SCAG GHG quantification determination in the 2016 RTP/SCS (SCAG, 2016).

Local Level

City of San Gabriel General Plan

The Comprehensive General Plan of the City of San Gabriel (General Plan), adopted in 2004 (City of San Gabriel, 2004), provides a long-range policy guide to address changes to the City and a roadmap for future development. The General Plan contain goals and targets that are applicable to the Project:

Chapter 7: Open Space and Recreation

Target 7.5.2: Create urban landscapes that will reduce heat/solar gain

Chapter 8: Environmental Resources

Goal 8.6: Improve air quality within the City of San Gabriel.

Target 8.6.1: Reduce the amount of emissions from vehicles in San Gabriel.

Target 8.6.2: Encourage the use of mass transit, carpooling, bicycling, and other alternative transportation options.

Target 8.6.4: Enhance the functionality and expand the size of the City's network of Park and Ride Lots.

Target 8.6.5: Encourage the planting of street trees and yard trees because of their air quality contribution.

Target 8.6.6: Replace City-owned and encourage replacement of privately owned fire extinguishers with models that do not use ozone depleting compounds.

Target 8.6.7: Investigate the feasibility of expanding a City operated bus service.

Target 8.6.8: Work with the South Coast Air Quality Management District to reduce emissions from stationary sources in San Gabriel.

Target 8.6.9: Permit major indirect sources of air pollution only if they provide transportation measures to reduce their impacts to an insignificant level.

Target 8.6.10: Map sensitive land uses including hospitals, schools, and care facilities and periodically check air quality in these areas.

Chapter 10: Community Design

Target 10.3.3: Encourage the application of sustainable design principles and materials that do not consume irreplaceable resources. The City shall:

- Promote energy efficient construction
- Support code modifications that encourage the use of recycled and regenerated materials
- Orient new development to transit wherever possible Permit "vertically integrated" mixed uses, meaning traditional patterns of development that permit people to live over their places of business
- Promote traditional street patterns that allow high levels of pedestrian circulation and promote short walking distances to necessary services
- Support the principles for sustainable development recommended by the American Planning Association's policy guide, Planning for Sustainability. These practices include renewable and recycled building materials, energy efficient design, transit oriented development, neighborhood livability, pedestrian friendly design, drought tolerant and native plant materials, and other techniques for sustainable communities.

City of San Gabriel 2013-2021 Housing Element

The Housing Element was created to provide an assessment of current and future housing needs, and the constraints in and resources for meeting those needs (City of San Gabriel, 2013). It also provides a comprehensive strategy that establishes housing goals, policies, and programs. The 2013-2021 Housing Element provides a comprehensive strategy that establishes housing goals, policies, and programs. The following policies and action would also result in reductions in GHG emissions applicable to the Project:

> **Policy 1.1.5:** Through subdivision and zoning ordinances, and through the permit process, encourage use of innovative construction techniques, design standards, and energy conservation methods in new housing development.
>
> **Policy 2.1.3:** Support the development of cost saving and energy-conserving construction techniques.
>
> > **Action 2.1.5:** Through subdivision and zoning ordinances, and through the permit process, encourage use of innovative construction techniques, design standards, and energy conservation methods in new housing development.

3.6.4 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to greenhouse gas emissions if it would:

a) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases; or

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

Significance Thresholds

Lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including by looking to thresholds developed by other public agencies, such as air districts, or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (see Section 15064.7(c)). A lead agency may also use thresholds on a case-by-case basis. (Id., subd. (b).) Each case must be analyzed in light of its own facts and circumstances.

Even in the absence of clearly defined thresholds for GHG emissions, the law requires that an agency makes a good faith effort to disclose the GHG emissions from a project and mitigate to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact. Regardless of which threshold(s) are used, the agency must support its analysis and significance determination with substantial evidence. (CEQA Guidelines Section 15064.7.) The CEQA Guidelines recommends considering certain factors, among others, when determining the significance of a project's GHG emissions, including the extent to which the project may increase or reduce GHG emissions as compared to the existing environment; whether

the project exceeds an applicable significance threshold; and extent to which the project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs.

According to CAPCOA, "GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective" (CAPCOA, 2008). Due to the complex physical, chemical and atmospheric mechanisms involved in global climate change, there is no basis for concluding that a single project's increase in annual GHG emissions would cause a measurable change in global GHG emissions necessary to influence global climate change. Section 15064.4(b) of the CEQA Guidelines states that "in determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonable foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions (CAPCOA, 2008)."

Although the Project's GHG emissions have been quantified as discussed under the Subsection 3.6.5, *Methodology*, below, neither CARB, SCAQMD, nor the City has adopted quantitative project-level significance thresholds for assessing impacts related to GHG emissions applicable to the Project. In the absence of any adopted quantitative threshold, the determination of whether or not the proposed project would result in a cumulatively considerable contribution to the cumulative impacts of global climate change is based on the following:

- If the Project would conflict with (and thereby be inconsistent with) the applicable regulatory plans and policies to reduce GHG emissions, which include the emissions reduction measures included within CARB's Climate Change Scoping Plan; SCAG's 2016-2040 RTP/SCS; and the City's General Plan, County Climate Action Plan, and the Green Building and Energy Code.

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project (CCR, Title 14, Section 15064(h)(3)). To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency (CCR, Title 14, Section 15064(h)(3)). Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions" (CCR, Title 14, Section 15064(h)(3)).

Thus, CEQA Guidelines Section 15064(h)(3) allows a Lead Agency to make a finding of non-significance for GHG emissions if a project complies with a program and/or other regulatory schemes to reduce GHG emissions.[1]

3.6.5 Methodology

The Climate Action Registry General Reporting Protocol (General Reporting Protocol) provides procedures and guidelines for calculating and reporting GHG emissions from general and industry-specific activities. Although no numerical thresholds of significance have been adopted, and no specific protocols are available for land use projects, the General Reporting Protocol provides a framework for calculating and reporting GHG emissions from the Project. This section provides an estimate of the GHG emissions from Project construction and operation.

Consistency with Greenhouse Gas Reduction Plan, Policies, and Actions

The Project's GHG emissions are also evaluated by assessing the Project's consistency with applicable GHG reduction strategies and local actions adopted by the City. As discussed previously, the City has established goals and targets which would lead to GHG emission reductions.

The CEQA Guidelines encourage lead agencies to make use of programmatic mitigation plans and programs from which to tier, when they perform individual project analyses. The City does not have a programmatic mitigation plan to tier from, such as a Greenhouse Gas Emissions Reduction Plan, as recommended in the relevant amendments to the CEQA Guidelines. However, the City has elements in its General Plan that focus on encouraging environmental sustainability and land use and transportation sectors.

GHG Emissions Estimates

To provide additional information to decision makers and the public, this GHG analysis provides an estimate of the GHG emissions from Project construction and operation. The following Project-related emission sources have been evaluated:

1. Construction Emission Sources – Fossil-fueled on- and off-road vehicles and equipment needed for building demolition and hauling; site grading; and building construction, paving, and architectural coating;

[1] See, for example, San Joaquin Valley Air Pollution Control District (SJVAPCD), CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation, APR-2025 (June 25, 2014), in which the SJVAPCD "determined that GHG emissions increases that are covered under ARB's Cap-and-Trade regulation cannot constitute significant increases under CEQA…" Furthermore, the SCAQMD has taken this position in CEQA documents it has produced as a Lead Agency. The SCAQMD has prepared 3 Negative Declarations and one Draft Environmental Impact Report that demonstrate the SCAQMD has applied its 10,000 $MTCO_2e$/yr significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold. See SCAQMD, Final Negative Declaration for Ultramar Inc. Wilmington Refinery Cogeneration Project, SHC No. 2012041014 (October 2014); SCAQMD Final Negative Declaration for Phillips 99 Los Angeles Refinery Carson Plant—Crude Oil Storage Capacity Project, SCH No. 2013091029 (December 2014); SCAQMD Final Mitigated Negative Declaration for Toxic Air Contaminant Reduction for Compliance with SCAQMD Rules 1420.1 and 1402 at the Exide Technologies Facility in Vernon, CA, SCH No. 2014101040 (December 2014); and SCAQMD Final Environmental Impact Report for the Breitburn Santa Fe Springs Blocks 400/700 Upgrade Project, SCH No. 2014121014 (August 2015).

2. Direct Operational Emission Sources – Combustion of natural gas on-site for space heating, and water heating; and combustion of fossil fuels for lawn care and maintenance activities, and motor vehicle trips; and
3. Indirect Operational Emission Sources – Off-site electricity generation, wastewater treatment and water conveyance, and solid waste disposal.

Since potential impacts resulting from GHG emissions are long-term rather than acute, GHG emissions are calculated on an annual basis (metric tons per year of CO_2e). To report total GHG emissions using the CO_2e metric, the GWP ratios for CO_2, CH_4, and N_2O corresponding to the warming potential of CO_2 over a 100-year period are used in this analysis.

Construction

Construction emissions are forecasted by assuming a conservative estimate of construction activities from each phase of the Project. Construction emissions are estimated using the CalEEMod (Version 2016.3.2) software, an emissions inventory software program recommended by the SCAQMD. CalEEMod is based on outputs from OFFROAD and EMFAC2017, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including off- and on-road vehicles. CalEEMod outputs construction-related GHG emissions of CO_2, CH_4, and CO_2e.

The output values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the same construction subphasing assumptions used in the criteria pollutant analysis (see Section 3.2, *Air Quality*) to generate GHG emissions values for each year of Project construction.

SCAQMD's Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, recognizes that construction-related GHG emissions from projects "occur over a relatively short-term period of time" and that "they contribute a relatively small portion of the overall lifetime project GHG emissions (SCAQMD, 2008)." The guidance recommends that construction project GHG emissions should be "amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies." In accordance with that SCAQMD guidance, GHG emissions from Project construction have been amortized over the 30-year lifetime of the Project.

Operations

CalEEMod was also used to estimate operational GHG emissions from electricity, natural gas, solid waste, water and wastewater, and landscaping equipment. Building electricity and natural gas usage rates were adjusted to account for current Title 24 Building Energy Efficiency Standards. CalEEMod was used to estimate mobile source emissions. CalEEMod uses the on-road vehicle EMissions FACtor (EMFAC) model. The most recent version is EMFAC2017, which "represents CARB's current understanding of motor vehicle travel activities and their associated emission levels." EMFAC data in CalEEMod was updated to reflect EMFAC2017 emissions rates. A summary of that methodology is provided below.

For mobile sources, CalEEMod was used to generate the GHG emissions and VMT from Project uses are based on the VMT provided in the Project's Transportation Impact Study (Fehr & Peers, 2020).

With regard to energy demand, the consumption of fossil fuels to generate electricity and to provide heating and hot water generates GHG emissions. Energy demand rates were estimated based on specific square footage of the commercial buildings and number of residential units as well as predicted water supply needs for these uses. However, since the data used in CalEEMod is from 2002, correction factors were incorporated into CalEEMod to account for the 2019 version of the Title 24 Building Energy Efficiency Standards in effect. The Project electricity demands are supplied by Southern California Edison (SCE).

GHG emissions from solid waste disposal, water and wastewater, and equipment used to maintain landscaping, such as lawnmowers and trimmers were estimated using CalEEMod.

Operational year 2023 would have the maximum emissions for the Project and over time, Project emissions would decrease due to increasing renewable portfolio standards of utility providers, increasing building energy efficiency requirements, and improvements in mobile fleets.

3.6.6 Environmental Impact Analysis

Impact GHG-1: The proposed Project would not conflict with any applicable plan, policy, regulation, or recommendation of an agency adopted for the purpose of reducing the emissions of GHGs. (Less than Significant Impact.)

Impact GHG-2: The proposed Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. (Less than Significant Impact.)

Consistency with State Plans, Policies, or Regulations

Consistency with AB 32

In support of AB 32, the State has promulgated specific laws aimed at GHG reductions applicable to the Project. The heating, ventilation, and air conditioning (HVAC) system would be sized and designed in compliance with the CALGreen Code and the City's General Plan to maximize energy efficiency caused by heat loss and heat gain.

The Project Site is also located in an established residential and commercial area with access to public transportation, which minimizes trips and trip lengths reducing mobile source emissions. The Project would also be a mixed-use development, which would reduce additional VMT by allowing residents to use the retail and commercial uses on the Project Site. The Project Site would also be located less than 0.25 mile from the Metro Bus 176 route, which provides direct access to the Metrolink train at the El Monte Station. Additionally, the Project would provide eight percent of residential-designated spaces for electric vehicle charging. Therefore, the Project would be consistent with State efforts to reduce motor vehicle emissions and congestion.

As discussed, the location and design of the proposed Project are consistent with relevant goals and actions that results in the efficient use of public and private resources. **Therefore, the Project's GHG emissions and associated impacts would be less than significant.**

Project Consistency with Regional and Local Trip and VMT Reduction Goals, Actions, and Recommendations.

The significance of the Project's GHG emissions was first evaluated based on whether the emissions would be generated in connection with development located and designed consistent with relevant regional and local goals, actions, and recommendations designed to encourage development to reduce trips and VMTs. Transportation-related GHG emissions are the largest sector of emissions from the Project. This Project characteristic is consistent with the assumption in many regional plans, such as the SCAG 2016 RTP/SCS, which recognizes that the transportation sector is the largest contributor to the State's GHG emissions. Consistent with SCAG's RTP/SCS alignment of transportation and land use, the Project would accommodate projected increases in population, households, employment, and travel demand by implementing smart land use strategies. As discussed previously, the Project Site is an infill location in close proximity to existing public transit stops, which would reduce VMT as compared to a site that is not located in proximity to transit stops. Moreover, the RTP/SCS states that while "population and job growth would induce land use change (development projects) and increase VMT, and would result in direct and indirect GHG emissions," the RTP/SCS would "supports sustainable growth through a more compact, infill, and walkable development pattern (SCAG, 2015)."

Project Consistency with City Goals and Actions

The significance of the Project's GHG emissions is also evaluated based on whether they would be generated in connection with a development location and design consistent with the applicable City's goals and actions. Although the City does not have specific GHG reduction requirements, its General Plan has elements that aim to improve and encourage water and energy conservation from buildings, improve air quality, and encourage environmental sustainability from land use and transportation sectors. The Project is a mixed-use development; its design and location would be consistent with relevant goals and actions designed to encourage development that results in the efficient use of public and private resources.

Consistency with GHG reduction strategies is an important priority and reasonable reduction efforts should be taken. **Table 3.6-3** contains a list of GHG-reducing strategies applicable to the Project, and the consistency of the Project with these strategies. Based on design features of the Project, the Project would be consistent with the City's General Plan goals regarding energy use and consumption as shown in **Table 3.6-4**. **Therefore, the Project would result in less than significant GHG emissions and impacts.**

TABLE 3.6-3
PROJECT CONSISTENCY WITH APPLICABLE GREENHOUSE GAS REDUCTION STRATEGIES

Source	Category / Description	Consistency Analysis
California Green Building Standards Code Requirements	All bathroom exhaust fans shall be ENERGY STAR compliant.	**Consistent.** The Project would meet or exceed the energy standards in the Title 24 Building Energy Efficiency Standards.
	HVAC Systems will be designed to meet ASHRAE standards.	**Consistent.** The Project would meet or exceed the energy standards in ASHRAE 90.1-2013, Appendix G and the Title 24 Building Energy Efficiency Standards.
	Energy commissioning shall be performed for buildings larger than 10,000 square feet.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Air filtration systems are required to meet a minimum of MERV 8 or higher.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Refrigerants used in newly installed HVAC systems shall not contain any CFCs.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Parking spaces shall be designed for carpool or alternative fueled vehicles. Up to eight percent of total parking spaces will be designed for such vehicles.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Long-term and short-term bike parking shall be provided for up to five percent of vehicle trips.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code..
	Stormwater Pollution Prevention Plan (SWPPP) required.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Indoor water usage must be reduced by 20% compared to current California Building Code Standards for maximum flow.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	All irrigation controllers must be installed with weather sensing or soil moisture sensors.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Wastewater usage shall be reduced by 20 percent compared to current California Building Standards.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Requires a minimum of 50 percent recycle or reuse of nonhazardous construction and demolition debris.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Requires documentation of types of waste recycled, diverted or reused.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Requires use of low VOC coatings consistent with AQMD Rule 1168.	**Consistent.** The Project would be consistent with this regulation and would meet or exceed the low VOC coating requirements.
	100 percent of vegetation, rocks, soils from land clearing shall be recycled or stockpiled on-site.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.

SOURCE: ESA, 2019.

TABLE 3.6-4
PROJECT CONSISTENCY WITH CITY'S GENERAL PLAN GOALS FOR ENERGY EFFICIENCY AND CONSUMPTION

Source	Category / Description	Consistency Analysis
Chapter 8 Environmental Resources		
Goal: Promote Environmental Sustainable Planting Practices	Target: Require that all new construction include a landscape component that will increase the number of trees onsite.	**Consistent:** The Project would include a 33,543 square foot central park area (23,218 square foot central park and 10,325 square foot central plaza) with expansive landscaping and outdoor seating areas. A 24,280 square foot secondary plaza with landscaped and hardscape areas would surround the perimeter of the entire Project Site.
Goal: Encourage the conservation and protection of water quality within San Gabriel.	Target: Require new buildings and the construction of additions to include water conserving toilets and fixtures; expand existing provisions in the City's building and plumbing code.	**Consistent:** The Project would meet this requirement as part of its compliance with the CALGreen Code.
Goal: Improve air quality within the City of San Gabriel	Targets: Reduce the amount of emissions from vehicles in San Gabriel and encourage the use of mass transit, carpooling, bicycling, and other alternative transportation options.	**Consistent.** The Project Site is served by the Los Angeles County Metro. The Project is located less than 0.25 mile from the Metro 176 route which provides direct access to the Metrolink at the El Monte Station.
	Target: Encourage the use of mass transit, carpooling, bicycling, and other alternative transportation options.	**Consistent.** The Project is served by the Los Angeles County Metro system with access to the Metrolink. Additionally, bicycle parking will be provided onsite separately for commercial and residential land uses.
	Target: Encourage the planting of street trees and yard trees because of their air quality contribution.	**Consistent:** As detailed previously, the Project would include a 33,543 square foot central park area with expansive landscaping that includes multiple green spaces consisting of trees, benches, and hardscape, as well as perimeter street trees.
	Implementation Measure: Require bicycle parking racks for commercial developments over 2,000 square feet and residential developments over four units., (3) require priority parking spaces for carpools in all office developments.	**Consistent:** Bicycle parking, consistent with the General Plan requirements, would be provided at the ground level for commercial users and at the subterranean level for residential users.
Chapter 10 Community Design		
Goal: Create designs that live and breathe with San Gabriel's neighborhoods as they themselves live and breathe.	**Target:** Encourage the application of sustainable design principles and materials that do not consume irreplaceable resources. The City shall: - Promote energy efficient construction - Support code modifications that encourage the use of recycled and regenerated materials - Orient new development to transit wherever possible Permit "vertically integrated" mixed uses, meaning traditional patterns of development that permit people to live over their places of business - Promote traditional street patterns that allow high levels of pedestrian circulation and promote short walking distances to necessary services - Support the principles for sustainable development recommended by the American Planning Association's policy guide, Planning for Sustainability. These practices include renewable and recycled building materials, energy efficient design, transit oriented development, neighborhood livability, pedestrian friendly design, drought tolerant and native plant materials, and other techniques for sustainable communities	**Consistent:** As discussed earlier, the Project would be consistent with the energy efficiency measures required under CALGreen Code; is located within 0.25 mile of a bus line that directly accesses the Metrolink and connects to other services; would be consistent with the waste management procedures within the City; and provides for easy pedestrian access.

SOURCE: ESA, 2019.

Consistency with Executive Orders S-3-05 and B-30-15

EOs S-3-05 and B-30-15 establish goals for reducing GHG emissions. EO S-3-05's goal to reduce GHG emissions to 1990 levels by 2020 was codified by the Legislature as AB 32. As analyzed above, the Project would be consistent with AB 32. Therefore, the Project does not conflict with the 2020 component of EOs S-3-05 and B-30-15.

EOs S-3-05 and B-30-15 also establish goals to reduce GHG emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050. These goals have not yet been codified by the Legislature. However, studies have shown that, to meet the 2030 and 2050 targets, aggressive technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. In its Climate Change Scoping Plan, CARB acknowledged that the "measures needed to meet the 2050 goal are too far in the future to define in detail (CARB, 2008). In the First Update, however, CARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately (CARB, 2014)." Due to the technological shifts required and the unknown parameters of the regulatory framework in 2030 and 2050, quantitatively analyzing the Project's impacts further relative to the 2030 and 2050 goals currently is speculative for purposes of CEQA.

Although the Project's emissions levels in 2030 and 2050 cannot yet be reliably quantified, statewide efforts are underway to facilitate the State's achievement of those goals and it is reasonable to expect the Project's emissions level to decline as the regulatory initiatives identified by CARB in the First Update are implemented, and other technological innovations occur. Stated differently, the Project's emissions total at build-out represents the maximum emissions inventory for the Project as California's emissions sources are being regulated (and foreseeably expected to continue to be regulated in the future) in furtherance of the State's environmental policy objectives. As such, given the reasonably anticipated decline in Project emissions once fully constructed and operational, the Project would be consistent with the Executive Orders' goals.

The Climate Change Scoping Plan recognizes that AB 32 establishes an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction] measures also put the state on a path to meet the long-term 2050 goal of reducing California's greenhouse gas emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to stabilize the climate (CARB, 2008)." Also, in 2014, CARB's First Update provides that it "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," and many of the emission reduction strategies recommended by CARB would serve to reduce the Project's post-2020 emissions level to the extent applicable by law through the energy, transportation, eater, and waste management sectors (CARB, 2014).

The Project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the establishment of the 2030 and 2050 targets. **Therefore, the proposed Project would not**

conflict with any applicable plan, policy, regulation, or recommendation adopted for the purpose of reducing the emissions of GHGs, and impacts would be less than significant.

Quantification of GHG Emissions

Construction

The GHG emissions associated with construction of the Project were calculated for each year of construction activity. Although construction-related GHGs are one-time emissions, an assessment of the Project emissions should generally include construction emissions. SCAQMD recommends that a project's construction-related GHG emissions be amortized over the project's 30-year lifetime in order to include these emissions as part of the project's annualized lifetime total emissions, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies. In accordance with this recommendation, the Project's estimated construction GHG emissions have been amortized over a 30-year period and are included in the annualized operational GHG emissions. Results of this analysis are presented in **Table 3.6-5**. The construction GHG emissions are estimated based on construction equipment operating continuously throughout the work day. In reality, construction equipment tends to operate periodically or cyclically throughout the work day. Therefore, the GHG emissions shown reflect a conservative estimate. A complete listing of the equipment by phase, emission factors, and calculation parameters used in this analysis is included within the emissions calculation worksheets that are provided in Appendix E. **As previously stated under Subsection 3.6.5, *Methodology*, no numerical thresholds of significance have been adopted; therefore, the determination of whether Project construction would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment is determined to be less than significant based on the analysis set forth under Impact GHG-2.**

TABLE 3.6-5
PROJECT CONSTRUCTION GREENHOUSE GAS EMISSIONS

Emission Source	CO_2e (Metric Tons) [a,b]
Off-Road – 2021	353
Off-Road – 2022	672
Off-Road – 2023	381
On-Road (total)	2,170
Total Construction Emissions	**3,577**
Amortized Construction Emissions (30-years)	**119**

[a] Totals may not add up exactly due to rounding in the modeling calculations Detailed emissions calculations are provided in Appendix E.

[b] CO_2e emissions are calculated using the GWP values from the IPCC Fourth Assessment Report.

SOURCE: ESA, 2019.

Operation

The long-term operational emissions from the Project were estimated using CalEEMod. Maximum annual GHG emissions resulting from motor vehicles, energy, water conveyance, and waste sources

were calculated for the expected first operating year (2023) and added to the amortized construction emissions, as shown in **Table 3.6-6.**

TABLE 3.6-6
UNMITIGATED PROJECT GREENHOUSE GAS EMISSIONS

Emission Source	Metric Tons CO_2e per year
Opening Operational Year (2023)	
Mobile Sources	4,222
Area	28
Electricity	1,017
Natural Gas	434
Waste	144
Water	102
Amortized Construction Emissions	119
Total Project GHG Emissions	**6,066**

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix E.

SOURCE: ESA, 2019.

As shown in Table 3.6-6, the estimated annual Project GHG (net) emissions are estimated to be 6,066 $MTCO_2e$. Project operational-related GHG emissions are anticipated to decline in future years as emissions reductions from the State's Cap-and-Trade program are fully realized. As shown in Table 3.6-6, the Project's greatest source of GHG emissions come from mobile sources. Reductions in mobile sources GHGs would occur over the next decade, and beyond, ensuring that the Project's total GHG emissions would be further reduced. Emissions from mobile sources would decline in future year, as older vehicles are replaced with newer vehicles, resulting in a greater percentage of the vehicle fleet meeting more stringent combustion emissions standards, such as, the model year 2017-2025 Pavley Phase II standards. As previously stated under Subsection 3.6.5, *Methodology*, no numerical thresholds of significance have been adopted. As further stated under Subsection 3.6.4, *Thresholds of Significance*, CEQA Guidelines Section 15064(h)(3) allows a Lead Agency to make a finding of non-significance for GHG emissions if a project complies with a program and/or other regulatory schemes to reduce GHG emissions. As stated under Impact GHG-1, the proposed Project would not conflict with any applicable plan, policy, regulation, or recommendation adopted for the purpose of reducing the emissions of GHGs, and impacts would be less than significant. **Therefore, consistent with CEQA Guidelines Section 15064(h)(3) and the determination that Impact GHG-1 would be less than significant, the proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and impacts would be less than significant.**

3.6.7 Cumulative Impacts

The emissions of a single project will not cause or exacerbate global climate change. A substantial increase in GHG emissions from multiple projects throughout the world could possibly result in a cumulative impact with respect to global climate change. CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs from even relatively small (on a global basis) increases in GHG emissions. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable, and therefore, significant. A cumulatively considerable impact is the impact of a proposed project in addition to the related projects. However, in the case of global climate change, the proximity of the project to other GHG-generating activities is not directly relevant to the determination of a cumulative impact. Although the State requires MPOs and other planning agencies to consider how region-wide planning decisions can impact global climate change, there is currently no established non-speculative method to assess the cumulative impact of proposed independent private-party development projects.

Given that GHG emissions are cumulative in nature, and as detailed in the impact analysis, the Project would generate GHG emissions consistent with applicable reduction plans and policies, the Project's incremental contribution to cumulatively significant GHG emissions would be less than cumulatively considerable, and impacts would be less than significant.

3.6.8 References

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3.7 Hazards and Hazardous Materials

This section analyzes the potential effects of the proposed Project's impacts related to hazards and hazardous materials. Potential hazards addressed in this section include potential releases of hazardous materials from equipment and materials during construction, demolition, and operation; exposure to hazardous materials in buildings and other structures, soil, and groundwater; wildfires; airport safety; and emergency access and response plans. Possible hazards involving toxic air contaminant emissions and odors are discussed in Section 3.2, *Air Quality*, of this Draft EIR. The analyses are based on information provided in the Phase I (EEI, 2018) and the Limited Phase II (EEI, 2016) Environmental Site Assessments (Phase I and Phase II ESAs, respectively) conducted by EEI Engineering Solutions, a search of regulatory agency databases of hazardous materials sites, and other published reports, all as cited in the sections below.

3.7.1 Existing Conditions

On-site Conditions

The Project Site currently consists of vacant land with no structures. A row of planted king palm trees that were formerly part of the nursery are located in the southeastern part of the Project Site. Photographs of the Project Site are presented in **Figure 2-3**, Photographs of Project Site Conditions, in Chapter 2, *Project Description*. The Project Site was previously occupied by (and the original location of) San Gabriel Nursery & Florist, which continues to operate just north of the Project Site as a 2-acre garden and florist shop. San Gabriel Nursery & Florist has served Southern California for over 90 years since its founding in 1923 by Fred and Mikoto Yoshimura as the Mission Nursery. Hazardous materials commonly associated with nurseries include fertilizers, herbicides, and pesticides. The Project Site previously contained vacant greenhouses and associated structures, eight of which were burned down by an act of arson on February 14, 2018, which left the site severely burned and in damaged condition with a large amount of debris. The Project Site has since been cleared of all structures and burnt debris.

Two driveways provide vehicular access to the Project Site: the first is on the northwest portion of the Project Site, along S. San Gabriel Boulevard; and the second is on the southeastern portion of the Project Site, along S. Gladys Avenue. Existing electrical poles, street lights, and trees are situated along the sidewalks surrounding the Project Site along S. San Gabriel Boulevard. The sidewalks along E. Grand Avenue and S. Gladys are not paved.

On-site Soil Investigations

The Project Site historically contained former diesel underground storage tanks (USTs) and former gasoline USTs. In 1988, a Tank Removal Geologic Report by Petroleum Industry Consultants (PIC) was prepared for the Project Site (EEI, 2018). According to the report, the property owners (i.e. San Gabriel Nursery and Florists) requested the removal of four USTs identified as Tanks 1 and 2, located south of E. El Monte Street within the former growing portion of the Project Site, and Tanks 3 and 4, located north of E. El Monte Street east of the former retail building. Tank removal operations were completed on December 29, 1987, in accordance with tank removal permit

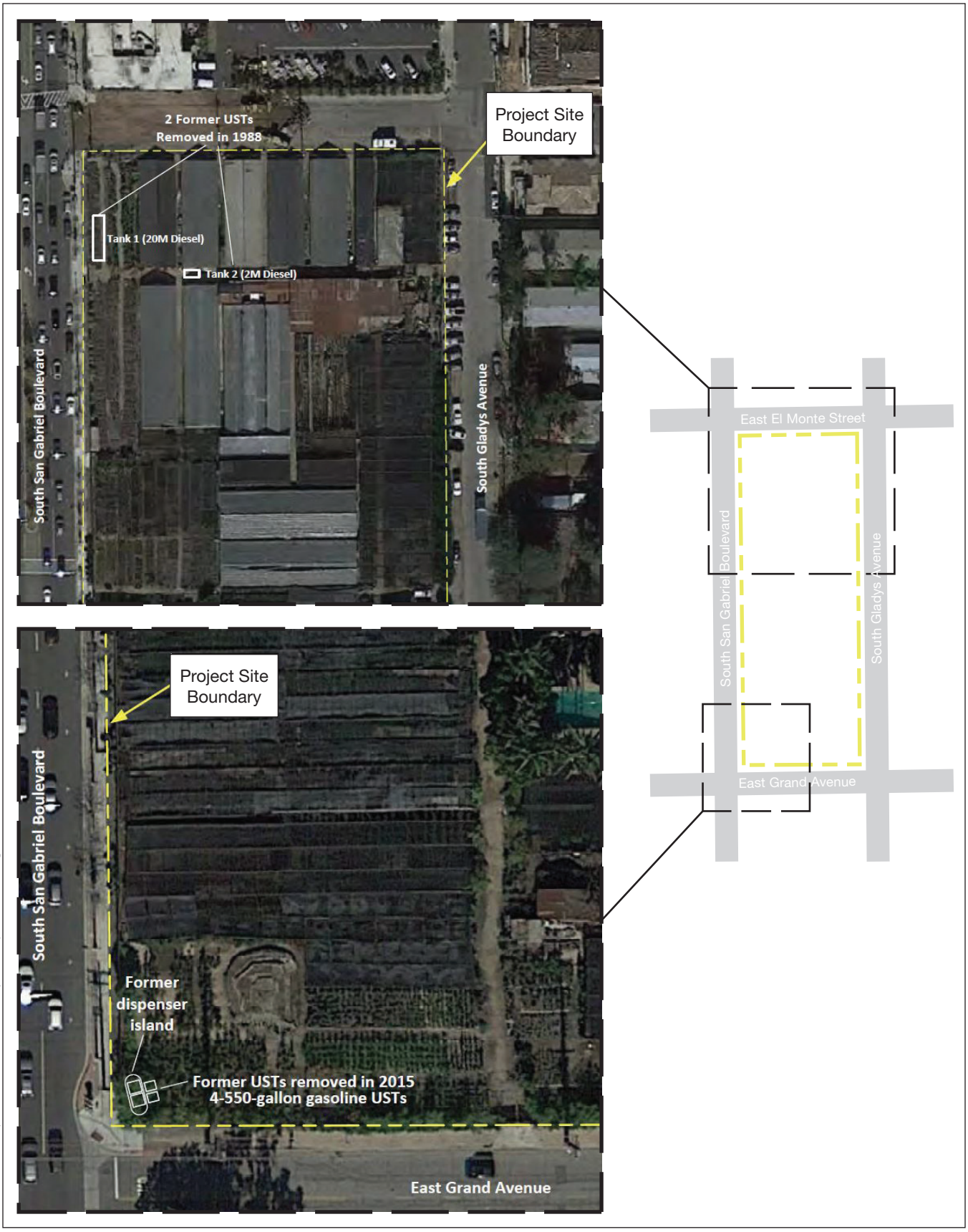
#3675B, issued by the Los Angeles County Department of Public Works-Environmental Programs Division (LACDPW-EPD), Engineering Division.

Upon excavation, Tanks 1 and 2, one 10,000-gallon diesel tank and one 2,000-gallon diesel tank, and Tanks 3 and 4, one 6,000-gallon leaded gasoline tank, and one 550-gallon unleaded gasoline tank were removed from the tank pits (see **Figure 3.7-1**). In addition, a pump dispenser was removed from a location south of Tank 4. In accordance with tank removal permit #3675B, issued by the LACDPW-EPD, six soil samples were recovered from under the tanks at a depth of two feet below the tank bottom, at approximately 15 feet below ground surface (bgs) and one sample from beneath the adjacent pump dispenser at a depth of one-foot bgs. Soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and for organic lead by EPA Method 7421. Sample analysis indicated TPHg and lead concentration measured non-detectable in all samples except in sample P2 which exhibited TPHg at a concentration of 50 parts per million (ppm). On March 16, 1988, based on a review of this information, the LACDPW-EPD found the tank closure was final and no further action was required.

Four additional USTs were closed and removed in November 2015 (see Figure 3.7-1) at the Project Site under the oversight of the LACDPW-EPD and San Gabriel Fire Department. Reportedly, the nursery owners initially encountered a dispenser island for two of the 550-gallon gasoline steel USTs during the process of reorganizing the nursery plants at the southwest corner of the Project Site (northeast corner of S. San Gabriel Boulevard and E. Grand Avenue). The tanks were located using GPR (Ground Penetrating Radar). On September 1, 2015 the island and hardcover of both tanks were removed and the tanks were excavated. During this excavation two additional 550-gallon gasoline USTs were discovered on the east side of the island. These were uncovered and an additional permit was obtained for their removal. On September 2, 2015 the four 550-gallon gasoline USTs were removed. Four soil samples from approximately two feet beneath the former location of four 550-gallon gasoline USTs at a total depth of nine feet bgs were collected and submitted for analytical testing. Confirmation soil samples collected form the former tank locations detected trace concentrations of Benzene and Toluene above the laboratory method detection limits. Based on field observations and the analytical results of the confirmation soil samples, closure was requested under Closure Application No. 809481 (EEI, 2018).

LACDPW-EPD requested TPH as Diesel Range Organics (DRO) and Total Recoverable Petroleum Hydrocarbons (TRPH) lab analysis results for the closure permit. Additional samples were analyzed and analytical results indicated that concentrations of both TPH-DRO and TRPH were not detected in any of the samples analyzed.

On March 15, 2016 LACDPW-EPD responded that due to concerns regarding soil and groundwater impacts, and pursuant to the California Health and Safety Code, Chapter 6.7, Section 25297 (b), the LACDPW-EPD referred the matter to the Los Angeles Regional Water Quality Control Board (LARWQCB) UST Program. The LARWQCB found that residual concentrations of fuel constituent posed a low threat to human health, and to soil and groundwater quality beneath the Project Site. Therefore, the LARWQCB stated that no further action was required to pursue any further soil and/or groundwater investigation at the Project Site.



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SOURCE: EEI, 2018

Pacific Square San Gabriel Mixed-Use Project

Figure 3.7-1
Former UST Locations

ESA

Although the USTs were granted regulatory closure and/or concurrence, no soil vapor sampling had been conducted to evaluate the former fueling areas for potential vapor intrusion concerns. Therefore, a Limited Phase II Environmental Assessment (EEI, 2016) was completed. The investigation included a geophysical survey in areas of the Project Site that formerly contained diesel and gasoline USTs, installation and sampling of six temporary soil vapor probes, each set to approximately 5-feet bgs, and the collection and analysis of 38 soil samples from 19 representative locations throughout the Project Site (see **Figure 3.7-2**).

The results of the geophysical survey did not reveal evidence of the presence of USTs or associated subsurface product piping within the areas surveyed. However, a possible excavation feature and/or trench was detected with GPR in one area of the Project Site that was suspected to formerly contain a UST(s).

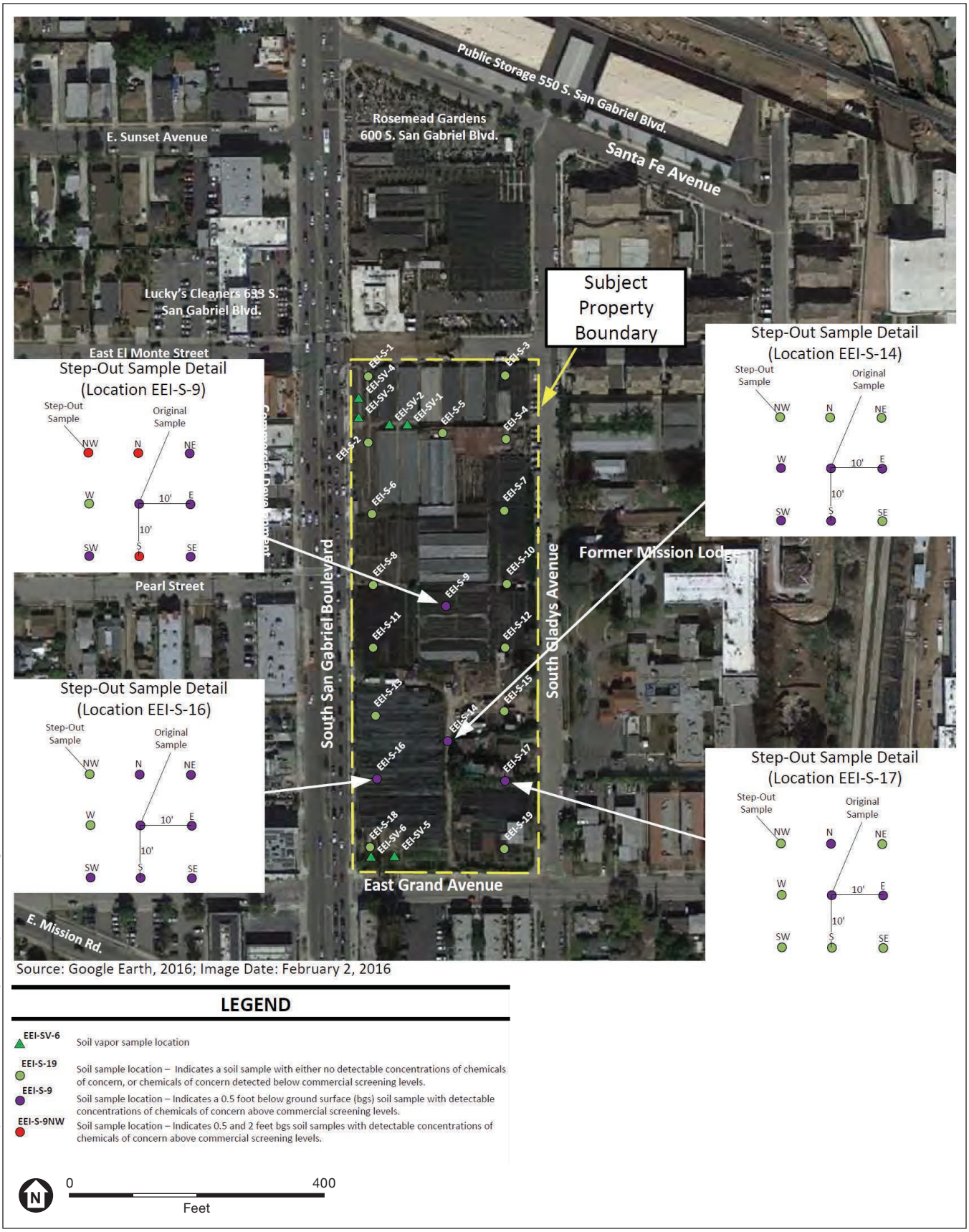
Detectable concentrations of volatile organic compounds (VOCs) were reported in each of the soil vapor samples analyzed. However, none of the reported soil vapor concentrations exceeded their respective commercial California Office of Environmental Health Hazard Assessment (OEHHA) values.

Additionally, based on elevated concentrations of pesticides and/or lead detected in soil samples, EEI returned to the Project Site in June 14, 2016 and collected soil samples at 10-foot increments to the north, northeast, east, southeast, south, southwest, west, and northwest of the 4 referenced sample locations. A total of 36 locations were sampled, including 8 surrounding each of 4 referenced sample locations and by collecting one 3-foot bgs sample from each of the 4 referenced sample locations (EEI, 2018).

The results included detectable concentrations of total arsenic reported in multiple samples analyzed from both sample events, exceeding the OEHHA commercial screening level of 0.24 mg/kg. In addition, 5 samples exhibited concentrations that were equal to or greater than the California Department of Toxic Substances Control (DTSC) School Evaluation Screening Value of 12 mg/kg, while the remaining samples exhibited concentrations below the DTSC screening value. Additionally, Dieldrin (insecticide) was detected in 5 samples, each exceeding the OEHHA commercial screening level of 130 µg/kg. All remaining detectable concentrations Dieldrin and other pesticides in soil were below their respective commercial screening levels.

Hazardous Materials Site Listing

The Project Site is the location of a former growing area which most recently supported the San Gabriel Nursery and Florist (632 S. San Gabriel Boulevard, northern adjacent property). The San Gabriel Nursery and Florist was listed under the Historical Underground Storage Tank, Statewide Environmental Evaluation and Planning System (SWEEPS), Underground Storage Tank (UST) and Los Angeles Co. Industrial Waste and Underground Storage Tank (HMS) databases.



Source: Google Earth, 2016; Image Date: February 2, 2016

LEGEND

EEI-SV-6	Soil vapor sample location
EEI-S-19	Soil sample location – Indicates a soil sample with either no detectable concentrations of chemicals of concern, or chemicals of concern detected below commercial screening levels.
EEI-S-9	Soil sample location – Indicates a 0.5 foot below ground surface (bgs) soil sample with detectable concentrations of chemicals of concern above commercial screening levels.
EEI-S-9NW	Soil sample location – Indicates 0.5 and 2 feet bgs soil samples with detectable concentrations of chemicals of concern above commercial screening levels.

N

0 400

Feet

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SOURCE: EEI, 2018

Pacific Square San Gabriel Mixed-Use Project

Figure 3.7-2
Soil Sampling Locations

ESA

These listings appear to be related to the removal of former USTs from the Project Site in 1988 and 2015, as described above. The San Gabriel Nursery and Florist was also listed under the HAZNET database for the reporting year 2016, identified by Envid: U001570611, with a waste category of "Off-specification, aged or surplus organics". The disposal method was identified as "Storage, Bulking and/or Transfer offsite – no treatment/recovery" for 0.231 tons of waste. These listings do not constitute environmental concern as the Project Site does not include a dual listing, such as, an additional reported release of hazardous materials on the Project Site. Therefore, there are no recorded environmental concerns for the Project Site.

Off-site Hazardous Materials

There are offsite facilities within the area that are listed in state and local databases. However, based on the reported distances from the Project Site, whether the facility was on a database reporting unauthorized releases of hazardous materials, reported substances released, reported regulatory agency status (e.g., case closed, no further action), and location of the facility with respect to the reported groundwater flow direction, the offsite facilities are unlikely to represent an environmental impact for the Project Site.

Proximity to Schools

The following schools are located within one-quarter mile of the Project Site:

- Lincoln School, 600 E. Grand Avenue, located about 0.18-mile southwest of the Project Site.
- Kids Klub, 4930 Earle Avenue, located about 0.25-mile east of the Project Site.
- Options for Youth San Gabriel School, 405 S. San Gabriel Boulevard, located about 0.25-mile northwest of the Project Site.

Proximity to Airports

There are no airports or airstrips within two miles of the Project Site. The nearest airport is the El Monte Airport located about 3.15 miles southeast of the Project Site.

Emergency and Disaster Routes

Disaster Routes are transportation routes designated by the County of Los Angeles, such as freeway, highway or arterial routes, that are pre-identified for use during times of crisis (County of Los Angeles, 2008). These routes are used to bring in emergency personnel, equipment, and supplies to impacted areas in order to save lives, protect property and minimize impact to the environment. During a disaster, these routes have priority for clearing, repairing and restoration over all other roads. The County of Los Angeles states that "Disaster Routes are not Evacuation Routes. Although an emergency may warrant a road be used as both a disaster and evacuation route, they are completely different. An evacuation route is used to move the affected population out of an impacted area." Evacuation routes depend on the nature and location of the emergency or disaster. None of the streets within or adjacent to the Project Site are designated Disaster Routes (County of Los Angeles, 2008).

Wildfires

The Project Site is located within an urban and built environment with commercial and residential uses surrounding the Project Site. As noted by the California Department of Forestry and Fire Protection (CAL FIRE), the Project Site is located in a non-Very High Fire Hazard Severity Zone (CAL FIRE, 2011). No wildlands are located in the immediate vicinity of the Project Site. The Whitter Narrows is the nearest expanse of open space and it is located about four miles to the southeast of the Project Site.

3.7.2 Regulatory Framework

Federal Level

Resource Conservation and Recovery Act

The federal Resource Conservation and Recovery Act (RCRA) (42 U.S.C. secs. 6901-6992k) regulates the generation, transportation, treatment, storage, and disposal of hazardous waste. Under RCRA regulations, generators of hazardous waste must register and obtain a hazardous waste activity identification number. RCRA allows individual states to develop their own programs for the regulation of hazardous waste as long as they are at least as stringent as RCRA's. The State of California has developed the California Hazardous Waste Control Law (HWCL) (Health and Safety Code sec. 25100 et seq. and 22 California Code of Regulations [CCR] sec. 66260.1 et seq.) and the U.S. Environmental Protection Agency (USEPA) has delegated authority for RCRA enforcement to the State of California. Primary authority for the statewide administration and enforcement of HWCL rests with DTSC.

The Occupational Safety and Health Act of 1970, which is implemented by the federal Occupational Safety and Health Administration (OSHA), contains provisions with respect to hazardous materials handling. OSHA requirements, as set forth in 29 Code of Federal Regulations (CFR) Section 1910, et. seq., are designed to promote worker safety, worker training, and a worker's right–to-know. The U.S. Department of Labor has delegated the authority to administer OSHA regulations to the State of California. The California OSHA program (Cal/OSHA) (codified in the CCR, Title 8, or 8 CCR generally and in the Labor Code secs. 6300-6719) is administered and enforced by the Division of Occupational Safety and Health (DOSH). Cal/OSHA requires employers to implement a comprehensive, written Injury and Illness Prevention Program (IIPP) for potential workplace hazards, including those associated with hazardous materials.

USTs are regulated under Subtitle I of RCRA and its regulations, which establish construction standards for new UST installations (those installed after December 22, 1988), as well as standards for upgrading existing USTs and associated piping. Since 1998, all non-conforming tanks were required to be either upgraded or closed.

State Level

California Hazardous Materials Release Response Plans and Inventory Law of 1985

The California Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act) requires that businesses that store hazardous materials on-site prepare a Hazardous

Materials Business Plan (HMBP) and submit it to the local Certified Unified Program Agency (CUPA), which in this case is the Los Angeles County Fire Department Hazardous Materials Division. The Business Plan Act requires preparation of Hazardous Materials Business Plans and disclosure of hazardous materials inventories, including an inventory of hazardous materials handled, plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the state. Local agencies are responsible for administering these regulations.

Several state agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety, including CalEPA and the California Emergency Management Agency. The California Highway Patrol and Caltrans enforce regulations specifically related to the transport of hazardous materials. Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roadways.

The Business Plan Act applies to the commercial portion of this Project because contractors would be required to comply with its handling, storage, and transportation requirements that would reduce the possibility of spills, and to prepare an emergency response plan to respond to accidental spills.

Health and Safety Code, Division 20, Chapter 6.7

The State regulates USTs pursuant to Health and Safety Code, Division 20, Chapter 6.7, and CCR Title 23, Division 3, Chapter 16 and Chapter 18. The State's UST program regulations include among others, permitting USTs, installation of leak detection systems and/or monitoring of USTs for leakage, UST closure requirements, release reporting/corrective action, and enforcement. Oversight of the statewide UST program is assigned to the State Water Resources Control Board (SWRCB) which has delegated authority to the Regional Water Quality Control Boards (RWQCB) and typically on the local level, to the fire department. The San Gabriel Fire Department (SGFD) administers and enforces federal and State laws and local ordinances for USTs at the Project Site. Plans for the construction/installation, modification, upgrade, and removal of USTs are reviewed by SGFD Inspectors. If a release is documented that affects groundwater, the Project file is transferred to the appropriate RWQCB for oversight.

California Division of Occupational Safety and Health (Cal/OSHA)

Cal/OSHA is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA requires many entities to prepare injury and illness prevention plans and chemical hygiene plans, and provides specific regulations to limit exposure of construction workers to lead. Cal/OSHA applies to this Project because contractors will be required to comply with its handling and use requirements that would increase worker safety and reduce the possibility of spills, and to prepare an emergency response plan to respond to accidental spills.

The Safe Drinking Water and Toxic Enforcement Act

The Safe Drinking Water and Toxic Enforcement Act (22 CCR sec. 12000 et seq.), Proposition 65, lists chemicals and substances believed to have the potential to cause cancer or deleterious reproductive effects in humans. It also restricts the discharges of listed chemicals into known drinking water sources above the regulatory levels of concern, requires public notification of any unauthorized discharge of hazardous waste, and requires that a clear and understandable warning be given prior to a known and intentional exposure to a listed substance.

Construction Storm Water General Permit (Construction General Permit Order 2009-0009-DWQ, National Pollutant Discharge Elimination System [NPDES] No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ)

Dischargers whose project disturbs one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one of more acres, are required to obtain coverage under the *NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). Construction activities subject to this permit include clearing, grading, grubbing, and other disturbances to the ground such as excavation and stockpiling, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of a facility. The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes specific Best Management Practices (BMPs) designed to prevent sediment and pollutants from being released into stormwater and off-site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area.

Municipal Separate Storm Sewer System (MS4) Permit NPDES No. CAS004001 and Order No. 01-182 (Amended on September 14, 2006 by Order R4-2006-0074; August 9, 2007 by Order R4-2007-0042; December 10, 2009 by Order R4-2009-0130; and October 19, 2010 and April 14, 2011 pursuant to the peremptory writ of mandate in L.A. Superior Court Case No. BS122724)

The MS4 permit requires permittees (in this case, the City of San Gabriel) to reduce pollutants and runoff flows from new development and redevelopment using BMPs to the maximum extent practical. The MS4 permittee also has its own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification element. The MS4 permit requires specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

Government Code Section 65962.5 (Cortese List)

Government Code Section 65962.5, amended in 1992, requires the California Environmental Protection Agency (CalEPA) to develop and update annually the Hazardous Waste and Substances Sites (Cortese) List, which is a list of hazardous waste sites and other contaminated sites. The Cortese List is a planning document used by the State, local agencies, and developers to comply

with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites.

California Emergency Services Act. Government Code 8550–8692

Government Code Section 8550–8692 provides for the assignment of functions to be performed by various agencies during an emergency so that the most effective use may be made of all manpower, resources, and facilities for dealing with any emergency that may occur. The coordination of all emergency services is recognized by the State to mitigate the effects of natural, man-made, or war-caused emergencies which result in conditions of disaster or extreme peril to life, property, and the resources of the State, and generally, to protect the health and safety and preserve the lives and property of the people of the State.

2018 Strategic Fire Plan for California

The State Board of Forestry and Fire Protection and CAL FIRE adopted the 2018 Strategic Fire Plan for wildland fire protection in California (CAL FIRE, 2018). The updated plan reflects CAL FIRE's focus on fire prevention and suppression activities, as well as natural resource management to meet California's climate change goals. The planning process defines a level of service measurement, considers assets at risk, incorporates the cooperative interdependent relationships of wildland fire protection providers, provides for public stakeholder involvement, and creates a fiscal framework for policy analysis.

California Government Code Section 4216-4216.9

Section 4216-4216.9 "Protection of Underground Infrastructure" requires an excavator to contact a regional notification center (e.g., Underground Services Alert or Dig Alert) at least two days prior to excavation of any subsurface installations. Any utility provider seeking to begin a project that could damage underground infrastructure can call Underground Service Alert, the regional notification center for southern California. Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are then notified and are required to mark the specific location of their facilities within the work area prior to the start of Project activities in the area.

Local Level

City of San Gabriel General Plan

The Public Safety Element of the General Plan defines the following issues and opportunities related to hazards that are relevant to the proposed project (General Plan policies related to geological and seismic hazards are addressed in Section 4.6.2.2):

Public Safety Element

Action 5.2.2.1 Require site design features, fire retardant building materials, and adequate egress systems as conditions for approval of development or improvements to reduce the risk of fire within the City.

Goal 5.7 Reduce potential harm and damage from environmental hazards.

Action 5.7.1.3 Require that special mitigation measures be incorporated in both new and existing development where methane gas is detected.

Target 5.7.4 Comply with all applicable regulations and provisions for the storage, use and handling of hazardous substances as established by federal (EPA), State (RWQCB, Cal OSHA, CAL EPA) and local (County of Los Angeles, City of San Gabriel) regulations.

Target 5.7.5 Promote opportunities for aquifer recharge to minimize groundwater hazards by encouraging developers to minimize paved areas in new developments and requiring these areas to be interspersed with landscaping.

3.7.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to hazards and hazardous materials if it would:

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

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

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

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

e) Be located within an area covered by 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, and would result in a safety hazard or excessive noise for people residing or working in the project area;

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or

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

3.7.4 Methodology

The analysis of hazards and hazardous materials impacts is based on the components and actions for the Project, as described in Chapter 2, *Project Description*. Hazards and hazardous materials for the Project was derived from various sources and compiled in this chapter to develop a comprehensive understanding of the potential constraints and hazards associated with construction and long-term operation of the proposed Project. Information sources include the cited onsite assessments and investigations, regulatory agency database searches, site reconnaissance, and applicable laws, ordinances, regulations and standards.

The analysis considers the range and nature of foreseeable hazardous materials use, storage, and disposal resulting from the construction and operation of the proposed Project and identifies the

primary ways that these hazardous materials could expose individuals or the environment to hazardous materials risks. Impacts would be significant if the location or activities of the proposed Project's components resulted in encountering or releasing hazardous materials that would expose construction workers, the public, or the environment.

As described in more detail below, the analysis of hazards and hazardous materials impacts in this section takes into account the various existing federal, State, and local ordinance and regulations that apply to hazards and hazardous materials and described above in Section 3.7.2, *Regulatory Framework*. Through compliance with the existing laws and regulations, the applicant would be required to use, transport, store, and dispose of hazardous materials using procedures that would avoid hazards or reduce the potential for hazardous materials incidents. Compliance with applicable federal, state, and local regulations is assumed in this analysis, and local and state agencies would be expected to continue to enforce applicable requirements to the extent that they do so now.

3.7.5 Environmental Impact Analysis

Impact HAZ-1 and HAZ-2: The proposed Project could create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. (Potentially Significant Impact.)

Construction

During the demolition and construction phase, construction equipment and materials may include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. The routine use or an accidental spill of hazardous materials could result in inadvertent releases, which could adversely affect construction workers, the public, and the environment. For hazardous materials used during construction, contractors, in accordance with State regulations, would be required to properly use and store materials in appropriate containers with secondary containment to contain a potential release. The California Fire Code would also require measures for the safe storage and handling of hazardous materials.

Construction contractors would be required to prepare a SWPPP for construction activities in compliance with the NPDES General Construction Permit requirements. The SWPPP would list the hazardous materials (including petroleum products) proposed for use during construction; describe spill prevention measures, equipment inspections, equipment and fuel storage; protocols for responding immediately to spills; and describe BMPs for controlling site runoff. In addition, the transportation of hazardous materials from demolition and construction activities are regulated by the USDOT, Caltrans, and the CHP. Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of accidental release.

Finally, in the event of an accidental spill or release of a hazardous material at the Project Site, a coordinated response with federal, state, and local levels would occur. The Los Angeles Fire Department Health Hazardous Materials Division is the local hazardous materials response team. In the event of a hazardous materials spill, the police and fire departments would be simultaneously notified and sent to the scene to respond and assess the situation.

As discussed in 3.7.1, Existing Conditions, the previous uses on the Project Site required USTs for fuel (gasoline and diesel) storage. Other hazardous materials commonly associated with nurseries include fertilizers, herbicides, and pesticides. As discussed above, a Limited Phase II Environmental Site Assessment was performed for the Project Site. Based on soil analytical results, with the exception of shallow soil located within a 10 feet radius of sample locations EEI-S-16, EEI-S-9, and EEI-S-14, the balance of soil underlying the Project Site could be reused for commercial purposes. The Project Site would require excavation and grading for foundations and utilities. **Based on concentrations of Dieldrin (insecticide) in soil exceeding the OEHHA commercial screening level, excavation activities could expose construction workers to unknown contamination resulting in a significant impact. Implementation of Mitigation Measures MM-HAZ-1 through MM-HAZ-3, would reduce potentially significant impacts related to the routine transport, use, disposal, or accidental release of hazardous materials to less-than-significant levels.**

Mitigation Measures

The incorporation of the following Mitigation Measures MM-HAZ-1 through MM-HAZ-3 would reduce construction-related hazards impacts associated with the Project:

> **Mitigation Measure MM-HAZ-1:** A 10-foot radius to a depth of 2-feet, the equivalent of approximately 30 cubic yards of soil, surrounding sample location EEO-S-16 shall be excavated and disposed as Non-RCRA (California) hazardous waste. The balance of soil beneath the Project Site would qualify as non-hazardous waste and can be reused for commercial purposes. Excavations measuring approximately 20 feet x 20 feet to depths of approximately 2 feet surrounding sample locations EEI-S-9 and EEI-S-14 would be required, which would generate approximately 30 cubic yards of soil per area, totaling approximately 60 cubic yards. The excavated soil would qualify as non-hazardous waste.
>
> **Mitigation Measure MM-HAZ-2:** The construction contractor(s) shall prepare and implement site-specific Health and Safety Plans (HASP) prior to commencement of construction activities as required by and in accordance with 29 CFR 1910.120 to protect construction workers and the public during all excavation and grading activities. This HASP shall be submitted to the City of San Gabriel for review prior to commencement of construction activities. The HASP shall include, but is not limited to, the following elements:
>
> - Designation of a trained, experienced site safety and health supervisor who has the responsibility and authority to develop and implement the site HASP;
> - A summary of all potential risks to construction workers and maximum exposure limits for all known and reasonably foreseeable site chemicals;
> - Specified personal protective equipment and decontamination procedures, if needed;
> - Emergency procedures, including route to the nearest hospital; and
> - Procedures to be followed in the event that evidence of potential soil or groundwater contamination (such as soil staining, noxious odors, debris or buried storage containers) is encountered. These procedures shall be in accordance with hazardous waste operations regulations and specifically include, but are not limited to, the following: immediately stopping work in the vicinity of the unknown hazardous

materials release, notifying County of Los Angeles Fire Department Hazardous Materials Division and/or the LARWQCB, as appropriate, and retaining a qualified environmental firm to perform sampling and remediation.

Mitigation Measure MM-HAZ-3: In support of the Health and Safety Plan described above in mitigation measure HAZ-2, the contractor shall develop and implement a Soil Management Plan (SMP) prior to commencement of construction activities that includes a materials disposal plan specifying how the construction contractor(s) will remove, handle, transport, and dispose of all excavated materials in a safe, appropriate, and lawful manner in accordance with applicable federal, state, and local regulations. The SMP shall include the following elements:

- Protocols for the monitoring of soil to identify contaminated soil
- Procedures for the disposal of contaminated soil, including identification of a specific licensed disposal facility permitted to accept the waste materials and written documentation that the disposal facility can accept the waste.

As grading, excavation, and trenching are performed, exposed soil would be monitored for stained or discolored soil, wet or saturated soils, or odors. If impacted soil is encountered, the soil would be analyzed to identify and characterize the impact and determine if soil remediation is required. Based on visual monitoring, "grab" soil samples would be collected at selected locations for headspace screening for volatile organic compounds using a calibrated Photoionization Detector (PID). Headspace PID readings that are elevated above those of non-impacted grab soil samples would be considered potentially contaminated. At a minimum, at least one soil sample would be collected for chemical analysis at or near the center of the suspected impact, ideally representative of the "worst case" condition. Soil samples would be analyzed by an appropriate State-certified laboratory using appropriate methods based on the parameters to be analyzed. When a new impact has been identified it would be characterized to assess its lateral and vertical extent. Likely excavation of impacted soil would be followed by segregated stockpiling or direct-loading, waste profiling, and off-site disposal or recycling which would be performed in accordance with applicable Federal, State, and local regulations.

The contract specifications shall mandate full compliance with all applicable local, state, and federal regulations related to the identification, transportation, and disposal of hazardous materials, including those encountered in excavated soil.

Impact HAZ-3: The proposed Project would not 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.)

Operation

Project operation would include commercial and residential uses and would use and produce typical hazardous materials and wastes such as paints, commercial cleansers, herbicides, pesticides, solvents, and lubricants. Large quantities of these materials are not expected to be stored on site. Storage of hazardous materials are regulated by applicable Federal, State, and local regulations. Compliance with these requirements would serve to minimize health and safety risks to people or structures associated with routine use, transport, and disposal as well as accidental release of or exposure to hazardous materials. **Therefore, operational impacts associated with the Project**

related to use, transport, storage, or disposal of hazardous materials and accidental release of hazardous materials would be less than significant.

Construction and Operation

There are three schools located within one-quarter mile of the Project Site, as discussed above in 3.7.1, Existing Conditions. The construction and operation of the proposed Project would include the handling of hazardous materials. As discussed in Impacts HAZ-1 and HAZ-2 above, there are existing regulations covering the transportation, use, storage, disposal, and accidental release of hazardous materials during construction and operation activities. The required compliance with these regulations would ensure that nearby schools would not be exposed to hazardous materials. **The impact related to emissions of hazardous materials near a school would be less than significant.**

Impact HAZ-4: The proposed Project could 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, could create a significant hazard to the public or the environment. (Potentially Significant Impact.)

As discussed in Section 3.7.1, *Existing Conditions*, the Project Site was listed under the Historical UST, SWEEPS, UST, and Los Angeles County Industrial Waste and Underground Storage Tank databases. Based on the historical uses at the Project Site, these listings appear to be related to the removal of former USTs on the Project Site. The areas around sampling locations EEI-S-16, EEI-S-9, and EEI-S-14 have impacted soil from lead and insecticides.

Construction

Other areas within the Project Site may have soil with residual chemicals that workers would be exposed to during construction earthwork activities. Although extensive sampling has been conducted throughout the Project Site, and previously undetected contaminated areas are not anticipated, it is possible that unknown locations may have contaminated soils. Implementation of mitigation measure MM-HZ-1 would ensure removal of contaminated soils. The construction activities could expose construction workers and the environment to contaminated soil resulting in significant impacts. **Implementation of Mitigation Measures MM-HAZ-2 and MM-HAZ-3 would reduce construction impacts related to hazardous material sites creating a significant hazard to the public or the environment to a less than significant impact.**

Operation

Upon completion of construction activities, which would include implementation of mitigation measure MM-HAZ-1, affected soils would have been removed. The existing remaining soil on the Project Site would be adequate for commercial development and could be reused onsite. **Therefore, there would be less than significant impacts during operations due to being located on a listed hazardous materials site since tanks closure letters have been issued and soils would be removed**.

Mitigation Measures

Implementation of Mitigation Measures MM-HAZ-1, MM-HAZ-2 and MM-HAZ-3 are required.

Impact HAZ-5 and HAZ-6: The proposed Project would not be located within two miles of a public airport, public use airport, or private airstrip which would result in a safety hazard or excessive noise for people residing or working in the project area. (No Impact.)

As discussed above in Section 3.7.1, *Existing Conditions*, Proximity to Airports, the Project Site and all associated Project activities would not be located within two miles of a public airport, public use airport, or private airstrip. **Therefore, there would be no impact.**

Impact HAZ-7: The proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant Impact.)

Construction

A lack of adequate access could impair the implementation of adopted emergency response plans by impeding the movement of emergency vehicles. During construction activities, lanes may be temporarily closed in order to facilitate utility tie-ins, and offsite construction within City right-of-way. However, if lane closures are needed for construction activities, it would be done in accordance with City permits and requirements. During construction, roadway access would be maintained by construction detours and diversions which would minimize disruptions to traffic flow and emergency vehicle access. These activities would also not interfere with or block evacuation routes specified in the General Plan Safety Element. **Therefore, impacts relating to interference with an adopted emergency response or evacuation plan during construction activities would be less than significant.**

Operation

The Project would include commercial and residential land uses and would be required by the Safety Element to establish, implement, and maintain on file an emergency response plan, which would be inspected annually by the City. The Project would also be subject to the City's multi-hazard function plan, which was developed in conjunction with the San Gabriel Fire Department. As part of the Project's emergency response plan, evacuation signs would be located in conspicuous floor locations, and in each area, as required by Code. All emergency plans, procedures, and evacuation signs would be submitted to the Fire Department for inspection and approval prior to their implementation and would be properly maintained. Therefore, this standard regulatory compliance would ensure an adequate emergency response plan serves the Project and the impact would be less than significant.

Further, once operational, the new facilities would not require any lane closures and traffic into and out of the Project Site would not exceed carrying capacity of the local streets, as discussed in Section 3.14, *Transportation*. **Therefore, the impact relative to an emergency response plan or emergency evacuation plan would be less than significant.**

Impact HAZ-8: The proposed Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. (Less than Significant Impact.)

The Project Site is located within an urban and built environment with commercial and residential uses surrounding the Project Site. As noted by CAL FIRE, the Project Site is located in a non-Very High Fire Hazard Severity Zone (CAL FIRE, 2011). Additionally, no wildlands are located in the immediate vicinity of the Project Site. The Whitter Narrows is the nearest expanse of open space and it is located about four miles to the southeast of the Project Site. **Therefore, impacts related to wildland fires would be less than significant.**

3.7.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the proposed Project in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts.

Unlike other resource areas, the geographic scope of analysis for cumulative hazardous materials cannot be precisely quantified by distance. The geographic area affected by the proposed Project and its potential to contribute to cumulative impacts varies based on the environmental resource under consideration. The geographic scope of analysis for cumulative hazardous materials impacts encompasses and is limited to the Project Site and its immediately adjacent area. This is because impacts relative to hazardous materials are generally site-specific and depend on the nature and extent of the hazardous materials release, and existing and future soil and groundwater conditions. For example, hazardous materials incidents tend to be limited to a smaller more localized area surrounding the immediate spill location and extent of the release, and could only be cumulative if two or more hazardous materials releases spatially overlapped.

Significant cumulative impacts related to hazards and hazardous material could occur if the incremental impacts of the proposed Project combined with the incremental impacts of one or more of the cumulative projects identified in Table 3.0-1 to substantially increase risk that people or the environment would be exposed to hazardous materials.

Construction

All of these projects would be subject to the same previously discussed regulatory requirements. That is, cumulative projects involving releases of or encountering hazardous materials also would be required to remediate their respective sites to established regulatory standards. This would be the case regardless of the number, frequency, or size of the release(s), or the residual amount of chemicals present in the soil from previous spills. Thus, while it is possible that the proposed Project and cumulative projects could result in releases of hazardous materials at the same location, the responsible party associated with each spill would be required to remediate site conditions to the same established regulatory standards. The residual less-than-significant effects of the Project that would remain after mitigation would not combine with the potential residual effects of cumulative projects to cause a potential significant cumulative impact because residual impacts would be highly site-specific. Accordingly, no significant cumulative impact with respect to the use of

hazardous materials would result. **For the above reasons, the proposed Project would not cause or contribute to a cumulatively significant impact with respect to the use of hazardous materials.**

Operation

Significant cumulative impacts related to operational hazards could occur if the incremental impacts of the Project combined with those of one or more of the above-listed projects to cause a substantial increase in risk that people or the environment would be exposed to hazardous materials used or encountered during the operations phase.

The operation of the Project facilities would require use of typical residential and commercial cleaning materials introducing potential for inadvertent releases of hazardous materials. Compliance with the various regulations regarding the safe transport, use, storage, and disposal of hazardous materials would reduce the project-specific incremental impact to a less-than-significant level.

The cumulative projects also would require the transport, use, and storage of hazardous chemicals. All project components involving the handling, storage, and disposal of hazardous materials would be required to prepare and implement a Hazardous Materials Business Plan and comply with applicable regulations, including those governing containment, site layout, and emergency response and notification procedures in the event of a spill or release. Transportation and disposal of wastes, such as spent cleaning solutions, would also be subject to regulations for the safe handling, transportation, and disposal of chemicals and wastes. As noted previously, such regulations include standards to which parties responsible for hazardous materials releases must return spill sites, regardless of location, frequency, or size of release, or existing background contaminant concentrations to their original conditions. Therefore, compliance with existing regulations regarding hazardous materials transport would reduce the risk of environmental or human exposure to such materials. **For these reasons, the Project, considered with the related projects, is not anticipated to result in significant cumulative impacts related to hazards or hazardous materials.**

3.7.7 References

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EEI Geotechnical & Engineering Solutions (EEI), 2016. Results of Limited Phase II Environmental Site Assessment. June 28, 2016. Provided in Appendix F-2 of this Draft EIR.

3.8 Hydrology and Water Quality

This section analyzes the potential effects of the proposed Project's impacts related to hydrology and water quality. Potential hydrology and water quality impacts addressed in this section include water quality standards and waste discharge requirements, groundwater supply and recharge, drainage pattern alterations, pollution in hazard, tsunami, or seiche zones, and whether or not the proposed Project would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This section is based, in part, on information and findings presented in the Preliminary Hydrology Study for Tract No. 82733, Pacific Square (Hydrology Study) prepared for the proposed Project by Fuscoe Engineering, Inc., and provided in Appendix G-1 of this Draft EIR (Fuscoe Engineering, 2019). Analysis on stormwater drainage and water quality is based on the findings presented in the Infiltration Study for Storm Water Quality (Infiltration Study) prepared for the proposed Project by Albus-Keefe & Associates, Inc., and provided in Appendix G-2 of this Draft EIR (Albus-Keefe, 2019).

3.8.1 Existing Conditions

Hydrology

Existing Hydrology and Drainage

The Project Site is located in an urbanized area and consists of graded land (exposed dirt surfaces) with no structures and impervious surfaces (e.g. compact soils and gravel found throughout the Project Site) and limited landscaping. Irrigation lines are also present within the southeastern portion of the Project Site (Albus-Keefe, 2019). The Project Site is relatively flat and gradually slopes from east to west and north to south, ultimately towards the southwest corner of the Project Site at S. San Gabriel Boulevard and E. Grand Avenue. Erosion control measures have been installed and are regularly maintained throughout the Project Site to ensure there is no erosion or runoff from these exposed dirt surfaces, in its current condition. This includes stabilized ingress/egress, a gravel bag barrier along the entire perimeter of the Project Site, sediment traps, and storm drain inlet protection. The Project Site contains two sets of curb drains located on S. San Gabriel Boulevard and E. Grand Avenue. The Project Site generally sits at grade with the adjacent streets and primarily drains via surface flow, ultimately discharging onto S. San Gabriel Boulevard or E. Grand Avenue (Fuscoe Engineering, 2019).

Based on Los Angeles County guidelines found in the Los Angeles County Hydrology Manual, all drainage facilities in developed areas not covered under the Capital Flood protection conditions must meet the Urban Flood level of protection. As defined by the County, an Urban Flood level is runoff from a 25-year frequency design storm falling on a saturated watershed. This means, as any additional runoff that exceeds that of the existing 25-year storm event must be detained onsite and released at a rate equivalent to the existing 25-year storm. The 25-year storm refers to the average number of years between storms of a certain size; a 25-year storm has a 4 percent chance annually to occur (USGS, 2019). The 5.85-acre Project Site is tributary to S. San Gabriel Boulevard and a total of 2.93-acres, or 50 percent, of the Project Site are impervious, yielding a 25-year event flow rate of 12.73 cubic feet per second (Fuscoe Engineering, 2019). **Table 3.8-1** provides existing storm water discharges within the Project Site, categorized by the type of flooding event.

TABLE 3.8-1
EXISTING SURFACE WATER RUNOFF DISCHARGES

Existing Conditions Discharges (cfs)						
Drainage Management Area	**2-Year Event**	**5-Year Event**	**10-Year Event**	**25-Year Event**	**50-Year Event**	**Outfall Location**
A	3.31	6.46	9.12	12.73	15.55	San Gabriel Blvd.
Onsite Total	3.31	6.46	9.12	12.73	15.55	-

SOURCE: Fuscoe Engineering, 2019

Existing Drainage and Storm Drain Facilities

Other than several curb drains located along E. Grand Avenue, there are no other existing drainage systems on the Project Site. There are no direct connections to any off-site public storm drain facilities. On-site storm water is routed via surface flow downstream to a City of San Gabriel catch basin located 200-feet south of the intersection of E. Grand Avenue and S. San Gabriel Boulevard, to the southwest, along S. San Gabriel Boulevard (Fuscoe Engineering, 2019).

South of the Project Site there is an existing Los Angeles County Flood Control District (LACFCD) catch basin located at the southwest corner of S. San Gabriel Boulevard and E. Grand Avenue. The catch basin drains into an existing 6-inch vitrified clay pipe (VCP) storm drain lateral within S. San Gabriel Boulevard. From there it is routed to a 57-inch reinforced concrete pipe (RCP) trunk line that flows northwest through East Mission Road and is tributary to the Rubio Wash. The Rubio Wash, which is located approximately 800 feet east of the Project Site, is a subgrade concrete-lined subsurface tributary of the Rio Hondo.

North of the property there are seven existing LACFCD catch basins, four at the intersection of E. El Monte Street and S. San Gabriel Boulevard and three downstream at the intersection of E. El Monte Street and S. Gladys Avenue. The four catch basins at the intersection of E. El Monte Street and San Gabriel drain into a 42-inch RCP storm drain line within E. El Monte Street. The three catch basins at the intersection of E. El Monte Street and S. Gladys Avenue drain into a 45-inch RCP storm drain line within E. El Monte. This trunk line flows east through E. El Monte Street and is tributary to the Rubio Wash.

Storm drain systems in the City of San Gabriel are operated and maintained by the City Utilities Department Operations Division's sewer and storm drain section. The larger, high capacity storm drains within the City are operated and maintained by the Los Angeles County Department of Public Work (LACDPW) (Fuscoe Engineering, 2019).

Surface Water Quality

Non-point source pollution is the largest contributor to surface water pollution in urban areas such as the Project Site. Impervious surfaces allow water to flow across the surface, rather than infiltrating back into groundwater aquifers, and potentially collecting pollutants on the way. Primary contributors to surface water runoff would be on-site landscaping irrigation and precipitation. As discussed in Section 3.7, *Hazards and Hazardous Materials*, the Project Site was

previously occupied by San Gabriel Nursery & Florist. Hazardous materials commonly associated with nurseries include fertilizers, herbicides, and pesticides. Historically, the Project Site contained diesel and gasoline underground storage tanks (USTs). A total of eight USTs have been closed and removed from the Project Site. Soil samples collected form the former tank locations detected trace concentrations of Benzene and Toluene above the laboratory method detection limits. During a Limited Phase II Environmental Assessment, detectable concentrations of Volatile Organic Compounds (VOCs) were reported in each of the soil vapor samples. However, none of the VOC concentrations exceeded their respective commercial California Office of Environmental Health Hazard Assessment (OEHHA) values. Some areas of the Project Site have been identified as having concentrations of insecticides in soil exceeding the OEHHA commercial screening level. Any affected soil would be excavated and removed from the Project Site as non-hazardous waste.

Groundwater Hydrology

The Project Site is located within the San Gabriel Valley groundwater basin, which is divided into two main parts: the Main San Gabriel Basin (Main Basin) and the Puente Basin. The Main Basin is a major natural source of water and groundwater pumping provides more than 75 percent of historical local water supply (San Gabriel Valley Municipal Water District, 2019). Historically, the groundwater levels have been low due to seven straight years of drought conditions. However, during 2018-2019, which saw an above average rainfall, approximately 130,000 acre-feet of water was replenished within the Main Basin (Main San Gabriel Basin Watermaster, 2019). While groundwater delivered to those in the area meet state and federal drinking water standards, several contaminants, including VOCs, nitrates, perchlorate, N-nitrosodimethylamine (NDMA), 1,2,3-trichloropropane (1,2,3-TCP), and 1,4-dioxane, are monitored and treated before water is served for domestic use (Main San Gabriel Basin Watermaster, 2019).

Much of the City is serviced by the San Gabriel County Water District (SGCWD), which relies on groundwater from nine wells (eight in the Main Basin and one in the Raymond Basin) (Todd Groundwater, 2020). The Main Basin is naturally recharged by stream runoff from surrounding mountains, precipitation, inflow from surrounding basins, and return flow. The Main Basin is also recharged with imported water. When the water demand is high or pumping is more limited in dry periods, SGCWD purchases imported water that recharges the Main Basin to make up for the extra water use. Even in dry periods, the water source for most of the City is still entirely groundwater. As the proposed Project is within the boundaries of SGCWD, the Project would use groundwater to serve the water demands of the Project (Todd Groundwater, 2020).

Groundwater was not encountered during subsurface exploration to the maximum depth explored of 51.5 feet below ground surface (bgs), except for an isolated perched groundwater condition found at a distinct boring, at approximately 28 feet bgs. Historical high groundwater levels for the general area have been mapped as 50 to 100 feet bgs (Fuscoe Engineering, 2019).

Flood Hazard, Tsunami, or Seiche Zone

The Project Site is mapped by the Federal Emergency Management Agency (FEMA) as lying within a Zone X area, which is an “Area of Minimal Flood Hazard” and is not located within a Special Flood Hazard Area (SFHA) (FEMA, 2019). The Project Site, which is located

approximately 25 miles east of the Pacific Ocean, is also not located in a Tsunami Emergency Response Planning Zone (California Governor's Office of Emergency Services [Cal OES], 2019). In addition, while the Project Site is located within proximity to the Rubio Wash, there are no major water-retaining structures that are located immediately up-gradient from the Project Site.

3.8.2 Regulatory Framework

Federal Level

Clean Water Act

The Clean Water Act (CWA) was first introduced in 1948 as the Water Pollution Control Act. The CWA authorizes Federal, state, and local entities to cooperatively create comprehensive programs for eliminating or reducing the pollution of state waters and tributaries. The primary goals of the CWA are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. As such, the CWA forms the basic national framework for the management of water quality and the control of pollutant discharges. The CWA also sets forth a number of objectives in order to achieve the above-mentioned goals. These objectives include regulating pollutant and toxic pollutant discharges; providing for water quality that protects and fosters the propagation of fish, shellfish and wildlife; developing waste treatment management plans; and developing and implementing programs for the control of non-point sources of pollution.

Since its introduction, major amendments to the CWA have been enacted (e.g., 1961, 1966, 1970, 1972, 1977, and 1987). Amendments enacted in 1970 created the U.S. Environmental Protection Agency (USEPA), while amendments enacted in 1972 deemed the discharge of pollutants into waters of the United States from any point source unlawful unless authorized by a USEPA National Pollutant Discharge Elimination System (NPDES) permit. Amendments enacted in 1977 mandated development of a "Best Management Practices" Program at the state level and provided the Water Pollution Control Act with the common name of "Clean Water Act," which is universally used today. Amendments enacted in 1987 required the USEPA to create specific requirements for discharges.

In response to the 1987 amendments to the CWA and as part of Phase I of its NPDES permit program, the USEPA began requiring NPDES permits for: (1) municipal separate storm sewer systems (MS4) generally serving, or located in, incorporated cities with 100,000 or more people (referred to as municipal permits); (2) 11 specific categories of industrial activity (including landfills); and (3) construction activity that disturbs 5 acres or more of land. Phase II of the USEPA's NPDES permit program, which went into effect in early 2003, extended the requirements for NPDES permits to: (1) numerous small municipal separate storm sewer systems, (2) construction sites of 1 to 5 acres, and (3) industrial facilities owned or operated by small municipal separate storm sewer systems. The NPDES permit program is typically administered by individual authorized states.

In 2008, the USEPA published draft Effluent Limitation Guidelines for the construction and development industry. On June 27, 2016, the USEPA finalized its 2016 Effluent Guidelines Program Plan.

In California, the NPDES stormwater permitting program is administered by the State Water Resources Control Board (SWRCB). The SWRCB was created by the Legislature in 1967. The joint authority of water distribution and water quality protection allows the Board to provide protection for the State's waters, through its nine Regional Water Quality Control Boards (RWQCBs). The RWQCBs develop and enforce water quality objectives and implement plans that will best protect California's waters, acknowledging areas of different climate, topography, geology, and hydrology. The RWQCBs develop "basin plans" for their hydrologic areas, issue waste discharge requirements, enforce action against stormwater discharge violators, and monitor water quality.

Executive Order 11988

Under Executive Order 11988 – Floodplain Management, the Federal Emergency Management Agency (FEMA) is responsible for management of floodplain areas defined as the lowland and relatively flat areas adjoining inland and coastal waters subject to a one percent or greater chance of flooding in any given year (the 100-year floodplain). FEMA requires that local governments covered by federal flood insurance pass and enforce a floodplain management ordinance that specifies minimum requirements for any construction within the 100-year floodplain. The Order addresses floodplain issues related to public safety, conservation, and economics. It generally requires federal agencies constructing, permitting, or funding a project in a floodplain to:

- Avoid incompatible floodplain development
- Be consistent with the standards and criteria of the National Flood Insurance Program
- Restore and preserve natural and beneficial floodplain values

National Flood Insurance Program

The National Flood Insurance Program (NFIP) is a relatively recent Federal program. The Federal government has been actively involved in flood control since 1927 following major floods on the Mississippi River. Beginning with the Flood Control Act of 1936, Congress assigned the USACE the responsibility for flood control engineering works and later for floodplain information services. Flood control was provided through the construction of dams and reservoirs. Despite these programs and rapidly rising Federal expenditures for flood control, flood losses continued to rise. In 1968, Congress passed the National Flood Insurance Act, which created the NFIP. The Flood Disaster Protection Act of 1973, which amended the 1968 Act, required the purchase of flood insurance by property owners who were located in special flood hazard areas and were being assisted by Federal programs, or by federally supervised, regulated, or insured agencies or institutions.

National Flood Insurance Program Reform Act of 1994

In 1994, the National Flood Insurance Program Reform Act went through its first major revision since its inception. Included in this revision were provisions that if a lender were to escrow an account and if the structure were in the floodplain, then the lender must escrow for flood insurance. The revised legislation also included increased flood insurance limits and the elimination of the 1962 buy-out program. However, the legislation did initiate the Hazard Mitigation Fund as part of the flood insurance policy. Also included in this legislation was the increase from a 5-day to a 30-

day waiting period for a new policy to become effective. It also prohibits the waiver of flood insurance purchase requirements as a condition of receiving Federal disaster assistance. If the flood insurance policy were not maintained, in the event of another disaster, no disaster assistance would be made available for that structure.

Federal Antidegradation Policy

The Federal Antidegradation Policy requires states to develop statewide antidegradation policies and identify methods for implementing them (Code of Federal Regulations, Title 40, Section 131.12). Pursuant to the Code of Federal Regulations, state antidegradation policies and implementation methods shall, at a minimum, protect and maintain (1) existing in-stream water uses; (2) existing water quality, where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of Americans' drinking water. Under SDWA, the USEPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. SDWA was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and groundwater wells.

State Level

California Porter-Cologne Act

The Porter-Cologne Water Quality Control Act established the legal and regulatory framework for California’s water quality control. The California Water Code (CWC) authorizes the SWRCB to implement the provisions of the CWA, including the authority to regulate waste disposal and require cleanup of discharges of hazardous materials and other pollutants.

As discussed above, under the CWC, the State of California is divided into nine RWQCBs, governing the implementation and enforcement of the CWC and CWA. The Project Site is located within Region 4, also known as the Los Angeles Region (LARWQCB). Each RWQCB is required to formulate and adopt a Basin Plan for its region. The LARWQCB’s Basin Plan is a comprehensive document that reports beneficial uses for surface and ground waters, defines narrative and numeric parameters to protect water quality, and describes implementation programs to protect waters throughout the Region. This Plan must adhere to the policies set forth in the CWC and established by the SWRCB. The RWQCB is also given authority to include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

Low Impact Development – Sustainable Storm Water Management

On January 20, 2005, the SWRCB adopted sustainability as a core value for all activities and programs carried out by the SWRCB (SWRCB, 2017). Low Impact Development (LID) is a sustainable practice that promotes water retention and the protection of water quality. LID design

techniques include features that increase infiltration, filtration, storing of water, reduce evaporation, and detain runoff. Ten common LID practices are outlined below:

1. Bioretention & Rain Gardens
2. Rooftop Gardens
3. Sidewalk Storage
4. Vegetated Swales, Buffers & Strips; Tree Preservation
5. Roof Leader Disconnection
6. Rain Barrels and Cisterns
7. Permeable Pavers
8. Soil Amendments
9. Impervious Surface Reduction & Disconnection
10. Pollution Prevention & Good Housekeeping

California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High Quality Water in California, was adopted by the SWRCB in 1968 (State Water Resources Control Board, Resolution No. 68-16, 1968). Unlike the Federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the United States, not just surface waters. The policy states that whenever the existing quality of a water body is better than the quality established in individual Basin Plans, such high quality shall be maintained and discharges to that water body shall not unreasonably affect present or anticipated beneficial use of such water resource.

California Toxics Rule

In 2000, the USEPA promulgated the California Toxics Rule, which establishes water quality criteria for certain toxic substances to be applied to waters in the State. In 1994, a California state court revoked the State's water quality control plans, which contained numeric criteria for water quality. This was in direct violation of the CWA, and required USEPA action. The USEPA then implemented the California Toxics Rule. The USEPA promulgated this rule based on Section 303(c)(2)(B) of the CWA, which dictates that states must adopt numeric criteria in order to protect human health and the environment. The California Toxics Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water such as inland surface waters and enclosed bays and estuaries that are designated by the LARWQCB as having beneficial uses protective of aquatic life or human health.

California Water Plan

The California Water Plan (the Plan), as required by Water Code Section 1005(a) and prepared by the California Department of Water Resources, is the State government's strategic plan for managing and developing water resources statewide for current and future generations and provides a framework for water managers, legislators, and the public to consider options and make decisions regarding California's water future. The Plan, updated every five years, presents basic data and

information on California's water resources including water supply evaluations and assessments of agricultural, urban, and environmental water uses to quantify the gap between water supplies and uses. The goal for updating the Plan is to meet Water Code requirements, receive broad support among those participating in California's water planning, and serve as a useful document for the public, water planners, legislators, managers, and other decision-makers. The current Plan is from 2018, which builds upon the 2013 update. (California Department of Water Resources, 2019).

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act of 2014 (SGMA) creates a framework for sustainable, local groundwater management in California. SGMA allows local agencies to customize groundwater sustainability plans to their regional economic and environmental needs. This act requires local regions to create a groundwater sustainability agency (GSA) and to adopt groundwater management plans for groundwater basins or subbasins that are designated as medium or high priority. High-priority and medium-priority basins or subbasins must adopt groundwater management plans by 2020 or 2022, depending upon whether the basin is in critical overdraft. As previously discussed, the Project Site is in the San Gabriel Valley groundwater basin. The San Gabriel Valley groundwater basin is classified as a very low priority and does not have a specific groundwater management plan.

Regional Level

Los Angeles County Code Low Impact Development Standards

Chapter 12.84 of the Los Angeles County Code (LACC) outlines LID Standards and their applicability to projects in the County. The purpose of these Standards are as follows:

- Lessen the adverse impacts of stormwater runoff from development and urban runoff on natural drainage systems, receiving waters and other water bodies.
- Minimize pollutant loadings from impervious surfaces to incorporate properly designed, technically appropriate BMPs and other LID strategies.
- Minimize erosion and other hydrologic impacts on natural drainage systems by requiring development projects to incorporate properly designed, technically appropriate hydromodification control principles and technologies.

The provisions in this Chapter 12.84 shall not be construed to augment any county, state, or federal ordinance, status, regulation, or other requirement governing the same or related matter, and where a conflict exists between a provision in this Chapter 12.84 and such other ordinance, statute, regulation, or requirement, the stricter provision shall apply to the extent permitted by law.

This is applicable to the proposed Project "All new development projects involving one (1) acre or greater of disturbed area and adding more than then thousand (10,000) square feet of impervious surface area" are subject to the LID Standards. Projects that fall under this requirement are considered Designated Projects. Designated Projects shall comply with the following requirements:

1. The project shall retain one hundred percent (100%) of the Stormwater Quality Design Volume ("SWQDv") on-site, through infiltration, evapotranspiration, rainfall harvest and use, or a

combination thereof, unless the Director determines that it would be technically infeasible to do so;

2. If the Director determines that it would be technically infeasible to retain one hundred percent (100%) of the SWQDv on-site, the project shall comply with one of the following alternative compliance measures:
    a. The project shall provide for on-site biofiltration of one and one-half (1.5) times the portion of the SWQDv that is not retained on-site;
    b. The project shall include infiltration or bioretention BMPs to intercept the portion of the SWQDv that is not retained on-site at an offsite location, as approved by the Director. The project shall also provide for treatment of the portion of the SWQDv discharged from the project site, as approved by the Director;
    c. The project shall provide for the replenishment of groundwater supplies that have a designated beneficial use in the Basin Plan;
        i. Groundwater replenishment projects shall include infiltration, or bioretention BMPs to intercept the portion of the SWQDv that is not retained on-site at an offsite location, as approved by the Director;
        ii. Groundwater replenishment projects shall also provide for treatment of the portion of the SWQDv discharged from the project site, as approved by the Director;
    d. The project shall include infiltration, bioretention, or rainfall harvest and use BMPs to retrofit an existing development, with similar land uses as the project, to intercept the portion of the SWQDv that is not retained on-site; or
    e. The County, independently or in conjunction with one (1) or more cities, may apply to the Regional Water Board for approval of a regional or sub-regional stormwater mitigation program to substitute in part or wholly for the provisions of this chapter for the area covered by the regional or sub-regional stormwater mitigation program. If the Regional Water Board approves the program, the provisions of the program shall apply in lieu of any conflicting provisions of this chapter.

Los Angeles Regional Water Quality Control Board Basin Plan

As mentioned above, the LARWQCB Basin Plan was written and implemented by the LARWQCB to preserve and enhance water quality throughout the Los Angeles County. The Basin Plan outlines beneficial uses of regional waters, narrative and numeric parameters to protect water quality, and describes implementation programs to protect waters throughout the Region. The Basin Plan outlines water quality parameters for both inland surface waters and for ground waters for a wide variety of water quality constituents.

NPDES Permit Program

The NPDES permit program was first established in 1972 under authority of the federal government through the CWA to control the discharge of pollutants from any point source into the waters of the United States (SWRCB, 2019). As indicated above, in California, the NPDES stormwater permitting program is administered by the SWRCB through the LARWQCB. For all water quality related objectives for CWA purposes, including the NPDES, the state must achieve water quality standards in effect at the state level as well as the regional level (USEPA, 2017). At the regional level, the effective plan is the LARWQCB's Basin Plan.

NPDES Construction General Permit

Construction associated with the proposed Project would disturb more than 1 acre of land surface affecting the quality of stormwater discharges into waters of the U.S. The proposed Project would, therefore, be subject to the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). The Construction General Permit regulates discharges of pollutants in stormwater associated with construction activity to waters of the U.S. from construction sites that disturb 1 acre or more of land surface, or that are part of a common plan of development or sale that disturbs more than 1 acre of land surface. The permit regulates stormwater discharges associated with construction or demolition activities, such as clearing and excavation; construction of buildings; and linear underground projects, including installation of water pipelines and other utility lines.

The Construction General Permit requires that construction sites be assigned a Risk Level of 1 (low), 2 (medium), or 3 (high), based both on the sediment transport risk within the Project Site and the receiving waters risk during periods of soil exposure (e.g., grading and site stabilization). The sediment risk level reflects the relative amount of sediment that could potentially be discharged to receiving water bodies and is based on the nature of the construction activities and the location of the site relative to receiving water bodies. The receiving waters risk level reflects the risk to the receiving waters from the sediment discharge. Depending on the risk level, the construction projects could be subject to the following requirements:

- Effluent standards;
- Good site management "housekeeping;"
- Non-stormwater management;
- Erosion and sediment controls;
- Run-on and runoff controls;
- Inspection, maintenance, and repair; or
- Monitoring and reporting requirements.

The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes specific best management practices (BMPs) designed to prevent sediment and pollutants from contacting stormwater from moving off site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area. Each category contains specific BMPs to achieve the goals of the overarching category. Specific BMPs may include the following:

- Soil stabilizing BMPs: Use of straw mulch, erosion control blankets or geotextiles, and/or wood mulching;
- Sedimentation control BMPs: Use of storm drain inlet protection, sediment traps, gravel bag berms, and fiber rolls

- Waste management BMPs: Stockpile management, solid waste management, and concrete waste management; and
- Good Housekeeping BMPs: Vehicle and equipment cleaning, implementing water conservation practices, and implementing rules for fueling construction vehicles and equipment.

Routine inspection of all BMPs is required under the provisions of the Construction General Permit. In addition, the SWPPP is required to contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

The SWPPP must be prepared before the construction begins. The SWPPP must contain a site map(s) that delineates the construction work area, existing and proposed buildings, parcel boundaries, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project area. The SWPPP must list BMPs and the placement of those BMPs that the applicant would use to protect stormwater runoff. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, vehicle and equipment washing and fueling. The Construction General Permit also sets post-construction standards (i.e., implementation of BMPs to reduce pollutants in stormwater discharges from the site following construction).

In the project area, the Construction General Permit is implemented and enforced by the Los Angeles Regional Water Quality Control Board (LARWQCB), which administers the stormwater permitting program. Dischargers are required to electronically submit a notice of intent (NOI) and permit registration documents (PRDs) in order to obtain coverage under this Construction General Permit. Dischargers are responsible for notifying the LARWQCB of violations or incidents of non-compliance, as well as for submitting annual reports identifying deficiencies of the BMPs and how the deficiencies were corrected. The risk assessment and SWPPP must be prepared by a State Qualified SWPPP Developer and implementation of the SWPPP must be overseen by a State Qualified SWPPP Practitioner. A Legally Responsible Person, who is legally authorized to sign and certify PRDs, is responsible for obtaining coverage under the permit.

NPDES Municipal Stormwater Permit (MS4) and Stormwater Quality Management Program (SQMP)

In 1987, amendments to the CWA expanded the NPDES stormwater permitting program to regulate discharges from storm drains owned and operated by municipalities. In November 1990, USEPA published regulations that established application requirements for stormwater permits for municipal stormwater discharges. In California, the NPDES stormwater permitting program is administered and enforced by the SWRCB through the nine RWQCBs by issuing Waste Discharge

Requirements and NPDES permits. These permits are reissued approximately every five years and also include applicable provisions of the state Porter-Cologne Act, which is the principal legislation for controlling stormwater pollutants in California. The permit establishes regulations covering discharge prohibitions, receiving water limitations, municipal operations (such as the proposed Project), new development, construction site controls (construction site runoff), and other regulations to regulate surface water quality.

The discharge prohibitions prohibit the discharge of non-stormwater (materials other than stormwater) into, storm drain systems and watercourses. The municipal operations regulations include a number of requirements to control and reduce non-stormwater discharges and polluted stormwater to storm drains and watercourses during operation, inspection, and routine repair and maintenance activities of municipal facilities and infrastructure, such as the proposed Project. The requirements include source control, site design, and stormwater treatment requirements, such as minimizing disturbance of natural infiltration areas and the addition of impervious surfaces, controlling and directing runoff, and the use of infiltration and bioretention measures, among other measures.

The County of Los Angeles and 84 incorporated cities (Co-Permittees) implemented a stormwater quality management program (SQMP) to comply with LARWQCB Order No. R4-2012-0175-A01 Amending Order No. Order No. R4-2012-0175 as Amended by State Water Board Order WW 2015-0075, NPDES Permit No. CAS004001, Waste Discharge Requirements For Municipal Separate Storm Sewer System (MS4), Discharges Within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach MS4, dated September 8, 2016. The SQMP has the goal of accomplishing the requirements of the MS4 Permit and reducing the amount of pollutants in stormwater runoff. The requirements include source control, site design, and stormwater treatment requirements, such as minimizing disturbance of natural infiltration areas and the addition of impervious surfaces, controlling and directing runoff, and the use of infiltration and bioretention measures, among other measures.

The SWMP requires the Co-Permitees to:

- Implement a public information and participation program to conduct outreach on storm water pollution;
- Control discharges at commercial/industrial facilities through tracking, inspecting, and ensuring compliance at facilities that are critical sources of pollutants;
- Implement a development planning program for specified development projects;
- Implement a program to control construction runoff from construction activity at all construction sites within the relevant jurisdictions;
- Implement a public agency activities program to minimize storm water pollution impacts from public agency activities; and
- Implement a program to document, track, and report illicit connections and discharges to the storm drain system.

The MS4 Permit contains the following provisions for implementation of the SQMP by the Co-Permittees:

1. General Requirements:
   - Each permittee is required to implement the SQMP in order to comply with applicable stormwater program requirements.
   - The SQMP shall be implemented and east permittee shall implement additional controls so that discharge of pollutants is reduced.
2. Best Management Practice Implementation:
   - Permittees are required to implement the most effective combination of BMPs for stormwater/urban runoff pollution control. This should result in the reduction of stormwater runoff.
3. Revision of the SQMP:
   - Permittees are required to revise the SQMP in order to comply with requirements of the RWQCB while complying with regional watershed requirements and/or waste load allocations for implementation of Total Maximum Daily Load (TMDLs) for impaired waterbodies.
4. Designation and Responsibilities of the Principal Permittee:

   The Los Angeles County Flood Control District is designated as the Principal Permittee who is responsible for:
   - Coordinating activities that comply with requirements outlined in the NPDES permit;
   - Coordinating activities among Permittees;
   - Providing personnel and fiscal resources for necessary updates to the SQMP;
   - Providing technical support for committees required to implement the SQMP; and
   - Implementing the Countywide Monitoring Program required under this Order and assessing the results of the monitoring program.
5. Responsibilities of Co-Permittee:
   - Each co-permittee is required to comply with the requirements of the SQMP as applicable to the discharges within its geographical boundaries. These requirements include:
   - Coordinating among internal departments to facilitate the implementation of the SQMP requirements in an efficient way;
   - Participating in coordination with other internal agencies as necessary to successfully implement the requirements of the SQMP; and
   - Preparing an annual Budget Summary of expenditures for the stormwater management program by providing an estimated breakdown of expenditures for different areas of concern, including budget projections for the following year.
6. Watershed Management Committees (WMCs):
   - Each WMC shall be comprised of a voting representative from each Permittee in the Watershed Management Area (WMA).
   - Each WMC is required to facilitate exchange of information between co-permittees, establish goals and deadlines for WMAs, prioritize pollution control measures, develop and update adequate information, and recommend appropriate revisions to the SQMP.

7. Legal Authority:
   - Co-permittees are granted the legal authority to prohibit non-stormwater discharges to the storm drain system including discharge to the MS4 from various development types.

Standard Urban Stormwater Mitigation Plan

A Municipal NPDES Permit was issued in December 2001 to Los Angeles County and 84 incorporated permittee cities within the County (Permittee). The permit defines the minimum required BMPs that must be adopted by the Permittee municipalities and included by developers within plans for facility operations. To obtain coverage under this permit, a developer must obtain approval of a project-specific Standard Urban Stormwater Mitigation Plan (SUSMP) from the appropriate Permittee.

A SUSMP addresses the discharge of pollutants within stormwater generated following new construction or redevelopment. Under recent regulations adopted by the LARWQCB, projects are required to implement a SUSMP during the operational life of a project to ensure that stormwater quantity and quality are addressed by incorporating BMPs into project design. This plan defines water quality design standards to ensure that stormwater runoff is managed for water quality concerns and to ensure that pollutants carried by stormwater are confined and not delivered to receiving waters. Applicants are required to abide by source control and treatment control BMPs from the list approved by the LARWQCB and included in the SUSMP. These measures include infiltration of stormwater into the ground, as well as filtering runoff before it leaves a site. This can be accomplished through various means, including the use of infiltration pits, flow-through planter boxes, hydrodynamic separators, and catch basin filters.

Typical BMPs to be implemented as part of the SUSMP for a project to manage post-construction stormwater runoff could include, but would not be limited to, the following:

- Peak Storm Water Runoff Discharge Rate: Post-development peak stormwater runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak storm water discharge rate will result in increased potential for downstream erosion;
- Provide storm drain system Stenciling and Signage (only applicable if a catch basin is built on-site);
- Properly design outdoor material storage areas to provide secondary containment to prevent spills;
- Properly design trash storage areas to prevent off-site transport of trash;
- Provide proof of ongoing BMP Maintenance of any structural BMPs installed;
- Design Standards for Structural or Treatment control BMPs:
- Conserve natural and landscaped areas;
- Provide planter boxes and/or landscaped areas in yard/courtyard spaces;
- Post-construction treatment control BMPs are required to incorporate, at minimum, either a volumetric or flow based treatment control design or both, to mitigate (infiltrate, filter or treat) storm water runoff.

In addition, project applicants subject to the SUSMP requirements must select source control and, in most cases, treatment control BMPs from the list approved by the RWQCB. The BMPs must control peak flow discharge to provide stream channel and over bank flood protection, based on flow design criteria selected by the local agency. Further, the source and treatment control BMPs must be sufficiently designed and constructed to collectively treat, infiltrate, or filter stormwater runoff from one of the following:

- The 85th percentile 24-hour runoff event determined as the maximized capture stormwater volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998);
- The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook—Industrial/ Commercial, (1993);
- The volume of runoff produced from a 0.75-inch storm event, prior to its discharge to a stormwater conveyance system; or
- The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for "treatment" (0.75-inch average for the Los Angeles County area) that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event.

Rio Hondo/San Gabriel River Enhanced Watershed Management Program

The Los Angeles County MS4 Permit allows Permittees the flexibility to develop Watershed Management Programs (WMPs) or Enhanced Watershed Management Programs (EWMPs) to implement the requirements of the Permit on a watershed scale through customized strategies, control measures, and BMPs. Participation in a WMP or EWMP is voluntary and allows a Permittee to address the highest watershed priorities, including complying with the MS4 Permit requirements in Part V.A. (Receiving Water Limitations), Part VI.E (Total Maximum Daily Load Provisions) and Attachments L through R, by customizing the control measures in Parts III.A.4 (Prohibitions - Non-Storm Water Discharges) and VI.D (Minimum Control Measures) (SWRCB, 2018).

The Rio Hondo/San Gabriel River Watershed Management Group voluntarily developed the EWMP for the Rio Hondo/San Gabriel River Watershed. The EWMP identifies measures (e.g., discharge requirements, LID BMPs, Green Streets, and regional stormwater infiltration/pollution reduction project) to achieve compliance with TMDLs and other water quality mandates, while maximizing potential benefits of stormwater for local water supply. The EWMP was approved on April 21, 2016 by the LARWQCB. A revised EWMP was developed in 2018 and approved on May 17, 2019. The revised EWMP updates the original EWMP using new data and improved watershed understanding (Rio Hondo/San Gabriel River Water Quality Group, 2018). The EWMP is applicable to the proposed Project in that proposed Project stormwater runoff would indirectly drain to the Rio Hondo which is a designated Waters of the United States.

Local Level

City of San Gabriel General Plan

The Comprehensive General Plan of the City of San Gabriel (General Plan), adopted in 2004 (City of San Gabriel, 2004), provides a long-range policy guide to address changes to the City and a

roadmap for future development. The General Plan outlines goals and actions that are applicable to hydrology and water quality and the Project as follows:

Chapter 5: Land Use Element

Goal 5.7 Reduce potential harm and damage from environmental hazards.

Target 5.7.5 Promote opportunities for aquifer recharge to minimize groundwater hazards by encouraging developers to minimize paved areas in new developments and requiring these areas to be interspersed with landscaping.

Action 5.7.5.1 Encourage, where feasible, use of turf block, decomposed granite, or similar permeable surfaces rather than conventional pavement

Chapter 7: Open Space and Recreation

Goal 7.5 Create commercial and residential streetscapes that are sustainable.

Target 7.5.1 Use drought-tolerant species on public and private developments to reduce water consumption.

Chapter 8: Environmental Resources Element

Goal 8.4 Encourage the conservation and protection of water quality within San Gabriel.

Target 8.4.1 Discourage the use of fertilizers, pesticides, and insecticides on private property.

Target 8.4.4 Where feasible, direct runoff from rooftops and other areas to water tanks.

Target 8.4.5 Encourage property owners to use paving surfaces that reduce the amount of urban storm water runoff.

Target 8.4.6 Require new buildings and the construction of additions to include water conserving toilets and fixtures; expand existing provisions in the City's building and plumbing code.

Chapter 10: Community Design Element

Goal 10.18 Respect the historic and environmental value of existing waterways, including flood control channels, and consider these as assets to be enhanced.

Target 10.18.1 Prohibit the covering of flood control channels except in those cases where the Council, upon review and recommendation by the Community Development Director, determines that there is an overwhelming public good to be achieved that outweighs the benefits of covering.

Target 10.18.3 Require new developments adjoining flood control channels to integrate the channels into project design through the development of paths, landscaping, and full architectural treatment along them.

City of San Gabriel Municipal Code

The City adopted by reference Chapter 12.84 of the LACC on November 17, 2015 and this chapter was incorporated into Chapter 53 of the San Gabriel Municipal Code (SGMC). Chapter 12.84 is discussed further above, under the LACC LID Standards subheading.

3.8.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to Hydrology and Water Quality if it would:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;

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

c) Substantially alter the existing drainage pattern of the site or area, including through 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;

   (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

   (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

   (iv) impede or redirect flood flows;

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

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

3.8.4 Methodology

The analysis in this section addresses potential impacts on hydrology (drainage), surface water quality, and groundwater. The analysis is based in part on the Hydrology Study prepared by Fuscoe Engineering, Inc. and provided in Appendix G-1 of this Draft EIR and Infiltration Study prepared by Albus-Keefe & Associates, Inc. and provided in Appendix G-2 of this Draft EIR. A summary of the analysis methodology for hydrology and surface water quality is provided below; for an expanded discussion, see the Hydrology Study and Infiltration Study.

Hydrology (Drainage)

The City has adopted the LACDPW Hydrology Manual as its basis of design for storm drainage facilities. Based on the County of Los Angeles Hydrology Manual, all drainage facilities in developed areas not covered under the Capital Flood protection conditions must meet the Urban Flood level of protection. As defined by the County, an Urban Flood level is runoff from a 25-year frequency design storm falling on a saturated watershed. Based on these requirements for urban floods, the design storm for this project is the 25-year design storm event. A 25-year frequency design storm has a probability of 1/25 of being equaled or exceeded in any year.

The analysis was prepared using HydroCalc software in conformance with the Los Angeles County Hydrology Manual. Delta flow rates and volumes were provided in the Hydrology Study for comparison purposes.

Water Quality

Water quality impacts were assessed by characterizing the types of pollutants and/or effects on water quality likely to be associated with construction and operation of the proposed Project, project design features to treat contaminants, and expected contaminant flows with proposed Project implementation. Project consistency with relevant regulatory permits/requirements, including BMPs and applicable plans, is evaluated to demonstrate how compliance would reduce potential Project impacts.

As recommended by the County of Los Angeles LID Standards Manual, the selection of LID BMPs proposed for a project must follow the following order of preference: infiltration, capture and reuse, biofiltration, and other treatment BMPs at the discretion of the Director of Public Works that demonstrate compliance with LID design requirements to the maximum extent practicable. LID hydrologic analysis was performed using the 85th percentile, 24-hour rain event.

Groundwater

Impacts to groundwater quality and groundwater level were assessed by identifying the types of pollutants and/or effects on water quality likely to be associated with construction and operation of the proposed Project. The analysis includes a review of the existing levels, quality, direction of flow, and existing uses for the water within the Main San Gabriel Basin.

Analysis of the proposed Project impact on groundwater levels includes assessing the pre- and post-Project Site permeability, determining the projected reduction in groundwater resources due to the Project's projected water demand, and projecting the change in local or regional groundwater flow patterns.

Water Quality and Sustainable Groundwater Management Plans

The evaluation of the proposed Project's consistency with water quality and sustainable groundwater management plans is based on a summary of the preceding analyses of proposed Project impacts on water quality and groundwater resources. The summary identifies the applicable plans, the regulatory mechanisms for meeting the standards in those plans, and the proposed Project's characteristics that conform to those regulatory standards.

3.8.5 Environmental Impact Analysis

Impact HYDRO-1: The proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. (Less than Significant Construction Impact. Less than Significant Operational Impact.)

Construction

Construction activities, such as earth moving, maintenance/operation of construction equipment, and handling/storage/disposal of materials, could contribute to pollutant loading in stormwater

runoff from the construction site. In addition, exposed and stockpiled soils could be subject to wind and conveyance into nearby storm drains during storm events, and on-site water activities for dust suppression could contribute to pollutant loading in runoff from the construction site.

As discussed under Subsection 3.8.2, *Regulatory Framework*, construction associated with the proposed Project would disturb more than one acre of land surface which could affect the quality of stormwater discharges into waters of the U.S. The proposed Project would, therefore, be subject to the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). In accordance with the requirements of the permit, the Applicant would prepare and implement a site-specific SWPPP that meets the requirements of the NPDES General Permit and the LACDPW Hydrology Manual, and specifies BMPs to be used during construction. BMPs would include, but would not necessarily be limited to: erosion control, sediment control, non-stormwater management, and materials management BMPs. With implementation of these BMPs, the proposed Project would reduce or eliminate the discharge of pollutants in stormwater runoff from the construction site to the maximum extent practicable. As such, the water quality of nearby surface waters and groundwater would be maintained via compliance with NPDES permit stipulations. In addition, Project construction activities, and thus any associated surface water quality impacts, would be short-term and temporary.

The proposed Project is not anticipated to require dewatering as the excavation required under the proposed Project would be a maximum depth of 35 feet bgs and water was not encountered during subsurface exploration to the maximum depth explored, 51.5 feet bgs. While perched ground water was encountered at 28 feet bgs, the historical high groundwater levels for the Project Site and surrounding area have been mapped as deep as 50 to 100 feet bgs (Fuscoe Engineering, 2019). In the event that localized water is encountered during excavation, temporary pumps and filtration would be utilized in compliance with the NPDES General Permit. The temporary system would comply with all relevant NPDES General Permit requirements related to construction and discharges from dewatering operations. In order to be authorized to discharge under the NPDES General Permit, the Applicant would be required to submit an NOI to discharge groundwater generated from dewatering operations during construction to the LARWQCB. Compliance with all applicable federal, state, and local requirements would reduce the potential for Project construction to release contaminants into the groundwater that could affect existing contaminants, expand the area, or increase the level of groundwater contamination.

As discussed above under Subsection 3.8.1, *Existing Conditions*, and as described further in Section 3.7, *Hazards and Hazardous Materials*, previous uses on the Project Site included a nursey, which employed the use of fertilizers, herbicides, and pesticides, as well as the use of USTs for diesel and gasoline storage. Soil samples collected form the former tank locations detected trace concentrations of Benzene and Toluene above the laboratory method detection limits. During a Limited Phase II Environmental Assessment, detectable concentrations of VOCs were reported in each of the soil vapor samples. However, none of the VOC concentrations exceeded their respective commercial California OEHHA values. Some areas of the Project Site have been identified as having concentrations of insecticides in soil exceeding the OEHHA commercial screening level. Any affected soil would be excavated and removed from the Project Site as non-hazardous waste.

This would serve to reduce any potential for further contamination of groundwater and would improve groundwater quality.

During on-site grading and building construction, hazardous materials, such as fuels, paints, solvents, and concrete additives, could be used and would, therefore, require proper management and, in some cases, disposal. The management of any resultant hazardous wastes could increase the opportunity for hazardous materials releases into groundwater. Compliance with all applicable federal, State, and local requirements concerning the handling, storage and disposal of hazardous waste, would reduce the potential for the construction of the proposed Project to release contaminants into groundwater that could affect existing contaminants, expand the area or increase the level of groundwater contamination, or cause a violation of regulatory water quality standards at an existing production well. Implementation of the BMPs in the SWPPP in accordance with LARWQCB's discharge requirements would further ensure that any discharge of groundwater during construction would not impact groundwater quality.

Based on the above, proposed Project construction would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality. Impacts would be less than significant.

Operation

Stormwater discharge is generated by rainfall that runs off the land and impervious surfaces, such as paved streets, parking lots, and rooftops. Stormwater discharge may include pollutants of concern, which are expected to be generated by the proposed Project that could affect stormwater quality. During proposed Project operation, pollutants of concern within runoff may include, but are not limited to, pollutants, such as sediment, hydrocarbons, oil, grease, heavy metals, nutrients, herbicides, pesticides, fecal coliform bacteria, and trash. This runoff can flow directly into storm drains and continue untreated. Untreated stormwater runoff degrades water quality in surface waters and groundwater and can affect drinking water, human health, and plant and animal habitats.

As previously discussed, approximately 50 percent of the Project Site is impervious as the Project Site includes a combination of compact soil and gravel with undeveloped areas located throughout the Project Site. The Project Site currently does not have a means for treatment of stormwater runoff.

The proposed Project would increase the impervious area on the Project Site compared to existing conditions through the introduction of buildings, roadways, parking areas, walkways, and other hardscape elements. As discussed in the Hydrology Study, based on the proposed Project, an average on-site impervious ratio of 90 percent was determined, which would increase the impervious areas on the Project Site. Pre and post discharge differences are provided in **Table 3.8-2**, below. As shown therein, discharges increase in the post development condition. While there is an increase in discharge rates between the pre and post conditions, the stormwater treatment design included as part of the proposed Project accounts for this increase in flow.

TABLE 3.8-2
ON-SITE EXISTING AND PROPOSED DISCHARGE DIFFERENCES (CFS)

Discharges (cfs)					
Drainage Management Area	**2-Year Event**	**5-Year Event**	**10-Year Event**	**25-Year Event**	**50-Year Event**
Existing	3.31	6.46	9.12	12.73	15.55
Proposed	5.45	9.67	12.67	16.30	20.14
Difference	**2.14**	**3.21**	**3.55**	**3.57**	**4.49**

SOURCE: Fuscoe Engineering, 2019.

The proposed Project would be required to implement SUSMP and LID BMPs throughout its operational life in order to comply with the Rio Hondo/San Gabriel River EWMP, MS4 Permit, LID Ordinance, and other applicable plans and regulations to, among other things, help achieve the TMDLs for the Rio Hondo. As part of these requirements, the proposed Project would prepare a SUSMP which would outline the stormwater treatment measures or post-construction BMPs required to control pollutants of concern, such as the following standard source control and treatment control SUSMP BMPs:

- Peak Stormwater Runoff Discharge Rate: Post-development peak stormwater runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak stormwater discharge rate will result in increased potential for downstream erosion.
- Provide storm drain system stenciling and signage to discourage illegal dumping.
- Design material storage areas within enclosures or secondary containment structures (e.g., berms, dikes, curbs, etc.) to prevent leaks or spills of pollutants from entering the storm drain system.
- Properly design trash storage areas to prevent off-site transportation of trash.
- Provide evidence of ongoing BMP maintenance of any structural BMPs installed.
- Provide planter boxes for structural or treatment control BMPs.
- Design post-construction structural or treatment control BMPs to treat stormwater runoff. Stormwater treatment facilities and systems would be designed to meet the following requirements:
- Volumetric Treatment Control BMPs would be designed to capture the volume of runoff from a 0.75-inch storm event or an 85th percentile storm, whichever is greater, prior to discharging to the public storm drain system.
- Flow based Treatment Control BMPs would be designed to the same standards as the volume-based control BMPs. The flow of runoff produced from the storm event shall be equal to or at least 0.2 inch per hour.
- Treatment devices shall be sized and designed to meet the above requirements.

As recommended by the County of Los Angeles LID Standards Manual, the selection of LID BMPs proposed from the proposed Project must follow the following order of preference: infiltration, capture and reuse, biofiltration, and other treatment BMPs at the discretion of the Director of Public

Works that demonstrate compliance with LID design requirements to the maximum extent practicable. As discussed in the Hydrology Study, it was determined by the Geotechnical Report that infiltration rates and soil conditions within the Project Site exceed County minimums, making the Project Site suitable for infiltration BMPs. As such, due to the feasibility of infiltration, the Project Site would utilize drywells for infiltration for treatment of storm water runoff. The areas on the Project Site implementing the dry well system would be combined with a detention structure, in order to provide storage for required treatment volumes. The Percolation Study, included under Appendix G-2, provides further detail on the design and configuration of the infiltration dry wells.

As described above, BMPs are not currently implemented within the Project Site for the treatment of stormwater runoff from the existing impervious surfaces. Therefore, implementation of the structural BMPs proposed as part of the proposed Project, and of the non-structural BMPs required as part of the SUSMP and by LID requirements, would result in a substantial improvement in the water quality of stormwater runoff from the Project Site.

Subterranean parking structure would reach a maximum of 35 feet bgs. As previously discussed, water was not encountered during subsurface exploration to the maximum depth explored, 51.5 feet bgs. While perched ground water was encountered at 28 feet bgs, the historical high groundwater levels for the Project Site and surrounding area have been mapped as deep as 50 to 100 feet bgs (Fuscoe Engineering, 2019). As such, permanent dewatering is not anticipated to be required under the proposed Project. If permanent dewatering is utilized, such dewatering would occur in compliance with applicable regulatory requirements and approvals related to dewatering operations.

Based on the above, with implementation of statutorily required BMPs such as those described above and compliance with other applicable requirements (e.g., NPDES, MS4, SUSMP, LID Ordinance, etc.), operation of the proposed Project would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality. I**mpacts would be less than significant**.

Impact HYDRO-2: The proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed Project may impede sustainable groundwater management of the basin. (Less than Significant Construction Impact. Less than Significant Operational Impact.)

Construction

As described under Impact HYDRO-1, above, the proposed Project is not anticipated to require dewatering as the excavation required under the proposed Project would be a maximum depth of 35 feet bgs and water was not encountered during subsurface exploration to the maximum depth explored, 51.5 feet bgs. While perched ground water was encountered at 28 feet bgs, the historical high groundwater levels for the Project Site and surrounding area have been mapped as deep as 50 to 100 feet bgs (Fuscoe Engineering, 2019).

While dewatering is not anticipated to be required during construction of the proposed Project, in the event that water is encountered during excavation, any such dewatering would be associated with perched groundwater and not the groundwater table. Temporary pumps and filtration would

be utilized in compliance with the NPDES General Permit. The temporary system would comply with all relevant NPDES General Permit requirements related to construction and discharges from dewatering operations.

Based on the above, no lowering of the groundwater table would occur, and Project construction would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed Project impedes sustainable management of the Main San Gabriel Valley basin. **Impacts would be less than significant**.

Operation

The Project Site currently consists of 50 percent impervious surfaces. A majority of the stormwater that enters the Project Site flows into the local stormwater system. The Project Site currently has a limited groundwater recharge potential because relatively low levels of stormwater percolates into the soil due to prevalence of impervious surfaces in the surrounding area. While development of the proposed Project would increase impervious surfaces on the Project Site from 50 percent to 90 percent (an increase of 40 percent compared to existing conditions), the proposed Project does not propose groundwater withdrawal or permanent dewatering.

The Project is located within the boundaries of the SGCWD, which relies primarily on groundwater drawn from the Main Basin and the Raymond Basin. The entire water demand for the SGCWD is met by groundwater from the nine wells (eight in Main Basin and one in Raymond Basin). Imported water from the Metropolitan Water District of Southern California (MWD) is used to recharge the groundwater basins from which municipal wells for the City draw supply and is used primarily as emergency water supply. As further detailed in Section 3.16, *Utilities and Service Systems*, the City's 2015 Urban Water Management Plan (UWMP) states that the SGCWD has adequate resources to meet the water demands for the City's growing population, as well as has implemented measures to decrease its per capita water use (Todd Groundwater, 2020). The net water demand increase for the Project consists of 1.2 percent of the projected SGCWD water demand for 2020. Therefore, the Project would not substantially decrease groundwater supplies that the SGCWD would use to serve the rest of its service area.

As discussed above, the Project Site would utilize drywells for infiltration for treatment of storm water runoff. Infiltration drywells would be distributed throughout the Project Site. As defined by the USEPA, dry wells are gravity-fed pits that serve to penetrate layers of clay soils with poor infiltration rates to reach more permeable layers of soils, allowing for more rapid infiltration of stormwater (SWRCB, 2014). Installation of infiltration dry wells throughout the Project Site would serve to increase groundwater recharge on the Project Site as compared to existing conditions.

Based on the above, no lowering of the groundwater table would occur, and operation of the proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed Project impedes sustainable management of the Main San Gabriel Valley basin. **Impacts would be less than significant**.

Impact HYDRO-3: The proposed Project would not 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 that would:

(i) Result in substantial erosion or siltation on- or off-site. (Less than Significant Construction Impact. Less than Significant Operational Impact.)

Approximately 50 percent of the Project Site is impervious (paved) due to compacted soil and gravel found on the Project Site. Erosion control measures have been installed and regularly maintained throughout the Project Site in the existing condition to ensure there is no erosion or runoff from these exposed dirt surfaces. Measures include stabilized ingress/egress, a gravel bag barrier along the entire perimeter of the Project Site, sediment traps, and storm drain inlet protection.

Construction activities are the primary activities that could contribute to erosion or siltation when soils are exposed during development of the Project Site. Once the proposed Project is operational, the Project Site would be predominately impervious and erosion and siltation would not occur. Construction activities include excavation to a maximum depth of 35 feet bgs and earthwork would require a net export of 192,000 cubic yards (cy) of soil. These construction activities would have the potential to temporarily alter existing drainage patterns and flows within the Project Site by exposing the underlying soils and making the Project Site temporarily more permeable. Exposed and stockpiled soils could be subject to erosion and conveyance into nearby storm drains during storm events. In addition, construction activities such as earth moving, maintenance/operation of construction equipment, and handling/storage/disposal of materials could contribute to pollutant loading in stormwater runoff.

As discussed under Impact HYDRO-1, above, since the construction site would be greater than one acre, the proposed Project would be required to obtain coverage under the NPDES General Permit. In accordance with the requirements of this permit, the proposed Project would implement a SWPPP that specifies BMPs and erosion control measures to be used during construction to manage runoff flows and prevent pollution. BMPs would be designed to reduce runoff and pollutant levels in runoff during construction. The NPDES and SWPPP measures are designed to contain and treat, as necessary, stormwater or construction watering on the Project Site so runoff does not impact off-site drainage facilities or receiving waters. Construction activities are temporary and flow directions and runoff volumes during construction will be controlled pursuant to regulatory requirements. The Project Site does not contain a stream or river. The Rubio Wash, a concrete-lined subgrade tributary of the Rio Hondo, is located approximately 800 feet east of the Project Site.

As previously analyzed above, the proposed Project would increase the impervious area on the Project Site compared to existing conditions through the introduction of buildings, roadways, parking areas, walkways, and other hardscape elements. As discussed in the Hydrology Study, based on the proposed Project, an average on-site impervious ratio of 90 percent was determined, which would increase the impervious areas on the Project Site by 40 percent. While impervious surfaces would be added to the Project Site, the stormwater treatment design included as part of the proposed Project accounts for this increase in flow. Development of the proposed Project would also result in a change to the existing on-site drainage pattern. Under existing conditions, the water

would flow westerly towards S. San Gabriel Boulevard and E. Grand Avenue. However, under the proposed Project, water would also flow easterly towards S. Gladys Avenue as well as San Gabriel Boulevard and E. Grand Avenue. Therefore, new parkway drains would be installed as part of the proposed Project development layout, which would ensure stormwater runoff is routed properly. All on-site drainage would be collected in a proposed private storm drain system and treated before discharging to the public street. The stormwater treatment design and new parkway drains that would be implemented as part of the proposed Project would minimize the potential for both on- and off-site erosion and siltation during operation of the proposed Project.

Based on the above, construction and operation of the proposed Project would not substantially alter the existing drainage pattern of the Project Site or surrounding area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner that would cause substantial erosion or siltation. **Impacts would be less than significant.**

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. (Less than Significant Construction Impact. Less than Significant Operational Impact.)

Construction

Water would be used during the temporary construction phases of the proposed Project (e.g., for dust suppression). However, this water would be mechanically and precisely applied and would, in general, infiltrate, or evaporate. Additionally, the temporary increase in permeable surfaces during Project construction would reduce, rather than increase, off-site runoff from the Project Site during a portion of the construction.

As discussed under Impact HYDRO-1, above, since the construction site would be greater than one acre, the proposed Project would be required to obtain coverage under the NPDES General Permit. In accordance with the requirements of this permit, the proposed Project would implement a SWPPP that specifies BMPs to be implemented during construction to manage runoff flows and avoid on- or off-site flooding. In addition, construction activities and any associated hydrology (drainage) impacts would be temporary. Project construction would not require modifications to the offsite Rubio Wash.

Therefore, Project construction would not substantially alter the existing drainage pattern of the Project Site or Project area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner such that it would substantially increase the rate or amount of surface runoff that would result in flooding on-site or off-site. **Impacts would be less than significant**.

Operation

The proposed Project would increase the impervious area on the Project Site compared to existing conditions through the introduction of buildings, roadways, parking areas, walkways, and other hardscape elements. As discussed in the Hydrology Study, based on the proposed Project, an average on-site impervious ratio of 90 percent was determined, which would increase the impervious areas on the Project Site by 40 percent. While impervious surfaces would be added to

the Project Site, the stormwater treatment design included as part of the proposed Project accounts for this increase in flow. As a result, development of the proposed Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.

As previously discussed, development of the proposed Project would also result in a change to the existing on-site drainage pattern. Under existing conditions, surface water flows westerly towards S. San Gabriel Boulevard and E. Grand Avenue. However, under the proposed Project, water would also flow easterly towards S. Gladys Avenue as well as S. San Gabriel Boulevard and E. Grand Avenue. Therefore, new parkway drains would be installed as part of the proposed Project development layout, which would ensure stormwater runoff is routed properly. All on-site drainage would be collected through infiltration dry wells distributed throughout the Project Site. Infiltration dry wells would allow for more rapid infiltration of stormwater. Implementation of this LID BMP would serve to reduce the rate or amount of surface runoff.

Therefore, operation of the proposed Project would not substantially alter the existing drainage pattern of the Project Site or surrounding area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner such that it would substantially increase the rate or amount of surface runoff that would result in flooding on-site or off-site. **Impacts would be less than significant**.

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. (Less than Significant Construction Impact. Less than Significant Operational Impact.)

Construction

Water would be used during the temporary construction phases of the proposed Project (e.g., for dust suppression). However, this water would be mechanically and precisely applied and would, in general, infiltrate or evaporate. Therefore, the proposed Project would not result in a substantial increase in the rate or amount of surface runoff and would not exceed the capacity of existing or planned stormwater drainage systems and impacts would be less than significant.

As the construction site would be greater than one acre, the proposed Project would be required to obtain coverage under the NPDES General Permit. In accordance with the requirements of this permit, the proposed Project would implement a SWPPP that specifies BMPs to be implemented during construction to manage runoff flow volumes and water quality and would ensure that they do not exceed the capacity of existing or planned stormwater drainage systems. In addition, construction activities and any associated hydrology (drainage) impacts would be temporary. Project construction would not require modifications to the Rubio Wash.

Based on the above, construction of the proposed Project would not substantially alter the existing drainage pattern of the Project Site or surrounding area, including through the alteration of the course of a stream or river or through the addition of imperious surfaces, in a manner which would 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 during construction. **Impacts would be less than significant**.

Operation

The proposed Project would increase the impervious area on the Project Site compared to existing conditions through the introduction of buildings, roadways, parking areas, walkways, and other hardscape elements. As discussed in the Hydrology Study, based on the proposed Project, an average on-site impervious ratio of 90 percent was determined, which would increase the impervious areas on the Project Site by 40 percent. While impervious surfaces would be added to the Project Site, the stormwater treatment design included as part of the proposed Project accounts for this increase in flow. In addition, all on-site drainage would be collected through infiltration dry wells distributed throughout the Project Site. Infiltration dry wells would allow for more rapid infiltration of stormwater and would not impact the existing stormwater drainage systems. The infiltration dry wells would also provide water quality treatment in order to meet the LA County LID ordinance

As previously discussed, development of the proposed Project would also result in a change to the existing on-site drainage pattern. Under existing conditions, the water would flow westerly towards S. San Gabriel Boulevard and E. Grand Avenue. However, under the proposed Project, water would also flow easterly towards S. Gladys Avenue as well as S. San Gabriel Boulevard and E. Grand Avenue. Therefore, new parkway drains would be installed as part of the proposed Project development layout, which would ensure stormwater runoff is routed properly. Existing parkway drains would also be reutilized as able on E. Grand Avenue and S. San Gabriel Boulevard. With implementation of the infiltration dry wells throughout the Project Site, which will not include direct connections to any public storm drain system, it is not anticipated that runoff water which would exceed the capacity of existing or planned stormwater drainage systems.

Based on the above, operation of the proposed Project would not substantially alter the existing drainage pattern of the Project Site or surrounding area, including through the alteration of the course of a stream or river or through the addition of imperious surfaces, in a manner which would 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. **Impacts would be less than significant**.

(iv) impede or redirect flood flows. (Less than Significant Impact.)

As discussed under Subsection 3.8.1, *Existing Conditions*, above, the Project Site is mapped by the FEMA as lying within a Zone X area, which is an "Area of Minimal Flood Hazard" and is not located within a Special Flood Hazard Area (FEMA, 2019). The Project Site is also not located within a potential inundation area, as the Rubio Wash is located 800 feet east of the Project Site. As detailed above in Impact HYDRO-3(ii), Project construction and operation would not substantially increase the amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, the proposed Project would not impede or redirect flood flows. **Impacts would be less than significant**.

Impact HYDRO-4: The proposed Project would not risk release of pollutants due to project inundation within flood hazard, tsunami, or seiche zones. (No Impact.)

A Flood Zone is a geographical area that is rated to reflect the severity or type of flooding in that area. These areas are indicated on a Flood Insurance Rate Map or a Flood Hazard Boundary Map. Flood hazard areas on the Flood Insurance Rate Maps are identified as a SFHA. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea-disturbance, such as a tectonic displacement of sea floor associated with large, shallow earthquakes. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank.

As discussed under Subsection 3.8.1, *Existing Conditions*, above, the Project Site is mapped by the FEMA as lying within a Zone X area, which is an "Area of Minimal Flood Hazard" and is not located within a SFHA (FEMA, 2019). In addition, the Project Site, which is located approximately 25 miles from the Pacific Ocean, is not located in a Tsunami Emergency Response Planning Zone (Cal OES, 2019). Furthermore, while the Project Site is located within proximity to the Rubio Wash, there are no major water-retaining structures that are located immediately up-gradient from the Project Site. As the Project Site is not within a flood hazard zone, tsunami zone, or seiche zone, development of the proposed Project would no risk release of pollutants due to project inundation. **No impacts would occur with development of the proposed Project and no mitigation measures would be required.**

Impact HYDRO-5: The proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (Less than Significant Impact.)

As discussed in Subsection 3.8.2, *Regulatory Framework*, and elaborated upon in the subsequent impact analyses, the proposed Project falls within the jurisdiction of water quality plans with related regulations and permitting requirements that assure that development projects are in compliance with clean water policies. Most notably, the proposed Project falls under the jurisdiction of the LARWQB (Region 4) Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties and the Rio Hondo/San Gabriel River Watershed EWMP; and the RWQCB is also given authority to issue waste discharge requirements, enforce actions against stormwater discharge violators, and monitor water quality. In California, the NPDES stormwater permitting program is administered by the SWRCB; and the County of Los Angeles and the City of San Gabriel is a Co-Permittee under the Los Angeles County NPDES MS4 Permit, and as such is required to implement development planning guidance and control measures regarding water quality impacts from new development.

The Los Angeles County MS4 Permit contains provisions for implementation and enforcement of the Stormwater Quality Management Program; and includes a LID Plan that designates BMPs that must be used by projects to address water infiltration, filtering, treatment and peak-flow discharge.

The proposed Project would incorporate into its design an on-site drainage system that would include infiltration dry wells throughout the Project Site that would meet regulatory requirements of the applicable plans for the protection of water resources. As previously described, dry wells are

gravity-fed pits that serve to penetrate layers of clay soils with poor infiltration rates to reach more permeable layers of soils, allowing for more rapid infiltration of stormwater (USEPA, 2014). Installation of dry wells throughout the Project Site would serve to increase groundwater recharge on the Project Site. The on-site-drainage system would also provide BMPs that would meet the design requirements as specified by the Los Angeles County Hydrology and LID Manuals.

The proposed Project's potential impacts regarding water quality are evaluated under Impact HYDRO-1, above. As indicated in that analysis, with the implementation of the proposed Project's on-site drainage system, the proposed Project would have less than significant impacts on both surface and groundwater quality during construction and operation of the proposed Project. The proposed Project's potential impacts regarding groundwater supplies and groundwater recharge are evaluated under Impact HYDRO-2, above. As indicated, the proposed Project would have a less than significant impact.

The proposed Project would thereby implement the necessary BMPs to support the applicable plans; and the proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **Impacts would be less than significant.**

3.8.6 Cumulative Impacts

As identified in Chapter 3, *Introduction to Environmental Analysis*, of this Draft EIR, there are 37 cumulative projects within the vicinity of the proposed Project. These cumulative projects could potentially increase the volume of stormwater runoff and contribute to pollutant loading in stormwater runoff, resulting in cumulative impacts to hydrology and water quality.

As with the proposed Project, the cumulative projects are located within an urbanized area and include mostly hard-surface development sites. Accordingly, the potential for the cumulative projects to generate a substantial amount of new impermeable surfaces is limited. The cumulative projects would also be subject to the same regulatory requirements as the proposed Project, including, where applicable, the NPDES permits/waste discharge requirements discussed above and compliance with Chapter 53 of the SGMC, which adopted, by reference, the Los Angeles County LID Standards. The Los Angeles County LID Standards require that each cumulative project greater than one-acre in size develop SWPPPs; each cumulative project would be evaluated individually to determine appropriate BMPs and treatment measures to avoid impacts to water quality. Smaller projects would be minor infill projects with drainage characteristics similar to existing conditions, with negligible impacts. In addition, cumulative projects would also be required to abide by source control and treatment control BMPs, which include infiltration of stormwater into the ground, as well as filtering runoff before it leaves a site. The source and treatment control BMPs must be sufficiently designed and constructed to collectively treat, infiltrate, or filter stormwater runoff from 85th percentile 24-hour runoff event. With these measures, many cumulative redevelopment projects on older development sites would likely have reductions in off-site drainage flows and surface pollutants as compared to current conditions through implementation of newer drainage control requirements. Thus, regulatory measures would avoid significant impacts on drainage/flooding conditions, the quality of water reaching the public drainage system, as well as groundwater quality. Moreover, as shown above, the proposed Project

would not significantly alter or increase stormwater flows from the Project Site, significantly alter drainage patterns in the area, or impact water quality. Accordingly, the proposed Project and cumulative projects would not result in cumulatively considerable impacts with respect to hydrology, drainage quantities/patterns, and water quality.

As demonstrated above, through compliance with applicable regulatory requirements via site-specific drainage systems and storm water management and BMPs, the proposed Project and cumulative projects would not substantially conflict with or obstruct implementation of a water quality control plan. Also, as discussed above, given the urbanized nature of surrounding area, the potential for the cumulative projects to generate a substantial amount of new impermeable surfaces and thereby affecting the groundwater table is limited. None of the cumulative projects are known to include significant quantities of permanent, ongoing groundwater withdrawal, but some would include infiltration as a means of LID compliance, where feasible and possible**.** Accordingly, with these considerations, along with the proposed Project's and cumulative project's compliance to applicable regulatory requirements, no significant cumulative impacts regarding conflicts with or obstructing implementation of a water quality control plan or sustainable groundwater management plan would occur.

As with the proposed Project, cumulative projects would similarly not be located within a flood hazard zone, tsunami zone, and seiche zones. Thus, there would be no cumulative potential for risk of release of pollutants within these zones. Accordingly, the proposed Project and cumulative projects would not result in cumulatively considerable impacts with respect to release of pollutants due to project inundation by flooding, tsunami, or seiche.

Overall, based on the above, the proposed Project's contribution to cumulative hydrology and water quality impacts would not be cumulatively considerable, and the proposed Project, considered together with the cumulative projects, would not result in cumulatively significant impacts to hydrology and water quality.

3.8.7 References

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3.9 Land Use and Planning

This section of the EIR provides an analysis of Project consistency with applicable adopted land use plans, policies, regulations, and guidance documents. CEQA Guidelines Section 15125 states that the EIR shall discuss "any inconsistencies between the proposed project and applicable general plans, specific plans and regional plans," and accordingly, the analysis includes consideration of potential inconsistencies between the proposed Project and relevant local and regional plans and policies. This section is based largely on the predominant planning document applicable to the Project Site, which is the City of San Gabriel's (City) General Plan (General Plan) (City of San Gabriel, 2016).

3.9.1 Existing Conditions

Onsite Land Uses

As discussed in more detail in Chapter 2, *Project Description*, of this Draft EIR, the Project Site encompasses 49 parcels, totaling approximately 5.85-acres. The Project Site previously contained vacant greenhouses and associated structures associated with the San Gabriel Nursery & Florist, eight of which were burned down by an act of arson on February 14, 2018, which left the site severely burned and in damaged condition with a large amount of debris. Since July 2018, the Project Site has been cleaned of all burnt debris. The Project Site currently consists of only vacant land with no structures present.

Surrounding Land Uses

The Project Site is located in an urbanized area that includes surrounding land uses that are predominantly commercial and residential (see also Figure 2-2 for surrounding land uses).

- **North:** The San Gabriel Nursery & Florist, which operates as a 2-acre garden and florist shop, is located directly north of the Project Site. Industrial uses are located north of the nursery and E. Santa Fe Street. The Southern Pacific Railroad tracks are farther north of the nursery. Land uses northeast of the Project Site include residential uses including multi-family apartments and townhomes. A small commercial area is located northwest of the Project Site and includes restaurants, dry cleaners, and health services such as a dentistry office and a chiropractor. Residential uses composed of mostly multi-family apartments are located farther west of the commercial uses.
- **South:** Land uses south of the Project Site include residential and commercial uses, such multi-family apartment buildings and single-family homes. A variety of commercial uses, such as gas stations and a car wash, are located beyond the residential uses. In addition, the Los Angeles County Metropolitan Transportation Authority (Metro) Line 176 bus stop is located 230 feet southeast of the Project Site on Mission Road and S. San Gabriel Boulevard.
- **East:** Land uses east of the Project Site are residential, predominantly composed of multi-family apartment buildings and townhomes. Additionally, a senior housing development will be constructed adjacent to the Project Site to the east across S. Gladys Avenue. This approved project is analyzed within the Draft EIR as cumulative project number 19. The San Gabriel Valley Humane Society is located southeast of the Project Site along E. Grand Avenue. The Rubio Wash is located farther to the east.

- **West:** Land uses west of the Project Site are predominantly commercial and include a variety of restaurants and healthcare facilities, such as a skin care center and dialysis center. Residential uses, composed of multi-family apartment buildings and single-family homes, are located farther west of the commercial uses.

Existing General Plan and Zoning Designations

Current land use designations and zoning for the Project Site and immediate surrounding area are shown in **Table 3.9-1**. As identified in the City of San Gabriel's General Plan Land Use Chapter, the entire Project Site is designated as a General Commercial (City of San Gabriel, 2004) (**Figure 3.9-1)**. The Project Site is also zoned as Retail Commercial (C-1) (City of San Gabriel, 2016) (**Figure 3.9-2**). The areas immediately north and south of the Project Site also have a land use designation of General Commercial, and are zoned Retail Commercial (C-1) and Commercial and Limited Light Manufacturing (C-3), respectively. The area east of the Project Site is consisted of several separate developments. The General Plan land use designations are High Density Residential (12-25 du/acre) and General Commercial. The zoning designations are Planned Development Overlay Zone (PDO) and Retail Commercial (C-1). The area immediately to the west of the Project Site has a land use designation of General Commercial, with the majority of the area zoned as Commercial and Limited Light Manufacturing (C-3), with some parcels zoned as Retail Commercial (C-1).

The Project Site is also within an area identified as a Redevelopment Area, as defined in Figure 1-4 of the General Plan.

TABLE 3.9-1
EXISTING LAND USES AND LAND USE DESIGNATIONS

Location	Current Land Uses	Existing General Plan Designations	Existing Zoning Designations
Project Site	Vacant	General Commercial	Retail Commercial (C-1)
North	San Gabriel Nursery and Florist	General Commercial	Retail Commercial (C-1)
South	Multi-family Residential and Commercial	General Commercial	Commercial and Limited Light Manufacturing (C-3)
East	Multi-family Residential and Commercial	General Commercial High Density Residential (12-25 du/acre)	Retail Commercial (C-1) Planned Development Overlay (PDO)
West	Commercial and Healthcare Facilities	General Commercial	Retail Commercial (C-1), Commercial and Limited Light Manufacturing (C-3)

SOURCE: City of San Gabriel, 2004.

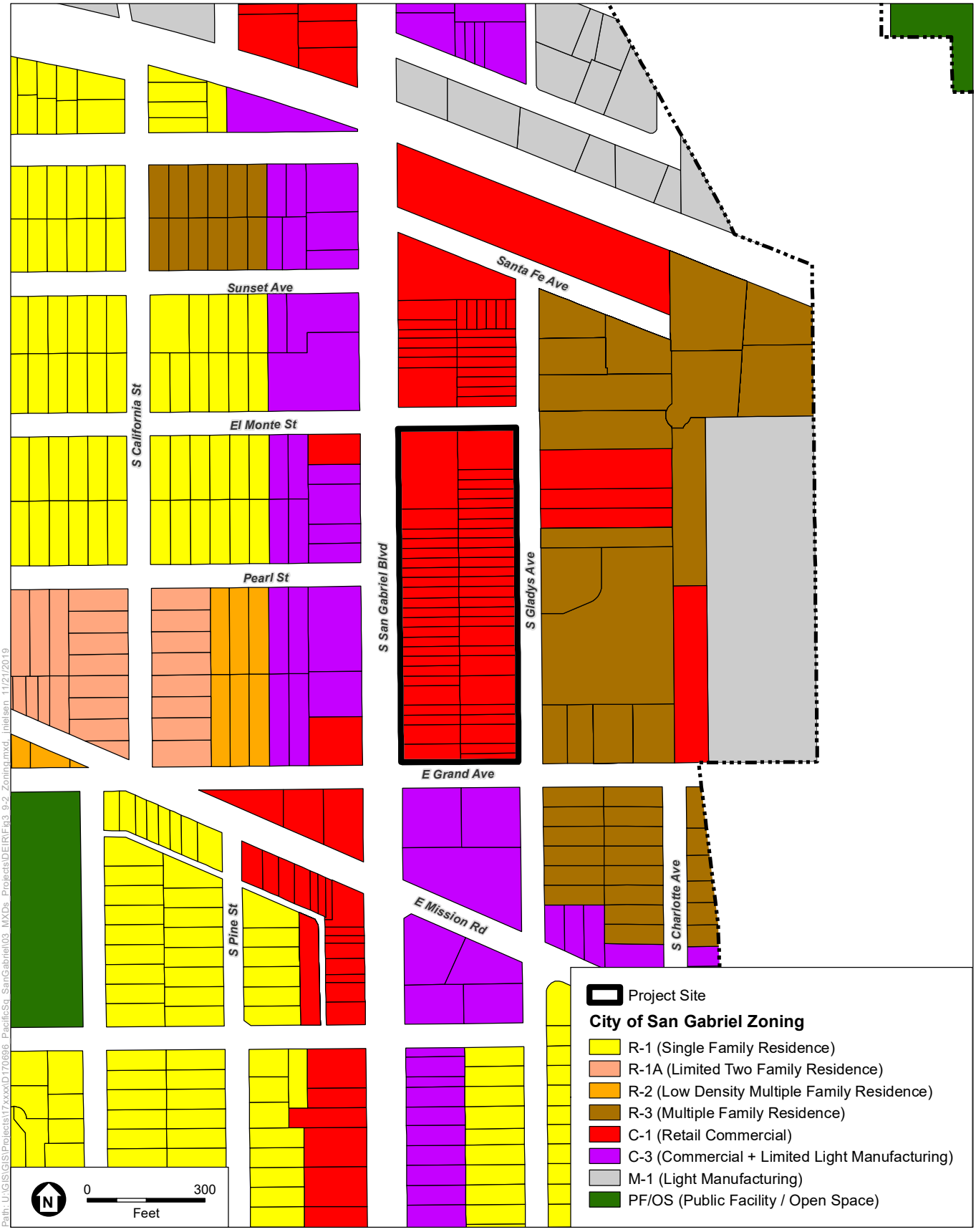


Pacific Square San Gabriel Mixed-Use Project

SOURCE: City of San Gabriel Land Use Plan, 2004.

Figure 3.9-1
Surrounding Land Use

ESA



SOURCE: City of San Gabriel Zoning, 2016.

Pacific Square San Gabriel Mixed-Use Project

Figure 3.9-2
Zoning

ESA

3.9.2 Regulatory Framework

Regional Level

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the designated regional planning agency for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial (SCAG, 2019). SCAG is a joint powers agency with responsibilities pertaining to regional issues. SCAG's mandated responsibilities include developing plans and policies with respect to the region's population growth, transportation programs, air quality, housing, land use, sustainability, and economic development. In addition to the six counties and 191 cities that make up SCAG's region, there are six County Transportation Commissions that hold the primary responsibility for programming and implementing transportation projects, programs and services in their respective counties. There are also 14 "sub-regions" within the six counties that have varying degrees of responsibilities in the development of planning and programming transportation projects and developing policies. The Project Site is located within the San Gabriel Valley Council of Governments (SGVCOG) sub-region.

Regional Transportation Plan/Sustainable Communities Strategy

On April 7, 2016, SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS presents the transportation vision for the region through the year 2040 and provides a long-term investment framework for addressing the region's transportation and related challenges (SCAG, 2016). The RTP/SCS also contains baseline socioeconomic projections used as the basis for SCAG's transportation planning, and the provision of services by other regional agencies. SCAG's RTP/SCS projections are discussed further in Section 3.11, *Population and Housing*, of this Draft EIR.

The RTP/SCS includes nine goals that pertain to economic development, mobility, accessibility, travel safety, productivity of the transportation system, protection of the environment and health through improved air quality, energy efficiency, and land use and growth patterns that complement the state and region's transportation investments, and security of the regional transportation system. The nine RTP/SCS goals are as follows:

1. Align the plan investments and polices with improving regional economic development and competitiveness.
2. Maximize mobility and accessibility for all people and goods in the region.
3. Ensure travel safety and reliability for all people and goods in the region.
4. Preserve and ensure sustainable regional transportation system.
5. Maximize the productivity of our transportation system.
6. Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g. bicycling and walking).
7. Actively encourage and create incentives for energy efficiency, where possible.
8. Encourage land use and growth patterns that facilitate transit and active transportation.
9. Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.

Local Level

City of San Gabriel General Plan

The San Gabriel General Plan was comprehensively updated in 2004, with amendments made in 2013 to its Housing Element. The General Plan's eleven elements document how the City is envisioned to grow, develop, and prosper. As the City is largely built-out with few undeveloped parcels remaining, the Land Use Element places an emphasis on quality of life issues to improve and enhance development that does take place. The General Plan reflects the desire to limit more intense development to focused areas, while preserving the integrity of established single-family residential neighborhoods. The Project Site is located within an area identified as Mixed Use Opportunities/Revitalization Needed/Need Amenities, and is identified within the focused Redevelopment Area for the City.

There are two adopted Specific Plans covering particular areas of the City, including the Mission District Specific Plan, which was adopted in December, 2004 and Valley Boulevard Specific Plan, which was adopted on December 19, 2006 and amended on January 15, 2013 (San Gabriel, 2018a; San Gabriel, 2018b). Historic Districts which include buildings, homes, and museums that hold the City's history, culture and art, include the Mission District and the San Gabriel School District which hosts the historic building and museum, The Hayes House (San Gabriel, 2018c). The Project Site is not located within any of these Specific Plan areas or historic districts, therefore the guiding policies from the General Plan are applicable.

Other General Plan elements include the Housing Element, which sets forth a strategy to preserve and enhance the community's residential character, expand housing opportunities for all economic segments, and provide guidance and direction for local government decision-making in all matters relating to housing. In addition, the Community Design Element places an emphasis on building a community of enduring value and beauty. Refer below to Subsection 3.9.5, *Environmental Impact Analysis*, for Impact LUP-2 for a Project-specific analysis of the goals and policies of the Land Use Element, Housing Element, and Community Design Element that are applicable to the proposed Project.

San Gabriel Municipal Code

The San Gabriel Municipal Code (SGMC), Title XV: Land Usage, Chapter 153: Zoning Code, defines the range of zoning classifications throughout the City, provides the specific permitted uses applicable to each zoning designation, and applies development regulations to each zoning designation (City of San Gabriel, 2018). As detailed above in Table 3.9-1, the Project Site is zoned Retail Commercial (C-1), and is surrounded by parcels zoned as Planned Development Overlay (PDO), Retail Commercial (C-1), Commercial and Limited Light Manufacturing (C-3), and Multiple Family Residence (R-3). The Retail Commercial (C-1) zone is intended to provide for the continued use and development of low-scale, local community-oriented retail sales and service uses. Typical uses within the Retail Commercial (C-1) zone include neighborhood-oriented retail and personal service businesses, small professional offices, and other businesses that generate low volumes of vehicle traffic. A comparison of project characteristics with the applicable zoning policies is provided below in Subsection 3.9.5, *Environmental Impact Analysis*, under Impact LUP-2.

3.9.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to land use and planning if it would:

a) Physically divide an established community; or

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.

3.9.4 Methodology

The CEQA Guidelines Section 15125(d) requires that an EIR discuss project inconsistencies with applicable general plans, specific plans, and regional plans. For purposes of this analysis, the proposed Project is considered consistent with regulatory plans if it meets the general intent of the plans and/or would not preclude the attainment of their primary goals. The criterion for determining significance with respect to a land use plan emphasizes conflicts with plans adopted for the purpose of avoiding or mitigating an environmental effect, recognizing that an inconsistency with a plan, policy, or regulation does not necessarily equate to a significant physical impact on the environment. The analysis of potential land use impacts of the proposed Project therefore considers consistency with adopted plans, regulations, and development guidelines that regulate land use on the Project Site, and whether any such inconsistencies are tied to physical impacts on the environment associated with the Project as identified in other sections within Chapter 3, *Environmental Impact Analysis*, of this Draft EIR.

Related to the analysis in this section, Section 3.1, *Aesthetics*, addresses policies and regulations related to the visual environment; Section 3.2, *Air Quality*, addresses relevant air quality plans and policies; Section 3.6, *Greenhouse Gas Emissions*, discusses relevant plans and policies to reduce greenhouse gas emissions; Section 3.11, *Population and Housing*, addresses the amount of development that would occur relative to growth projections and planned development capacity; Section 3.12, *Public Services*, describes regulations regarding open space and park requirements; Section 3.14, *Transportation*, discusses traffic mobility, parking requirements, and pedestrian access; and Chapter 5, *Other CEQA Considerations*, addresses issues pertaining to growth inducement.

3.9.5 Environmental Impact Analysis

Impact LUP-1: The proposed Project would not physically divide an established community. (Less than Significant Impact.)

The Project Site consists of approximately 5.85 acres of vacant undeveloped land that is entirely fenced off from the public, and no through access is permitted. The proposed Project would develop 243 residential units, 8 live/work units and 76,046 square feet of commercial space within five occupied stories, plus a mezzanine for a total of six stories, at a maximum height of 65 feet along with supporting open space. The Project Site is surrounded by existing development on all sides, including commercial and healthcare facilities to the north and west, and commercial and multi-family residential uses to the south and east. A senior housing development will be constructed

adjacent to the Project Site to the east across S. Gladys Avenue. This approved project is analyzed within the Draft EIR as cumulative project number 19. The proposed Project's mixed-use buildings would allow a more contiguous transition between the existing commercial and residential uses that surround it. The proposed open space and plaza area that is situated mid-block between the 700 Plaza and the 800 Plaza would facilitate movement internally within the Project Site and from the larger community to the east and west. The Project is designed to be well-integrated into the larger established community and would not present a barrier to physical access. **Therefore, the proposed Project would not divide an established community and impacts would be less than significant. No mitigation is required.**

Impact LUP-2: The proposed Project would not cause a significant effect 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.)

Consistent with CEQA Guidelines Section 15125(d), an EIR shall discuss any inconsistencies between a project and the applicable General Plan and regional plans. The following analysis addresses this requirement as it pertains to land use. As discussed above in Subsection 3.9.2, *Regulatory Framework*, applicable land use plans, policies, and regulations include the SCAG RTP/SCS, the City's General Plan, and the SGMC. The proposed Project's consistency with each of these plans and applicable policies and regulations is addressed below.

Regional Transportation Plan/Sustainable Communities Strategy

As detailed above in Subsection 3.9.2, *Regulatory Framework*, SCAG's RTP/SCS includes nine goals to improve the region's economic development, mobility, accessibility, protection of the environment, and land use patterns. The following land use goal is applicable to the proposed Project.

> **Goal 8:** Encourage land use and growth patterns that facilitate transit and active transportation.

Consistent. The proposed Project would construct a mixed-use development with convenient access to the Metro Line 176 bus stop, located approximately 230 feet southwest of the Project Site. This bus line connects to the Metro L (Gold) Line South Pasadena and Highland Park Stations, which allows the Project Site to be connected to the larger regional rail and bus transit network through Union Station. The proposed Project includes a 33,543 square foot central park area, which includes a 23,218 square foot central park and a 10,325 square foot central plaza, and 24,280 square foot secondary plaza. The central park area includes landscaping and outdoor seating areas with the focus of creating a pedestrian oriented open space. The area would include a pavilion located in the middle of the central park/plaza area. The pavilion structure is designed as a public art element creating a focal point for the central park area for passive and programmed use. The proposed pedestrian-orientated design would allow for people to circulate both within the Project Site and allow walkability to adjacent existing commercial uses. The proposed Project would also provide bicycle parking at the ground level of the proposed parking garage for commercial users and at the subterranean level for residential users. The proposed Project's location next to existing transit lines, pedestrian-oriented design, and proposed bicycle parking would provide the new residential population, visitors, and employees with access to restaurant, retail, recreation, and

entertainment activities within walking and biking distances and would provide convenient access to bus and rail services.

City of San Gabriel General Plan

As previously detailed, the City's General Plan documents the City's desire for growth. The Project Site has a General Plan land use designation of General Commercial. According to the Land Use Element, General Commercial allows all forms of retail, service, office, recreation/amusement and other commercial businesses which provide goods and services for the local population and those businesses which are targeted towards visitors and commuters. Mixed use projects are allowed in the General Commercial land use designation, but are limited to a building height of three-stories and 45 feet. While the proposed Project would include five-story buildings, plus a mezzanine for a total of six stories, at a maximum height of up to 65 feet, as part of the Project's Planned Development (PD) approval and zone change from General Commercial to PD, the Project would be in compliance with the General Plan. Additionally, the increase in height associated with this change is addressed throughout this EIR, including in Section 3.1, *Aesthetics*, and no environmental impacts associated with this change are identified.

The following General Plan land use goals are applicable to the proposed Project and analyzed for consistency with the proposed Project.

Land Use

Goal 1.5: Support new development that efficiently and effectively combines residential and commercial uses.

Consistent. The proposed Project would construct a mixed-use development, including 76,046 square feet of commercial space on the ground floor with 243 residential units and 8 live/work units above within five occupied stories, plus a mezzanine for a total of six stories, at a maximum height of 65 feet along with supporting open space across the 5.85-acre Project Site. The commercial space would include restaurants, retail, a fitness center, café, and a market, which would serve both new residents and the larger surrounding community.

Goal 1.6: Ensure that new development is appropriately and sensitively buffered from its neighbors.

Consistent. The Project Site is bound and buffered by E. El Monte Street, S. Gladys Avenue, E. San Gabriel Boulevard, and S. Grand Avenue, and does not have directly connected neighbors. The proposed Project would include street-scaping on all public spaces fronting the Project Site, including street trees, sidewalks, a turf parkway, raised planters, and green screen planters, which would provide a buffer between the proposed development and the surrounding neighbors.

Goal 1.13: Think and act creatively to maximize and increase public open space and greenery in our community.

Consistent. The proposed Project is organized around a 23,218 square foot central park and 10,325 square-foot plaza with expansive landscaping and outdoor seating areas with the focus on creating an internal, pedestrian oriented open space. The central park and plaza landscaping would consist

of palm trees, Japanese blueberry and olive trees, variegated flax, carpet and iceberg roses, bird of paradise, and white and orange lantana. Additionally, a 24,280 square foot secondary plaza with landscaped and hardscape areas would surround the perimeter of the entire Project Site. Perimeter street trees and planting would include pink trumpet and jacaranda trees, greenscreen with trumpet vine, and fountain and autumn glow muhly grass. Other plaza elements include a water feature, vertical metal screens, lighted bollard seating, and large decorative pots and raised planters with bench and light columns. Hardscape concepts include driveway cobble paving, sandblasted finished concrete, mica sparkles in concrete bands, and square and circular tree grates.

Economic Development

Goal 4.1: Create a vibrant business community.

Consistent. The Project's proposed 76,046 square feet of commercial space and 8 live/work units would revitalize the currently vacant site and surrounding commercial area, activate the pedestrian street front, particularly along S. San Gabriel Boulevard, and increase cooperation and coordination between public and private sectors by hosting community events such as an outdoor market. Overall, the proposed uses are consistent with the City's goal to create a vibrant business community.

Goal 4.3: Develop retail that will address the needs of the community.

Consistent. Commercial uses proposed by the Project include multiple types of restaurants (sit-down and fast casual restaurants, bakery, and café) to serve various needs of the community. The market and fitness uses also provide key services to the surrounding area that do not currently exist. These uses address needs of the community and are consistent with City goals.

Goal 4.4: Develop underutilized properties with national and regional retailers.

Consistent. Commercial uses proposed by the Project include multiple types of restaurants (sit-down and fast casual restaurants, bakery, and café), some of which may consist of national and regional retailers. Additionally, the anchoring uses of the market and fitness would be with national and regional retailers. All of these uses would occur on underutilized property, consistent with the goal.

Environmental Resources

Goal 8.1: Create a verdant City by maintaining significant trees, requiring developers to plant additional trees, and promoting the healthy maintenance of trees.

Consistent. The Project's proposed 33,543 square foot central park area and 24,280 square foot secondary plaza would incorporate the planting of trees as part of the landscaping and outdoor seating areas. The existing fan palm trees located within the Project Site would be relocated within the development, to be consistent with City goals.

Community Design Element

Goal 10.1: Create an expectation that San Gabriel will accept nothing less than the highest quality in architecture, in landscape design, and in streetscape.

Consistent. The proposed Project would be designed in the contemporary architectural style, consistent with the existing surrounding contemporary buildings along S. San Gabriel Boulevard. The Project proposes a strong use of geometry in the central park area and the second level residential courtyards to reinforce the modern design style. The proposed Project is designed with the second through fifth floor massing stepped back from the ground floor retail uses, providing a distinct visual identity to the retail while buffering the upper residential use from the street. The proposed Project would include a mix of building materials, including stucco, wooden and metal wall panels, and glass railings. The design would include an earth tone color palette, consisting of brown, gray, bronze, and white colors. In addition, the Applicant would utilize a Master Sign Program to ensure that all signs would be consistent and complimentary with the architecture of the development. Additionally, the landscape plan would include a varied palette of landscaping plants, shrubs, and trees within the central open space area that is designed to allow people to circulate between the north and south portions of the development.

Goal 10.3: Create designs that live and breathe with San Gabriel's neighborhoods as they themselves live and breathe.

Consistent. The proposed Project would adhere to existing City design guidelines. As previously detailed, the proposed Project is designed with the second through fifth floor massing stepped back from the ground floor retail uses, providing a distinct visual identity to the retail while buffering the upper residential use from the street. The proposed Project would include a mix of building materials, including stucco, wooden and metal wall panels, and glass railings. The design would include an earth tone color palette, consisting of brown, gray, bronze, and white colors. The Project proposes a 33,543 square foot central park area with expansive landscaping and outdoor seating areas with the focus of creating an internal, pedestrian oriented open space as well as a 24,280 square foot secondary plaza with landscaped and hardscape areas would surround the perimeter of the entire Project Site. Landscaping would screen the proposed development through its placement of street trees, a turf parkway, raised planters, and green screen planters, which would provide a buffer between the proposed buildings and the surrounding uses. Consistent with cultural precedents, the landscaping design of the Project Site provides homage to the previous property owner, the San Gabriel Nursery, located north of the Project Site.

Goal 10.10: Make the quality of landscape design a fundamental component of all decision-making for new development.

Consistent. Organized around a central park area, the landscaping design of the Project Site provides homage to the previous property owner, the San Gabriel Nursery, now located north of the Project Site. The proposed landscaping plan, to be prepared by a licensed landscape architect, would consist of a broad variety of species types and would incorporate the row of palm trees that exist within the Project Site.

Goal 10.13: Require development to provide architectural and public art amenities.

Consistent. The Project proposes a strong use of geometry in the central park area and the second level residential courtyards to reinforce the modern design style. The pedestrian-oriented central park and plaza area includes multiple green spaces allowing for both passive and programmed use, which in turn would activate the surrounding retail spaces. Proposed plaza elements include a pavilion, metal light columns, a water feature, vertical metal screens, lighted bollard seating, large decorative pots, and raised planters with bench and light columns. Hardscape concepts include driveway cobble paving, sandblasted finished concrete, mica sparkles in concrete bands, and square and circular tree grates. The pavilion would be located in the middle of the central park/plaza area. The pavilion structure is designed as a public art element creating a focal point for the central park area for passive and programmed use. Hardscape concepts would differentiate between pedestrian and vehicle areas, including driveway cobble paving, sandblasted finished concrete, and mica sparkles in concrete bands.

As mentioned above, the Project is organized around a 33,543 square foot central park area (23,218 square foot central park and 10,325 square foot central plaza) with expansive landscaping and outdoor seating areas with the focus of creating an internal, pedestrian oriented open space. This open space allows for people to circulate through the site and between the 700 Plaza and the 800 Plaza, as well as to the larger community to the east and west of the Project Site. Vehicle circulation within the central park area is limited to service vehicles only to maintain a pedestrian dominant open space.

City of San Gabriel Municipal Code

As previously detailed, the Project Site is zoned as Retail Commercial (C-1). The proposed Project would construct 243 residential units, 8 live/work units, 76,046 square foot of commercial space within five occupied stories, plus a mezzanine for a total of six stories, at a maximum height of 65 feet along with supporting open space. The proposed Project would amend the existing zoning designation of the Project Site to Planned Development (PD). The PD zone allows for large-scale development (one acre or larger) with more flexible regulations to ensure orderly and compatible development. Any use permitted in any residential, commercial, or manufacturing zone may be permitted in a Planned Development Overlay Zone. The proposed Project would apply for a Zone Map Amendment, the approval of which would bring the proposed Project into compliance with the SGMC.

Consistency Conclusion

As detailed above, the proposed Project would be consistent with the goals and policies of SCAG's RTP/SCS, the City's General Plan, and the SGMC. With implementation of the PD and Zone Map Amendment that is part of the Project approvals being sought, the Project would be consistent with the City's General Plan and SGMC. **Therefore, as the proposed Project would not conflict with regional plans, policies, or regulations that have been adopted for the purpose of avoiding or mitigating an environmental impact, a less than significant impact would occur and no mitigation is required.**

3.9.6 Cumulative Impacts

The geographic scope for which cumulative land use impacts are considered is the City of San Gabriel. Consistency with applicable land use plans are site specific and require analysis on an individual basis due to each development site being dependent on its immediate environment. Land use compatibility impacts are generally a function of the interaction between a specific development site and its immediate environment. Further, similar to the proposed Project, other cumulative projects would be required to be consistent with the General Plan land use designation and zoning as applicable to ensure consistency with surrounding land uses. A list and figure depicting cumulative projects are shown in Chapter 3, *Environmental Setting*, of this Draft EIR. The cumulative projects closest to the Project Site are approximately 200 feet from the Project and includes the 600 S. San Gabriel Boulevard condominium and retail project located north of the Project Site and the proposed senior home located on 824 E. Gladys Avenue, east of the Project site. Other cumulative projects would be required to go through an approval process with the City to obtain permits and approvals. General Plans are implemented to provide an overall land use plan for the City such that consistency with the General Plan would avoid cumulative land use impacts. **The proposed Project would not be expected to cause incremental impacts to land use and planning when considering related past, present, or foreseeable future projects, and no mitigation measures are required to reduce cumulative impacts.**

3.9.7 References

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3.10 Noise

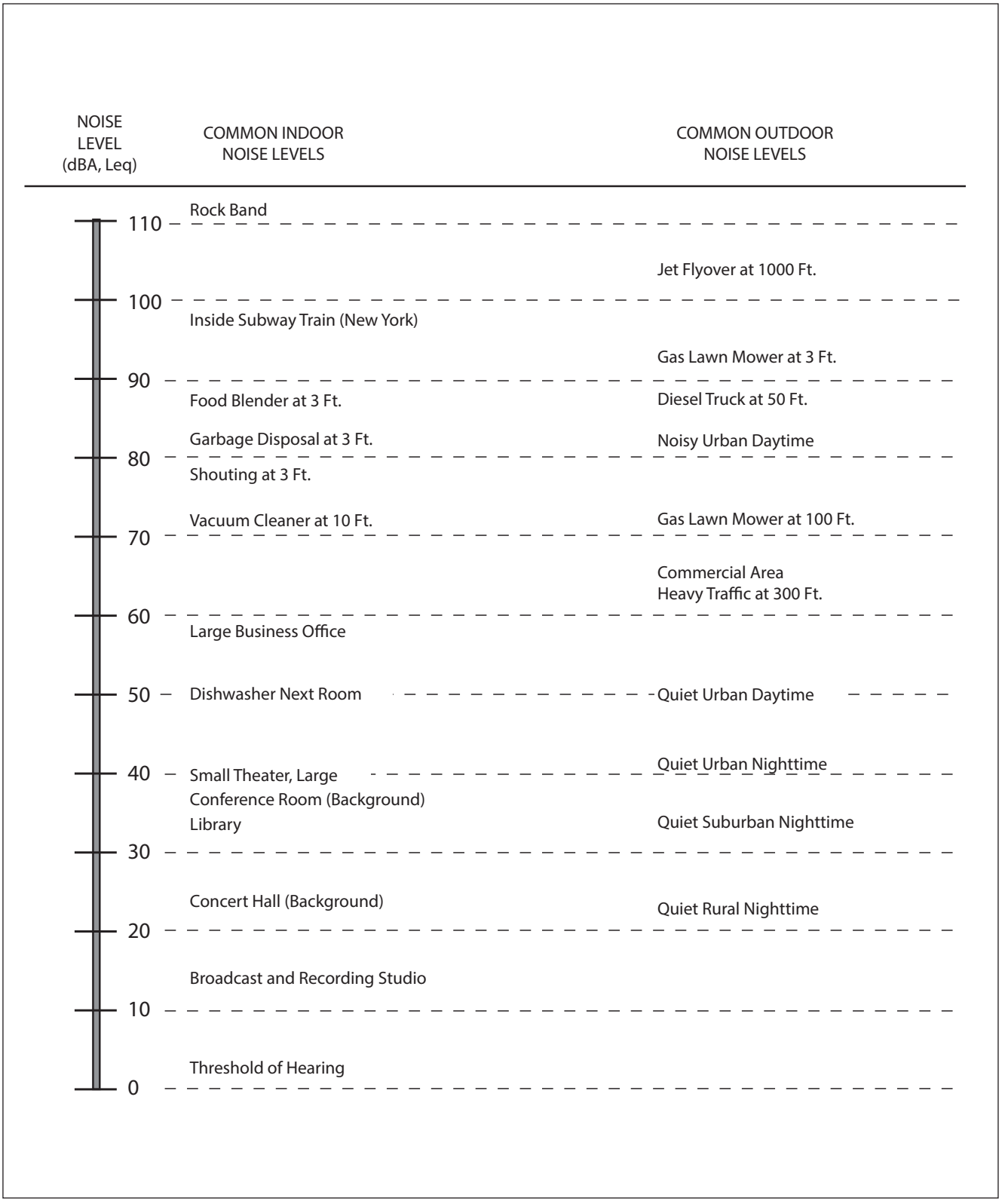
This section analyzes the potential effects of the proposed Project's impacts from construction and operational noise and vibration on off-site noise sensitive receptors. The analysis identifies noise sensitive receptors in proximity to the Project Site including measured ambient noise levels. Project construction and operation noise and vibration levels are estimated and compared to applicable federal, state, and local noise and vibration standards and criteria to identify any potential exceedances, and mitigation measures are identified, where necessary. Existing and future traffic noise levels on area roadways with and without Project traffic volumes are estimated from existing and future traffic volumes provided in *The Pacific Square Mixed-Use Project CEQA Transportation Impact Study* (Traffic Study) (Fehr & Peers, 2020a), provided in Appendix J of this EIR. Calculation worksheets, assumptions, and model outputs of the analysis are provided in Appendix H of this EIR.

3.10.1 Noise and Vibration Background

Noise Principals and Descriptors

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air). Noise is generally defined as unwanted (i.e., loud, unexpected, or annoying) sound. Acoustics is defined as the physics of sound and addresses its propagation and control using the fundamental scientific model of a sound (or noise) source, a receiver, and the propagation path between the two (Caltrans, 2013a). The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver.

Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) that is measured in decibels (dB), which is the standard unit of sound amplitude measurement. The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound, with 0 dB corresponding roughly to the threshold of human hearing and 120 and 140 dB corresponding to the threshold of feeling and pain, respectively. Pressure waves traveling through air exert a force registered by the human ear as sound (Caltrans, 2013a). Sound pressure fluctuations can be measured in hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude. All audible frequencies of sound range from 20 to 20,000 Hz, which the typical human ear is not equally sensitive. As such, when assessing potential noise impacts, sound is measured using an electronic filter that deemphasizes frequencies below 1,000 Hz and above 5,000 Hz corresponding to the human ear's decreased sensitivity to these extremely low and extremely high frequencies. This method referred to as A-weighting, expressed as A-weighted decibels (dBA), which is typically applied to community noise measurements (Caltrans, 2013a). Some representative common outdoor and indoor noise sources and their corresponding A-weighted noise levels are shown in **Figure 3.10-1**.



SOURCE: Caltrans

Pacific Square San Gabriel Mixed-Use Project

3.10-1

Decibel Scale and Common Noise Sources

ESA

Noise Exposure and Community Noise

An individual's noise exposure is a measure of noise over a period of time; a noise level is a measure of noise at a given instant in time, as presented in Figure 3.10-1. However, noise levels rarely persist at that level over a long period of time. Rather, community noise varies continuously over a period of time with respect to the sound sources contributing to the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with many unidentifiable individual contributors. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources, such as changes in traffic volume. What makes community noise variable throughout a day, besides the slowly changing background noise, is the addition of short duration, single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual (Caltrans, 2013a).

These successive additions of sound to the community noise environment change the community noise level from instant to instant, requiring the noise exposure to be measured over periods of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. The following noise descriptors are used to characterize environmental noise levels over time, which are applicable to the proposed project (Caltrans, 2013a).

L_{eq}: The equivalent sound level over a specified period of time, typically, 1 hour (L_{eq}), also referred to as the average sound level.

L_{max}: The maximum, instantaneous noise level experienced during a given period of time.

L_{min}: The minimum, instantaneous noise level experienced during a given period of time.

L_x: The noise level exceeded for a percentage of a specified time period. For instance, L50 and L90 represent the noise levels that are exceeded 50 and 90 percent of the time, respectively.

L_{dn}: The average A-weighted noise level during a 24-hour day, includes an addition of 10 dB to measured/calculated hourly noise levels from 10:00 PM to 7:00 AM to account for nighttime noise sensitivity. The L_{dn} is also termed the day-night average noise level (DNL).

CNEL: The Community Noise Equivalent Level (CNEL) is the average A-weighted noise level during a 24-hour day that includes an addition of 5 dB to measured/calculated hourly noise levels from 7:00 PM to 10:00 PM and an addition of 10 dB to hourly noise levels from 10:00 PM to 7:00 AM to account for noise sensitivity in the evening and nighttime, respectively.

Effects of Noise on People

Noise is generally loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity that is a nuisance or disruptive. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance);
- Interference effects (e.g., communication, sleep, and learning interference);

- Physiological effects (e.g., startle response); and
- Physical effects (e.g., hearing loss).

Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. Interference effects interrupt daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening and arousal to a lesser state of sleep (Caltrans, 2013a).

With regard to the subjective effects, the responses of individuals to similar noise events are diverse and influenced by many factors, including the type of noise, the perceived importance of the noise, the appropriateness of the noise to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity. Overall, there is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction on people. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted (i.e., comparison to the ambient noise environment). In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships generally occur (Caltrans, 2013a).

- Except in carefully controlled laboratory experiments, a change of 1 dBA in ambient noise levels cannot be perceived by the human ear;
- Outside of the laboratory, a 3 dBA change in ambient noise levels is considered to be a barely perceivable difference;
- A change in ambient noise levels of 5 dBA is considered to be a readily perceivable difference; and
- A change in ambient noise levels of 10 dBA is subjectively heard as doubling of the perceived loudness.

These relationships occur in part because of the logarithmic nature of sound and the decibel scale. The human ear perceives sound in a non-linear fashion; therefore, the dBA scale was developed. Because the dBA scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather logarithmically. Under the dBA scale, a doubling of sound energy corresponds to a 3 dBA increase. In other words, when two sources are each producing sound of the same loudness, the resulting sound level at a given distance would be approximately 3 dBA higher than one of the sources under the same conditions. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA (i.e., 50 + 50 = 53), not 100 dBA. However, where ambient noise levels are high in comparison to a new noise source, there will be a small change in noise levels. For example, when 70 dBA ambient noise levels are combined with a 60 dBA noise source, the resulting noise level equals 70.4 dBA. Under

the dB scale, three sources of equal loudness together produce a sound level of approximately 5 dBA louder than one source, and ten sources of equal loudness together produce a sound level of approximately 10 dBA louder than the single source (Caltrans, 2013a).

Noise Attenuation

When noise propagates over a distance, the noise level reduces with distance depending on the type of noise source and the propagation path. Noise from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, referred to as "spherical spreading." Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (i.e., reduce) at a rate between 6 dBA for acoustically "hard" surface sites and 7.5 dBA for "soft" surface sites for each doubling of distance from the reference measurement, as their energy is continuously spread out over a spherical surface (e.g., for hard surfaces, 80 dBA at 50 feet attenuates to 74 at 100 feet, 68 dBA at 200 feet, etc.). Hard sites are those with a reflective surface between the source and the receiver, such as asphalt or concrete surfaces or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the reduction in noise levels with distance (drop-off rate) is simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees, which in addition to geometric spreading, provides an excess ground attenuation value of 1.5 dBA (per doubling distance) (Caltrans, 2013a).

Roadways and highways consist of several localized noise sources on a defined path, and hence are treated as "line" sources, which approximate the effect of several point sources. Noise from a line source propagates over a cylindrical surface, often referred to as "cylindrical spreading." (Caltrans, 2013a) Line sources (e.g., traffic noise from vehicles) attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement (Caltrans, 2013a). Therefore, noise due to a line source attenuates less with distance than that of a point source with increased distance.

Fundamentals of Vibration

Vibration can be interpreted as energy transmitted in waves through the ground or man-made structures, which generally dissipate with distance from the vibration source. Because energy is lost during the transfer of energy from one particle to another, vibration becomes less perceptible with increasing distance from the source.

As discussed in the California Department of Transportation's (Caltrans) Transportation and Construction Vibration Guidance Manual, operation of construction equipment generates ground vibration. Maintenance operations and traffic traveling on roadways can also be a source of such vibration. If its amplitudes are high enough, ground vibration has the potential to damage structures, cause cosmetic damage or disrupt the operation of vibration-sensitive equipment such as electron microscopes and advanced technology production and research equipment. Ground vibration and groundborne noise can also be a source of annoyance to individuals who live or work close to vibration-generating activities (Caltrans, 2013b).

In describing vibration in the ground and in structures, the motion of a particle (i.e., a point in or on the ground or structure) is used. The concepts of particle displacement, velocity, and acceleration are used to describe how the ground or structure responds to excitation. Although displacement is generally easier to understand than velocity or acceleration, it is rarely used to describe ground and structure borne vibration because most transducers used to measure vibration directly measure velocity or acceleration, not displacement. Accordingly, vibratory motion is commonly described by identifying the peak particle velocity (PPV) (Caltrans, 2013b).

3.10.2 Existing Conditions

Noise and Vibration-Sensitive Receptor Locations

Some land uses are considered more sensitive to noise than others due to the amount of noise exposure and the types of activities typically involved at the receptor location. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, nursing homes, and parks are generally more sensitive to noise than commercial and industrial land uses. Noise sensitive land uses adjacent to and within proximity to (i.e., within approximately 500 feet) the Project Site are single- and multi-family residential, as shown in **Figure 3.10-2.**

Ambient Noise and Vibration Levels

The Project Site is located at 700-800 S. San Gabriel Boulevard in the east/central part of the City, and is currently vacant with no existing structures. The Project Site is bounded by E. Grand Avenue on the south, S. Gladys Avenue on the east, E. El Monte Street on the north, and S. San Gabriel Boulevard on the west. Surrounding land uses are commercial, and single- and multi-family residential developments.

Given the Project Site is void of active uses, there is no current noise that is generated from within the Project Site. Primary noise sources observed in the Project Site vicinity represent typical noise levels expected in a suburban, mostly residential, environment. The predominant existing noise source is vehicle traffic noise from the roadways surrounding the Project Site: S. San Gabriel Boulevard, S. Gladys Avenue, E. Grand Avenue, and E. El Monte Street. The nearest freeway is the I-10, approximately 1.5 miles to the south. Secondary noise sources include general residential- and commercial-related activities, such as landscaping and refuse service activities, and intermittent aircraft flyovers and passing trains. The Southern Pacific Railway is located below-grade, approximately 650 feet north of the Project Site with dense intervening residential and commercial development between the rail line and the Project Site, providing distance and barrier attenuation (as the railway is situated below-grade).



SOURCE: Nearmap, 2020.

Pacific Square San Gabriel Mixed-Use Project

Figure 3.10-2
Noise Sensitive Receptors and Noise Measurement Locations

ESA

To establish baseline noise conditions representing the nearby noise sensitive land uses in the vicinity of the Project Site, existing ambient noise levels measurements were conducted at 10 locations, labeled as R1 through R10 in **Figure 3.10-2** and as described as follows:

- R1 - on the western Project Site boundary, approximately 80 feet from commercial development across S. San Gabriel Boulevard;
- R2 - on the eastern Project Site boundary, approximately 50 feet from multi-family residences across S. Gladys Avenue;
- R3 - at multifamily residences, approximately 40 feet south of the Project Site across E. Grand Avenue at S. Gladys Avenue;
- R4 - at multifamily residences, approximately 75 feet northeast of the Project Site across the intersection of E. El Monte Street and S. Gladys Avenue;
- R5 - Single- and multi-family residences along Sunset Avenue, approximately 450 feet northwest of the Project Site across S. San Gabriel Boulevard;
- R6 - Single- and multi-family residences along E. El Monte Street, approximately 245 feet west of the Project Site across S. San Gabriel Boulevard;
- R7 - Single- and multi-family residences along Pearl Street, approximately 235 feet west of the Project Site across S. San Gabriel Boulevard;
- R8 - Single- and multi-family residences along E. Grand Avenue, approximately 225 feet west of the Project Site across S. San Gabriel Boulevard;
- R9 - Single- and multi-family residences along East Mission Road, approximately 330 feet southwest of the Project Site across S. San Gabriel Boulevard; and
- R10 - Single- and multi-family residences along E. Grand Avenue, approximately 500 feet east of the Project Site.

There are other noise-sensitive uses located at distances greater than 500 feet from the Project Site, however, the construction noise would further attenuate to even lower noise levels at these uses. As stated previously, construction on the Project Site is considered a point source for receivers at more than 500 feet away. At this distance, construction equipment or activity noise would be attenuated by 20 dBA on hard ground and 25 dBA on soft ground. In addition, the intervening buildings/structures between the Project Site and these distant receivers would provide, at a minimum, a 10 dBA noise reduction from barrier effect. With a minimum of 30 dBA in noise reduction from the Project Site to receivers more than 500 feet away. As such, typical construction activities, similar to the proposed Project, generate noise levels that attenuate well below municipal construction noise level limits. Therefore, additional uses father away were not evaluated.

Long-term (24-hour) noise measurements were conducted at locations R1 and R2, and short-term (15-minute) noise measurements were conducted at locations R3 through R10 (See **Tables 3.10-1** and **3.10-2**). Though the Project Site does not contain any active uses, measured noise levels at the Project Site (R1 and R2) and adjacent to the Project Site (R3 and R4) represent typical noise levels expected in a suburban, mostly residential, environment. The short-term noise measurements were conducted between 1:52 PM and 4:32 PM on September 26, 2018, and long-term measurements were conducted from September 26 - 27, 2018 to characterize the existing

24-hour noise environment in the Project vicinity. The long-term measurements are used to characterize the existing hourly average ambient noise levels over a 24-hour period at the Project Site boundary, which identifies the quietest noise level hour for potential worst-case operational noise impacts at night.

TABLE 3.10-1
SUMMARY OF LONG-TERM AMBIENT NOISE MEASUREMENTS

Measurement Locations (Date and Time of Day)	Measured Ambient Noise Levels (dBA L_{eq}) Daytime Range (7 AM to 10 PM)	Daytime Average	Nighttime Range (10 PM to 7 AM)	Nighttime Average
R1 9/26/2018 (10:00 AM) - 9/27/2018 (12:00 PM)	64.1 - 68.5	66.5	56.5 - 68.8	63.2
R2 9/26/2018 (11:00 AM) - 9/27/2018 (1:00 PM)	53.4 - 61.7	57.9	46.4 - 56.4	51.0

SOURCE: ESA, 2019.

The ambient noise measurements were conducted using Larson Davis's model 820 Precision Integrated Sound Level Meter (SLM), which is a Type 1 standard instrument, as defined in the American National Standard Institute S1.4. The SLM was within its annual factory calibration, field calibrated prior to conducting measurements, and operated according to the applicable manufacturer specification. The microphone of the SLM was placed at a height of five feet above the local grade, representing an average height of the human ear.

Ambient vibration levels are typically not measured in areas, such as the Project Site, where background vibration velocity levels would be limited to heavy truck traffic on surrounding roadways, typically, approximately 0.0013 in/sec PPV, which is well below the vibration velocity level threshold of human perception. Observed noise and activity levels at and surrounding the Project Site did not identify uncharacteristically high sources of vibration (e.g., impact construction activity, adjacent freeways). Intermittent train traffic on the rail line approximately 600 feet away would generate vibration at its source, however, would dissipate with this distance at the Project Site.

TABLE 3.10-2
SUMMARY OF SHORT-TERM (15 MINUTES) AMBIENT NOISE MEASUREMENTS

Measurement Locations Date (Time of Day)	Noise Level (dBA L_{eq}) [a]
R3 9/26/2018 (2:11 PM - 2:26 PM)	60.9
R4 9/26/18 (3:56 PM - 4:11 PM)	54.1
R5 9/26/18 (4:17 PM - 4:32 PM)	57.0
R6 9/26/18 (3:36 PM - 3:51 PM)	59.3
R7 9/26/18 (3:16 PM - 3:31 PM)	56.8
R8 9/26/18 (2:35 PM - 2:50 PM)	58.2
R9 9/26/18 (2:55 PM - 3:10 PM)	66.6
R10 9/26/18 (1:52 PM - 2:07 PM)	64.0

[a] Detailed measured noise data, including hourly L_{eq} levels not shown in this table, are included in Appendix H.

SOURCE: ESA, 2019.

Existing Modeled Roadway Noise Levels

The Project's Circulation Study (Fehr & Peers, 2020b) analyzed traffic conditions at 6 intersections surrounding of the Project Site. However, the noise measurements and calculations presented below include 18 intersections in the Project vicinity to characterize the noise levels in the area surrounding the Project Site. Based on vehicle turning movement data provided in the Traffic Study for studied intersections, existing vehicle traffic noise levels were calculated for eight roadway segments. The roadway segments selected for analysis are considered to be those that are expected to be the most directly affected by Project-related traffic, which, for the purpose of this noise analysis, include the roadways that are located near and leading to the Project Site. These roadways, when compared to roadways located at a greater distance from the Project Site, would experience the greatest volume or percentage increase in traffic generated by the Project (as distances are increased from the Project Site, traffic is spread out over a greater geographic area and its corresponding noise effects are reduced).

Existing traffic noise levels were calculated using the Caltrans Technical Noise Supplement (TeNS) method based on the roadway traffic volume data and traffic volumes at the study intersections analyzed in the Traffic Study. The model calculates the average traffic noise levels at specific

locations based on traffic volumes, average speeds, and site environmental conditions. The expected average daily noise levels along these roadway segments are presented in **Table 3.10-3**.

TABLE 3.10-3
EXISTING MODELED ROADWAY NOISE LEVELS

Street	Roadway Segment	Existing Land Uses Located Along Roadway Segment	Noise Level (dBA CNEL)
Broadway	Between Del Mar Avenue and S. San Gabriel Boulevard.	Multi-Family Residential/Commercial	67.1
Broadway	East of S. San Gabriel Boulevard	Commercial	67.7
Broadway	West of Del Mar Avenue	Residential/Commercial	65.8
California Avenue	North of Mission Road/E. Grand Avenue	Single-Family Residential	53.7
California Avenue	South of Mission Road/E. Grand Avenue	Single-Family Residential/Educational	59.8
Del Mar Avenue	Between Broadway and Mission Road	Commercial/Single-Family Residential	70.0
Del Mar Avenue	Between Las Tunas Drive and Broadway	Residential	70.1
Del Mar Avenue	Between Mission Road and Valley Boulevard	Single-Family Residential	70.4
Del Mar Avenue	North of Las Tunas Drive	Commercial	69.3
Del Mar Avenue	South of Valley Boulevard.	Commercial	70.8
E. El Monte Street	Between S. San Gabriel Boulevard and S. Gladys Avenue.	Commercial	53.6
S. Gladys Avenue	Between E. El Monte Street and E. Grand Avenue	Multi-Family Residential/Commercial	56.5
S. Gladys Avenue	Between E. Grand Avenue and Mission Road	Multi-Family Residential/Commercial	53.4
S. Gladys Avenue	North of E. El Monte Street	Multi-Family Residential/Commercial	53.8
S. Gladys Avenue	South of Mission Road	Commercial/Single-Family Residential	56.9
E. Grand Avenue	Between S. Gladys Avenue and Walnut Grove Avenue	Commercial/Single-Family Residential	61.9
E. Grand Avenue	Between S. San Gabriel Boulevard and S. Gladys Avenue	Commercial	62.1
E. Grand Avenue	East of Walnut Grove Avenue	Commercial/Single-Family Residential	62.1
Hermosa Drive	East of S. San Gabriel Boulevard.	Single-Family Residential	63.1
Hermosa Drive	West of S. San Gabriel Boulevard	Single-Family Residential	63.5
Junipero Serra Drive/Mission Road	Between Mission Road./San Gabriel Mission and Del Mar Avenue	Residential	67.5
Las Tunas Drive	between Del Mar Avenue and S. San Gabriel Boulevard	Commercial	69.0
Las Tunas Drive	East of S. San Gabriel Boulevard.	Commercial	72.5
Las Tunas Drive	West of Del Mar Avenue	Commercial	72.3
Mission Drive	East of Walnut Grove Avenue	Single-Family Residential	70.8

Street	Roadway Segment	Existing Land Uses Located Along Roadway Segment	Noise Level (dBA CNEL)
Mission Road	Between Del Mar Avenue and California Avenue	Commercial/Single-Family Residential	68.7
E. El Monte Street	Between Del Mar Avenue and S. San Gabriel Boulevard	Single-Family Residential	58.8
Mission Road	Between S. Gladys Avenue and Walnut Grove Avenue	Single-Family Residential	70.2
Mission Road	Between S. San Gabriel Boulevard. and S. Gladys Avenue	Commercial	70.2
Mission Road./S.E. Grand Avenue (Mission)	Between California Avenue and S. San Gabriel Boulevard	Commercial/Single-Family Residential	69.5
Mission Road./S.E. Grand Avenue (Grand)	Between California Avenue and S. San Gabriel Boulevard	Single-Family Residential	53.1
Mission Road/S.E. Grand Avenue	East of California Avenue	Single-Family Residential/Educational	59.4
S. San Gabriel Boulevard	Between Broadway and E. El Monte Street	Commercial	73.2
S. San Gabriel Boulevard	Between E. El Monte Street and S. Grand Avenue	Commercial	73.0
S. San Gabriel Boulevard	Between S. Grand Avenue and Mission Road	Commercial	72.9
S. San Gabriel Boulevard	Between Hermosa Drive and Las Tunas Drive	Commercial	72.5
S. San Gabriel Boulevard	Between Las Tunas Drive and Broadway	Commercial	72.7
S. San Gabriel Boulevard	Between Mission Road and Valley Boulevard	Commercial	72.7
S. San Gabriel Boulevard	North of Hermosa Drive	Commercial	72.8
S. San Gabriel Boulevard	South of Valley Boulevard	Commercial	72.5
Valley Boulevard	Between Del Mar Avenue and S. San Gabriel Boulevard	Commercial	70.9
Valley Boulevard	East of S. San Gabriel Boulevard.	Commercial	72.0
Valley Boulevard	West of Del Mar Avenue	Commercial	72.2
Walnut Grove Avenue	Between S. Grand Avenue and Mission Drive	Single-Family Residential	66.7
Walnut Grove Avenue	North of S. Grand Avenue	Commercial	67.5
Walnut Grove Avenue	South of Mission Drive	Single-Family Residential	67.9

SOURCE: Fehr & Peers, 2020b; ESA, 2019.

3.10.3 Regulatory Framework

Federal Level

Under the authority of the Noise Control Act of 1972, the United States Environmental Protection Agency (USEPA) established noise emission criteria and testing methods published in Parts 201 through 205 of Title 40 of the Code of Federal Regulations (CFR) that apply to some transportation equipment (e.g., interstate rail carriers, medium trucks, and heavy trucks) and construction equipment. In 1974, USEPA issued guidance levels for the protection of public health and welfare in residential land use areas of an outdoor L_{dn} of 55 dBA and an indoor L_{dn} of 45 dBA (USEPA, 1974). These guidance levels are not considered as standards or regulations, and were developed without consideration of technical or economic feasibility. There are no federal noise standards that directly regulate environmental noise related to the construction or operation of the Project.

State Level

California Noise Guidelines

The State of California does not have statewide standards for environmental noise, but the California Department of Health Services (DHS) has established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. The purpose of these guidelines is to maintain acceptable noise levels in a community setting for different land use types. Noise compatibility by different land uses types is categorized into four general levels: "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable." For instance, a noise environment ranging from 50 dBA CNEL to 65 dBA CNEL is considered to be "normally acceptable" for multi-family residential uses, while a noise environment of 75 dBA CNEL or above for multi-family residential uses is considered to be "clearly unacceptable." In addition, California Government Code Section 65302(f) requires each county and city in the State to prepare and adopt a comprehensive long-range general plan for its physical development, with Section 65302(g) requiring a noise element to be included in the general plan. The noise element must: (1) identify and appraise noise problems in the community; (2) recognize State of California Department of Health Services, Office of Noise Control guidelines; and (3) analyze and quantify current and projected noise levels. The City's Noise Element is described in further detail below.

California Vibration Criteria

There are no State-established vibration standards. While the Caltrans' Transportation and Construction Vibration Guidance Manual does not provide standards for vibration, it does provide vibration criteria that can be used as screening tools for assessing the potential for adverse vibration effects related to structural damage and human perception (Caltrans, 2013b). The vibration criteria established by Caltrans for assessing structural damage and human perception are shown in **Table 3.10-4** and **Table 3.10-5**, respectively.

TABLE 3.10-4
CALTRANS VIBRATION DAMAGE POTENTIAL THRESHOLD CRITERIA

Structure and Condition	Maximum PPV (in/sec)[a]	
	Mobile (Transient) Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

[a] PPV = Peak Particle Velocity; in/sec = inches per second

NOTE: Mobile (transient) sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

SOURCE: Caltrans, 2013b.

TABLE 3.10-5
CALTRANS VIBRATION ANNOYANCE POTENTIAL CRITERIA

Structure and Condition	Maximum PPV (in/sec)[a]	
	Mobile (Transient) Sources	Continuous/Frequent Intermittent Sources
Slightly perceptible	0.04	0.012
Distinctly perceptible	0.25	0.035
Strongly perceptible	0.9	0.10
Disturbing	2.0	0.7

[a] PPV = Peak Particle Velocity; in/sec = inches per second

NOTE: Mobile (transient) sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

SOURCE: Caltrans, 2013b.

Local Level

City of San Gabriel General Plan

The Noise Element of the General Plan outlines goals and actions that are applicable to noise and vibration and the Project as follows:

Noise Element

Goal 9.2: Minimize the impact of traffic noise for those who live and work on our major roadways.

Goal 9.4: Protect residents from the harmful effects of noise from mechanical equipment and trucks.

The City's Noise Element also establishes community noise standards for maximum exterior and interior noise levels. **Table 3.10-6** provides the following exterior noise levels to receptor properties within a designated noise zone. As shown in **Table 3.10-6**, the residential exterior standards are 50 dBA daytime and 45 dBA nighttime, used as reference noise level that is adjusted for the duration of the noise-generating event.

TABLE 3.10-6
CITY OF SAN GABRIEL GENERAL PLAN EXTERIOR NOISE STANDARDS

Noise Zone	Designated Noise Zone Land Use (Receptor Property)	Time Interval	Exterior Noise Level (dB)	Standard 1 (dB)[a]	Standard 2 (dB)[b]	Standard 3 (dB)[c]	Standard 4 (dB)[d]	Standard 5 (dB)[e]
I	Noise-sensitive area	Anytime	45	45	50	55	60	65
II	Residential Properties	10:00 PM – 7:00 AM (Nighttime)	45	45	50	55	60	65
		7:00 AM – 10:00 PM (Daytime)	50	50	55	60	65	70
III	Commercial Properties	10:00 PM – 7:00 AM (Nighttime)	55	55	60	65	70	75
		7:00 AM – 10:00 PM (Daytime)	60	60	65	70	75	80
IV	Industrial Properties	Anytime	60	60	65	70	75	80

[a] Standard No. 1 is the exterior level that may not be exceeded for more than a total of 30 minutes in any hour.
[b] Standard No. 2 is the exterior level that may not be exceeded for more than a total of 15 minutes in any hour.
[c] Standard No. 3 is the exterior level that may not be exceeded for more than a total of 5 minutes in any hour.
[d] Standard No. 4 is the exterior level that may not be exceeded for more than a total of 1 minutes in any hour.
[e] Standard No. 5 is the exterior level that may not be exceeded for any period of time.

SOURCE: City of San Gabriel, 2004.

The following interior noise levels for residential dwellings shall apply, within all such dwellings with windows in their normal seasonal configuration, as shown in **Table 3.10-7**.

TABLE 3.10-7
CITY OF SAN GABRIEL GENERAL PLAN INTERIOR NOISE STANDARDS

Noise Zone	Designated Noise Zone Land Use (Receptor Property)	Time Interval	Allowable Interior Noise Level (dB)	Standard 1 (dB)[a]	Standard 2 (dB)[b]	Standard 3 (dB)[c]
All	Residential Properties	10:00 PM – 7:00 AM (Nighttime)	40	40	45	50
		7:00 AM – 10:00 PM (Daytime)	45	45	50	55

No source of sound, or creation of any noise, which causes the noise level when measured inside a neighboring receiving dwelling unit to exceed the following standards:

[a] Standard No. 1 is the interior level that may not be exceeded for more than a total of 5 minutes in any hour.

[b] Standard No. 2 is the interior level that may not be exceeded for more than a total of 1 minutes in any hour.

[c] Standard No. 3 is the interior level that may not be exceeded for any period of time.

SOURCE: City of San Gabriel, 2004.

City of San Gabriel Municipal Code

Although the City's noise standards are contained within the Noise Element of the City's General Plan, the City's Municipal Code (SGMC) includes several references to noise control. The following sections of the SGMC are applicable to the Project:

Title IX: General Regulations

Section 98.02 MAINTENANCE OF PREMISES; NUISANCES.

It shall be unlawful and hereby declared a public nuisance for any person or persons either owning, leasing, occupying or having charge or possession of any real property within the city to cause, permit or allow any of the following conditions to exist thereon:

(T) To maintain or operate, between the hours of 10:00 PM and 7:00 AM, any device, instrument, vehicle or machinery in such a manner as to create noise or cause vibrations which cause discomfort or annoyance to reasonable persons of normal sensitivity, or which endangers the comfort, repose, health or peace of the public or of any person using or occupying other property in the vicinity;

Title XIII: General Offenses

Section 130.09 NOISE CAUSED BY MACHINERY.

It shall be unlawful for any person to run or operate, or permit to be run or operated, any mechanical, electrical, electronic, hydraulic, or wind-driven equipment, fan, pump, compressor, blower, motor, engine, machine, or other similar apparatus, whether as owner, agent, employee, lessee, or other person having the charge thereof, which causes, or is likely to cause, any loud, excessive, unnecessary, or unusual continued or intermittent noise, or any noise which annoys, disturbs, injures, or endangers the comfort, repose, health, peace, or safety of others within the city unless such noise is muffled effectually and the apparatus is either

equipped with a muffler device in constant operation and properly maintained to deaden such noise, or the apparatus is enclosed in a room, building, or other enclosure sufficiently insulated to deaden such noise.

Title XV: Land Usage

Section 150.003 Construction; Hours of Construction

No construction shall take place within the city except between the hours of 7:00 AM and 7:00 PM, Monday through Friday and between the hours of 8:00 AM and 4:00 PM on Saturday. Construction shall be prohibited on Sundays and such holidays as may be designated by Council resolution. The Community Development Director may extend the hours of operation for special circumstances by providing written notice to surrounding residents in advance. The restriction on construction hours shall not apply to emergency repairs required to protect the public health, safety, and welfare, whether performed by a public agency, utility, company, or private owner. Said restrictions also shall not apply to a residential property owner and or members of his immediate family, performing work on his personal property.

3.10.4 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines, and the thresholds of significance in the City of San Gabriel General Plan Noise Element and Municipal Code. A project would result in a significant adverse impact related to noise and vibration if it would:

a) Generate 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;

b) Generate excessive groundborne vibration or groundborne noise levels; or

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.

The Project Site and all associated potential Project-related activities would not be located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, would not be located within two miles of a public use airport. The nearest airport is the San Gabriel Airport (formerly known as, the El Monte Airport), approximately 3.1 miles east of the Project Site, which is not located within and airport influence area of an airport land use plan (Los Angeles County, 1991). Therefore, the Project would not expose people to excessive noise from a public airport or private airstrip, and these two issue areas, and there would be no impact. This issue will not be analyzed further in this EIR.

The significance threshold for estimated Project traffic noise would be an increase of 5 dBA or greater, when compared to projected future traffic noise conditions without the Project.

Applicable vibration standards are provided by Caltrans, which recommends construction vibration structural damage criteria of 0.5 in/sec PPV for older residential structures from mobile vibration sources (Caltrans, 2013b). With respect to human annoyance, Caltrans' recommends vibration annoyance potential criteria of 0.04 in/sec PPV for mobile sources (Caltrans, 2013b).

3.10.5 Methodology

The following describes the methodologies used to determine the noise and vibration impacts of the project.

Construction Noise

Construction of the proposed Project would first occur for the 700 Plaza, which would take place from approximately May 2021 to September 2023. Construction of the 800 Plaza would overlap with construction of the 700 Plaza and would take place from August 2021 to December 2023. Subphases of construction would include site preparation, grading, infrastructure installation, foundation, building construction, paving and architectural coatings. Approximately 192,000 cubic yards of soil would be exported due to required excavation, requiring daily haul truck activity on the site during the grading phase.

Construction noise levels were estimated using the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) based on construction equipment needed for the Project provided by the Applicant including air compressors, cement and mortar mixers, compactors, cranes, dozers, dump trucks, excavators, forklifts (rough-terrain), generators, graders, pavers, rollers, scrapers, tractor/loader/backhoes, and welders. Modeled construction noise levels were identified for the nearest representative sensitive receptors (R3 – R10, shown on **Table 3.10-2**) based on their respective distances from the Project Site. To present a conservative impact analysis, the estimated noise levels were calculated for a scenario in which all construction equipment was assumed to be operating simultaneously (i.e., on both the 700 and 800 Plazas) and at a location within the Project Site that is nearest to the affected receptors. These assumptions represent a worst-case noise scenario because construction activities would typically be spread out throughout the Project Site and would be located further away from the affected receptors. The estimated noise levels at the affected receptors were then analyzed and disclosed. Construction hours of the project are then compared against the construction noise requirements established in the SGMC to determine whether the construction would occur during established allowable hours. Applicable construction noise standards in the SGMC sets allowable construction hours and days of the week to 7:00 AM to 7:00 PM Monday to Friday, and 8:30 AM to 4:00 PM on Saturdays, but does not set a limit on construction noise levels.

Operational Noise

Once constructed, Project operation would generate noise from the operation of mechanical equipment on the exterior of Project buildings, vehicle traffic accessing parking garages, outdoor public events in central park/plaza of the Project Site, and Project traffic on area roadways. The methodology on how each of these components is addressed are described below.

On-site Building Exterior Mechanical Equipment

Noise would be generated on-site from the mechanical equipment (i.e., on the exterior of the Project buildings such as rooftops). The equipment noise levels were assessed based on SGMC requirements and measured data, and their impacts on the nearby off-site receptors are determined based on their distance from these receptors. The noise levels determined at the off-site, noise-sensitive receptors were then compared to the stationary source noise significance thresholds identified in the City's General Plan Noise Element or SGMC.

On-site Parking Garages

Noise would be generated on-site from the operation of the two, three-level concrete parking garages with one subterranean basement level, one at grade (ground floor) level, and one at mezzanine level. Residential parking is provided in the subterranean basement level of both garages with street access provided by two driveways onto S. Gladys Avenue. Commercial parking is provided on the ground and mezzanine levels of both garages with street access provided by ground-level access points along E. El Monte Street, S. Gladys Avenue, E. Grand Avenue, and S. San Gabriel Boulevard. The Project's peak hourly noise level that would be generated by the on-site parking was estimated using the Federal Transit Administration (FTA) equation for parking garages (FTA, 2018) based on peak hour vehicle trips in the Project's Circulation Study (Fehr & Peers, 2020b). The estimated peak hour parking garage noise levels would be compared to existing measured ambient noise levels to determine potential noise impacts.

On-site Outdoor Events

The Project includes publicly accessible open space areas between the 700 and 800 Plazas that would be available to the general public. This includes 33,543 square feet of central park/plaza area with landscaping and outdoor seating areas with the focus of creating an on-site, pedestrian-oriented open space. Of the 33,543 square feet of central park/plaza area, 26,283 square feet is considered as areas in which people could gather passively or during community events. This includes a pavilion located in the middle of the central park/plaza area. The remaining 7,260 square feet consists of raised planters, a water feature, space for the, at maximum, 10 food vendors, and outdoor seating from the ground-floor restaurant spaces. The event space capacity assumes a conservative spacing of attendees of one person per 11 square feet based off of an average of people sitting around a table (approximately 1 person per 15 square feet) and people standing at an event (approximately 1 person per 7 square feet). Assuming a conservative spacing of attendees of one person per 11 square feet equates to approximately 1,195 attendees.

Community events in the central park/plaza space could include a weekly market, assumed to occur from 6:00 PM to 10:00 PM during a weekday. Noise-generating activities at the pavilion in the central park/plaza area could include live (non-amplified) music, other pre-recorded amplified music or movie (through the proposed speaker system), food trucks, other off-site food vendors, as well as the event attendees in the central park/plaza area. The central park/plaza space could also host events similar to those currently held for the City of San Gabriel's annual "Summer in San Gabriel" outdoor events (e.g., concert followed by a movie). This analysis assumes such events would occur from 6:00 PM to 10:00 PM. Event noise would be generated in the central park/plaza from the amplified sound from the pavilion (i.e., speakers) for the outdoor events as well as the

people gathering and talking within the central park/plaza. Event noise impacts were evaluated by identifying the noise levels generated by the potential outdoor public events (e.g., people and music/movie) at the source, modeling the hourly average noise level L_{eq} at the property lines of the nearest noise sensitive receptors (i.e., residences), and comparing such noise levels to the adjusted City noise standards based on the measured ambient noise levels at each receptor (see below).

The outdoor event noise was modeled using the CadnaA noise propagation program. CadnaA is a Windows-based software program that predicts and assesses noise levels in the vicinity of noise sources based on International Organization for Standardization 9613-2 algorithms for noise propagation calculations. CadnaA considers environmental factors, such as topography, intervening structures, and distance (both horizontally and vertically) from a noise source. This is particularly relevant for projects containing outdoor gathering and performance areas that would have amplified sound that could potentially exceed noise standards at nearby noise sensitive receptors (i.e., residences). Since the Project has an open-air plaza for gatherings and performances with adjacent proposed buildings on-site that create a relatively complex soundscape, the CadnaA model was used to estimate outdoor event noise levels at the nearby residential receptors. Modeling inputs included the noise sources of people gathering and talking, speaker sound levels of music (live or recorded) or a movie, and the ambient noise level at the residential property line. The modeling inputs are variable, based on the number of people in attendance, conversation levels, and speaker volume. For the purposes of the analysis below, the speaker volumes and noise levels are considered at a maximum noise level of 93 dBA at 3.28 feet (1 meter). Conversational noise for the CadnaA modeling of outdoor event noise includes an outdoor concert with a maximum noise level of 93 dBA at 3.28 feet (1 meter) and assumes that 50 percent of the people in attendance of the event are talking at any given time. The rationale is that any one of a pair of attendees is talking while the other listens.

Applicable noise standards in the Noise Element of the City's General Plan sets exterior daytime (7:00 AM to 10:00 PM) residential noise standards at 50 dBA L_{eq} and 70 L_{max} at the residential property line. However, if the measured existing ambient noise levels near the Project Site already exceeded this City standard then the measured noise levels shall be used as the baseline condition; e.g., at location R2, measured ambient noise levels ranged from approximately 59.0 to 53.4 dBA L_{eq}, respectively, from 6:00 PM to 10:00 PM on a weekday. Therefore, for this Project analysis, the City daytime residential standard is raised to the measured ambient noise level at a residence plus 5 dBA for impact analysis. As discussed in Subsection 3.10.1, *Noise and Vibration Background,* a change in ambient noise levels of 5 dBA is considered to be a readily perceivable difference by a healthy human ear (Caltrans, 2013a).

The residence nearest the event noise source is located directly across S. Gladys Avenue from the proposed central park/plaza, where it opens directly to S. Gladys Avenue (between the proposed buildings of the 700 and 800 Plazas). From the ambient noise levels measured for the Project, measurement location R2 near the residence closest to the event noise source (the central park/plaza) (R2), the quietest hour was measured from 9:00 PM to 10:00 PM at approximately 53.4 dBA L_{eq}, which would be the potential worst-case hour during an outdoor event for a noise impact at a residence. Therefore, the noise standard at this location would be raised to measured ambient

noise level of approximately 53.4 dBA L_{eq} plus 5 dBA, equaling 58.4 dBA L_{eq} for worst-case noise impact scenario for Project event noise at this location (R2).

Off-site Project-Generated Traffic

Noise impacts resulting from Project-generated vehicle traffic volumes estimated on surrounding streets were evaluated using Caltrans' TeNS method, whereby vehicle traffic volumes on surrounding select streets both with and without the Project-generated traffic are modeled. The model calculates the average traffic noise levels at specific locations based on traffic volumes, average speeds, and site environmental conditions. Information regarding the existing and Project-generated traffic is provided by the Project's Circulation Study (Fehr & Peers, 2020b). The incremental increase in future average daily noise levels along these roadway segments with and without the Project is compared to the significance threshold of a vehicle traffic noise increase of 5 dBA or greater on each segment.

Construction and Operational Groundborne Vibration

Groundborne vibration levels resulting from the operation of construction equipment at the Project Site were estimated at potential vibration sensitive receptors (i.e. inhabited building structures) using data in FTA's *Transit Noise and Vibration Impact Assessment* (FTA, 2018), and compared against state agency (i.e., Caltrans) vibration impact criteria for potential structural damage and human annoyance. Potential vibration levels resulting from Project construction are identified for adjacent off-site locations that are sensitive to vibration (i.e., people and existing structures) based on their distance from construction activities. The types of uses (mixed use) included in the proposed Project are not anticipated to generate excessive vibration levels, and therefore, would not result in vibration impacts to people and structures.

3.10.6 Environmental Impact Analysis

Impact NOI-1: The proposed Project would not generate 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. (Potentially Significant Construction Impact. Potentially Significant Operational Impact.)

Construction Noise

On-Site Construction Noise

Construction of the 700 Plaza would commence in May 2021, with construction of the 800 Plaza commencing shortly after in August 2021. Construction of 700 Plaza would be completed in September 2023. The 800 Plaza would be completed in December 2023. Occupancy would occur following the completion of construction at each phase; therefore, the 700 Plaza would be operational after September 2023 and the 800 Plaza would be operational after December 2023.Construction would require the use of heavy-duty equipment during the construction activities at the Project Site which would include site preparation, excavation/grading, building construction, drainage/utilities/trenching, architectural coating, and paving. Heavy-duty equipment, such as air compressors, cement/mortar mixers, compactor, cranes, dozers, dump trucks, excavators, forklifts, generators, graders, pavers, rollers, and scrapers,

tractor/loader/backhoes, and welders would be used at the Project Site for different durations throughout the construction period. Construction activities would also involve the use of smaller power tools, generators, and other sources of noise. During each construction subphase (e.g., excavation/grading or architectural coating), there would be a different mix of equipment types, sizes, and number in operation. As such, construction noise levels at the Project Site and nearby receptors would fluctuate depending on the particular type, number, and duration of use of the various pieces of construction equipment. Individual pieces of the heavy-duty equipment (listed above) produce maximum noise levels ranging from 75 to 90 dBA L_{max} at a reference distance of 50 feet from the noise source, when operating at full power, as shown in **Table 3.10-8**. **Table 3.10-8** also includes the estimated usage factor for each piece of equipment, which are based on Federal Highway Administration (FHWA's) Roadway Construction Noise Model (RCNM) User's Guide (FHWA, 2006).

TABLE 3.10-8
CONSTRUCTION EQUIPMENT NOISE LEVELS

Construction Equipment	Noise Level (dBA L_{max}) at 50 Feet	Estimated Usage Factor, %
Air Compressor	78	40
Cement and Mortar Mixer	79	40
Compactor	83	20
Cranes	81	16
Dozer (rubber-tired)	82	40
Dump Trucks	76	40
Excavator	81	40
Forklift (Rough-terrain)	75	10
Generators	81	50
Graders	85	40
Pavers	77	50
Roller	80	20
Scraper	84	40
Tractor/Loader/Backhoe	82	40
Welders	74	40

SOURCE: FHWA, 2006.

The highest construction noise levels would be generated when multiple pieces of construction equipment are being operated concurrently (including the overlapping of construction at the 700 and 800 Plazas). The residences across the streets surrounding the Project Site would be temporarily exposed to increased exterior noise levels during project construction, which would occur during the daytime.

The Project construction noise levels were estimated for a worst-case noise scenario in which all construction equipment was assumed to be operating simultaneously and located at the construction area nearest to the affected residential receptors to present a conservative noise impact analysis. The estimated noise levels at the off-site sensitive receptors were calculated using FHWA's RCNM

based on the worst-case concurrent operation of several pieces of equipment (e.g., tractor/loader/backhoe, dozer, excavator, graders, etc.) during a phase of construction (e.g., grading/excavation). Typically, on a daily basis, Project construction would use less equipment concurrently, and as such, would actually generate lower noise levels than this worst-case conservative estimate. **Table 3.10-9** identifies the estimated combined maximum and hourly average construction noise levels (including the utilization factor for each equipment) that would occur at the nearest off-site sensitive residential receptors during a peak day of construction activity at the Project Site.

TABLE 3.10-9
ESTIMATED CONSTRUCTION NOISE LEVELS AT NOISE SENSITIVE USES

Off-site Sensitive Land Uses	Closest Distance to Receptor (ft)[a]	Estimated Combined Maximum Construction Noise Levels (dBA L_{max})	Estimated Combined Hourly Average Construction Noise Levels (dBA L_{eq})
R3	550	83	79
R4	65	82	77
R5	460	59	54
R6	240	68	63
R7	240	73	68
R8	550	73	68
R9	750	65	61
R10	725	68	64

[a] The distance represents the nearest construction area on the Project Site to the property line of the off-site receptor.

SOURCE: ESA, 2019.

As shown in **Table 3.10-9**, Project construction noise levels experienced at the off-site sensitive receptors would range from 54 to 79 dBA L_{eq} at the single- and multi-family residences at locations R5 to R3, respectively, as shown on **Figure 3.10-2**. The SGMC limits the allowable construction hours and days of the week to 7:00 AM to 7:00 PM Monday to Friday, and 8:30 AM to 4:00 PM on Saturdays; therefore, Project construction would comply with the allowable construction hours of the SGMC under Section 150.003, Construction. The SGMC does not limit the level of construction noise; therefore, Project construction noise would be in compliance with the SGMC. In addition, the Noise Element of the City's General Plan also does not provide a construction noise level limit. However, the Noise Element provides community noise standards for daytime exterior noise standards of 45 dB for noise-sensitive areas and 50 dB for residential properties (City of San Gabriel, 2004).

Although impacts from construction activities would be less than significant due to compliance with the SGMC, sensitive receptors in the Project vicinity could experience hourly average construction noise levels, shown in **Table 3.10-9**, that exceed the City's daytime operational noise standards of the Noise Element, as well as, exceed these standards adjusted to ambient, and impacts would be potentially significant. Implementation of Mitigation Measure MM-NOI-1 would require

the Applicant to implement best management practices (BMPs) during Project construction, such as placing noise generating construction equipment and locating construction staging areas away from residences, where feasible, and the scheduling of high noise-producing activities between the hours of 8:00 AM and 5:00 PM to minimize disruption to sensitive uses adjacent to the Project Site. **With the implementation of Mitigation Measure MM-NOI-1, on-site Project construction noise would not generate 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, and impacts would be less than significant.**

Mitigation Measures

The incorporation of the following Mitigation Measure MM-NOI-1 would reduce short-term construction-related noise impacts associated with the Project:

> **Mitigation Measure MM-NOI-1:** For all construction-related activities, noise-attenuation techniques shall be employed as needed to ensure that noise remains as low as possible during construction, specifically at each nearby sensitive receptor listed above. The following noise-attenuation techniques shall be incorporated into contract specifications to reduce the impact of construction noise:
>
> a) Ensure that construction equipment is properly muffled according to industry standards and in good working condition.
>
> b) Place noise-generating construction equipment and locate construction-staging areas away from sensitive uses, where feasible.
>
> c) Implement noise attenuation measures to the extent feasible, which may include but are not limited to installing temporary noise barriers or noise blankets around stationary construction noise sources for the duration of project construction.
>
> d) Use electric air compressors and similar power tools rather than diesel equipment, where feasible.
>
> e) All stationary construction equipment (e.g., air compressors, generators, impact wrenches, etc.) shall be operated as far away from residential uses as possible and shall be shielded with temporary sound barriers, sound aprons, or sound skins during operation.
>
> f) Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes.
>
> g) Clearly post construction hours, allowable workdays, and the phone number of the job superintendent at all construction entrances to allow surrounding owners to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party.

Off-Site Construction Traffic Noise

Haul truck trips would occur throughout the construction period for export of excavated soil and delivery of construction equipment and building materials. Construction-related vehicle traffic would likely access the Project Site from I-210 to the north or I-10 to the south via San Gabriel Boulevard

southbound or northbound, respectively. An estimated maximum of approximately 144 haul truck trips would occur per day and approximately 18 haul truck trips would occur per hour along this route, therefore, a minimal contribution to existing traffic on S. San Gabriel Boulevard. As discussed in Subsection 3.10.1, *Noise and Vibration Background - Effects of Noise on People*, an increase barely perceptible to the human ear (i.e., 3 dBA) requires the doubling of a noise source (e.g., doubling traffic noise). The Project's 18 truck trips per hour would generate noise levels of approximately 60.9 dBA L_{eq} at 30 feet distance along S. San Gabriel Boulevard. As shown in **Table 3.10-3**, the modeled existing traffic noise levels at the nearest residences off of S. San Gabriel Boulevard range from approximately 72.5 to 73.2 dBA CNEL, due primarily to traffic noise. Therefore, Project construction traffic noise levels generated by truck trips, combined with ambient noise levels by decimal addition (i.e., 72.5 dBA + 60 dBA = 72.7 dBA) would result in a negligible increase in traffic-related noise levels (by 0.2 dBA) along S. San Gabriel Boulevard, which would be a less than perceptible increase. **Therefore, off-site Project construction traffic noise would not generate 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, and impacts would be less than significant.**

Operational Noise

Once constructed, operation of the Project's land uses would generate noise from four main sources: the operation of mechanical equipment on the exterior of Project buildings, parking garages, outdoor events within the plaza, and Project-generated traffic on select surrounding streets. These are each addressed quantitatively in the following analysis.

On-Site Operational Noise

Building Exterior Mechanical Equipment

Operation of the proposed buildings would generate noise from building mechanical equipment, such as heating, ventilation, and air conditioning (HVAC) units that would be installed on the exterior of the buildings. Mechanical equipment is typically located on building rooftops or within buildings, and shielded from nearby land uses to attenuate noise and avoid conflicts with adjacent uses. In addition, all Project mechanical equipment would be designed with appropriate noise control devices, such as sound attenuators, acoustic louvers, or sound screens/parapet walls to comply with noise limitation requirements provided in **Table 3.10-6**. The Project would install mechanical equipment that would generate noise levels below this threshold consistent with applicable regulatory requirements. **Therefore, on-site operational noise during Project operation from mechanical equipment would not generate 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, and impacts would be less than significant**.

Parking Garages

Sources of instantaneous noise associated with parking facilities typically include engines accelerating, doors slamming, car alarms, and people talking. Noise levels at these facilities would fluctuate throughout the day with the amount of vehicle and human activity. However, vehicle trips, including truck delivery trips to and from the parking garage would generate the highest noise

levels. Noise levels would generally be the highest in the morning and afternoon peak hours, when the largest number of vehicles would enter and exit a parking facility (e.g., parking garage).

The proposed Project would include two three-level concrete parking garages, including one subterranean basement level, one level at grade (ground floor), and one level at mezzanine. For the purpose of providing a quantitative estimate of the noise levels that would be generated from the Project's parking garages, the methodology recommended by FTA for the general assessment of stationary transit noise sources is used. The Project's peak hourly noise level that would be generated by the on-site parking levels was estimated using the FTA equation for a parking garage (FTA, 2018).

Based on the Project's Circulation Study, the Project is forecasted to generate 8,345 daily vehicle trips, of which 721 and 668 trips are estimated to occur during the AM and PM peak hours, respectively (Fehr & Peers, 2020b). Using the FTA's reference parking garage noise level of 92 dBA Sound Exposure Level (SEL) (FTA, 2018) at 50 feet, it was determined that the Project's highest peak hour vehicle trips, which would be 721 trips during the AM peak hour, would generate noise levels of approximately 55 dBA L_{eq} at 50 feet from the Project's parking garages (FTA, 2018). The two closest sensitive receptors to the parking garages are R3, located approximately 55 feet from the southern parking garage, and R4, approximately 65 feet from the northern parking garage. Accounting for noise attenuation with distance, the noise levels from the parking garages (as measured from the ingress/egress locations to the nearest sensitive receptors) would be approximately 54.1 dBA L_{eq} at R3 and 52.7 dBA L_{eq} at R4, which would not exceed the ambient noise levels of approximately 60.9 dBA L_{eq} at R3 and 54.1 dBA L_{eq} at R4, respectively. During other hours of the day, when less overall vehicles arrive and depart from the Project Site, the noise levels at the nearest off-site residential uses would be even lower. **Therefore, on-site operational noise during Project operation from parking areas would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project Site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, and impacts would be less than significant.**

Central Park/Plaza - Outdoor Events

The Project includes an outdoor central park/plaza with landscaping, outdoor seating areas to support the retail uses, and open space areas that could also host community events and individual family uses. Community events could include a weekly market and hosting events similar to those currently held for the City of San Gabriel's annual "Summer in San Gabriel" outdoor events. This analysis assumes such events would occur from 6:00 PM to 10:00 PM. Activities at the weekly market would include people congregating and talking. The weekly market could also include live acoustic music (non-amplified) or pre-recorded low-level amplified music (through the proposed speaker system) (no live amplified music proposed), and food trucks and/or other off-site food vendors. Based on the City's current schedule of "Summer in San Gabriel" outdoor events, evening events at the other venues have consisted of music at approximately 7:00 PM followed by the screening of a movie at approximately 8:30 PM, assumed until 10:00 PM. Activities at these events would include people congregating and talking, with music or a movie. The event music could include live acoustic music (non-amplified), or pre-recorded or live low-level amplified music (through a speaker system).

As shown on Figure 2-4, the central park/plaza would be located at ground-level between the Plaza 700 and Plaza 800 buildings with open space and pedestrian access to S. Gladys Avenue. The nearest sensitive residential receptors are located approximately 100 feet to the east from the outdoor event noise sources. In addition, the central park/plaza is an atrium-like design (i.e., a large open space between the proposed buildings) opening to S. Gladys Avenue. Therefore, this is the potential worse-case scenario for event noise impacts.

Noise generated during the outdoor event was modeled using the CadnaA noise propagation program, which considers topography, intervening structures, and distance (both horizontally and vertically) from noise sources that could potentially exceed noise standards at noise sensitive receptors (i.e., residences) adjacent to the Project Site. Modeling inputs included the noise sources of people gathering and talking, speaker sound levels of music (live or recorded) or a movie, and the ambient noise level at the residential property line. The modeling inputs are variable, based on number of people in attendance, conversation levels, and speaker volume; therefore, the purpose of the modeling was to determine the various scenarios i.e., people talking and speaker volumes as model inputs that would not exceed the exterior noise standard (adjusted to ambient) at the quietest hour (9:00 PM to 10:00 PM) at the nearest residential property lines.

As detailed above in Subsection 3.10.5, *Methodology*, above, the following modeling assumptions for attendance at the events and how conversational noise is calculated were made to determine the noise level of people talking based on the attendees that could be present at an event (either a night market or an event in the pavilion). The total area of the central park/plaza useable for event attendance is approximately 26,283 square feet. Assuming a conservative spacing of attendees of one person per 11 square feet, equates to approximately 1,195 attendees.

Human conversation generates varying noise levels, based on the percentage of people talking and how loud they are talking (quiet, normal, raised, or loud) at any given moment. During the weekly outdoor events, 50 percent of the attendees were assumed to be talking and in a normal tone. **Table 3.10-10** shows the assumptions and results of the noise levels during an outdoor event.

TABLE 3.10-10
UNMITIGATED OUTDOOR EVENT NOISE LEVELS (50 PERCENT ATTENDEES SPEAKING)

Assumptions	Outdoor Event
Total square feet	26,283 sf
Capacity	1,195 attendees
Music Volume @ 3.28 feet (1 meter)	93 dB
% of people talking	50%
Maximum Noise Level	59.0 dB
Threshold	58.8 dB
Exceeds Threshold?	**Yes**

SOURCE: ESA, 2020.

The assumption that 50 percent of people in attendance of the event are talking is a worst-case scenario in that it assumes that half of the entire audience in attendance would be talking during an outdoor event. A more representative scenario would assume that during an outdoor event, 25 percent of the people in attendance would be talking at any given time. The rationale is that 50 percent of the attendees would be listening to the performance and not talking, while the remaining 50 percent of attendees would be speaking to each other (half a pair talking to the other), resulting in 25 percent of total attendees talking at any given time. **Table 3.10-11** shows the assumptions and results of the noise levels during an outdoor event under this more representative scenario, assuming that the outdoor concert is taking place with the same outdoor event noise levels as determined above (maximum noise level of 93 dBA at 3.28 feet [1 meter]) and that 25 percent of the attendees are assumed to be talking in a normal tone.

TABLE 3.10-11
UNMITIGATED OUTDOOR EVENT NOISE LEVELS (25 PERCENT ATTENDEES SPEAKING)

Assumptions	Outdoor Event
Total square feet	26,283 sf
Capacity	1,195 attendees
Music Volume @ 3.28 feet (1 meter)	93 dB
% of people talking	25%
Maximum Noise Level	58.7 dB
Threshold	58.8 dB
Exceeds Threshold?	No

SOURCE: ESA, 2020.

While the likelihood that the noise levels would be more representative of 25 percent conversational noise, in order to make a conservative assessment, the 50 percent conversational noise is assumed for purposes of this analysis. **Therefore, based on the noise assumptions of the number of attendees at the weekly market, a music level of 93 dBA L_{eq} at the source (speakers) at a distance of 3.28 feet (1 meter) or less would result in modeled noise levels exceeding the exterior noise standard (adjusted to ambient) of 58.8 dBA L_{eq} at the nearest residence at the quietest hour, and impacts would be potentially significant. Implementation of Mitigation Measure MM-NOI-2 would require the Applicant to implement best management practices (BMPs) during outdoor events to reduce event-generated noise levels to the extent practicable.**

Table 3.10-12 shows the resulting noise levels with implementation of Mitigation Measure MM-NOI-2.

TABLE 3.10-12
MITIGATED OUTDOOR EVENT NOISE LEVELS (50 PERCENT ATTENDEES SPEAKING)

Assumptions	Outdoor Event
Total square feet	26,283 sf
Capacity	1,195 attendees
Music Volume @ 3.28 feet (1 meter)	92 dB
% of people talking	50%
Maximum Noise Level with MM-NOI-2 Implemented	58.2 dB
Threshold	58.8 dB
Exceeds Threshold?	**No**

SOURCE: ESA, 2020.

As shown in **Table 3.10-12**, noise levels would not exceed the threshold of 58.8 dBA with MM-NOI-2 implemented. **Therefore, implementation of Mitigation Measure MM-NOI-2 would reduce potentially significant impacts from on-site operational noise from outdoor events to less-than-significant levels.**

Mitigation Measures

The incorporation of the following Mitigation Measure MM-NOI-2 would reduce short-term event-related noise impacts associated with the Project:

> **Mitigation Measure MM-NOI-2: Outdoor Performance Sound Restrictions.** Outdoor Project events in the central park/plaza, such as the weekly public market and seasonal special events, shall require sound levels restrictions from the proposed amplified sound system of the pavilion performance stage. Acoustic performances or live or prerecorded, low-level, background music or movie screenings on the pavilion performance stage shall be limited to a sound level equivalent to 92 dBA measured at 3.28 feet (1 meter) (or an equivalent of 74.4 dBA at 25 feet from the noise source). Compliance with this performance standard will be ensured through routine pre-performance sound tests/measurements for performances or ambient music speakers with potential to exceed the sound level, along with any necessary adjustments to the location and nature of proposed performances or music speakers.

With the implementation of Mitigation Measure MM-NOI-2, event noise levels could still potentially exceed the City's exterior noise standard, as well as, adjusted to ambient plus 5 dBA, at the nearest off-site residences due to crowd noise levels, and/or, event sound levels from music or movies, higher than assumed. In addition to the exterior noise standard, the City's General Plan Noise Element includes short-term daytime interior noise standard of 45 dBA (base noise level). The existing ambient of 53.8 dBA L_{eq} (at the residence closest to the event noise source) is already higher than the daytime exterior standard of 50 dBA base noise level, and is adjusted to the ambient plus 5 dBA, i.e., 58.8 dBA L_{eq}. A conservative exterior to interior sound attenuation rate to the off-site residential structures with windows closed is estimated at approximately 20 dBA of reduction (NCBI, 2018). Therefore, the resultant exterior noise level with event noise including ambient would be reduced to interior noise levels of approximately 38.8 dBA L_{eq}, which would be below

the City's interior noise standard. Therefore, even though the Project's operational noise levels would potentially exceed the City's exterior noise standards, the interior noise levels inside these nearest residences, with windows closed would be reduced to below the City's interior noise standards for residential uses.

Off-site Future Traffic Noise

Future roadway noise levels without the Project (baseline noise levels) were calculated along various arterial segments as compared to calculated baseline traffic noise levels that would occur with implementation of the Project. Future traffic noise levels were calculated using the Caltrans' TeNS method based on the roadway traffic volume data and traffic volumes at the study intersections analyzed in the Project Traffic Study. The future average daily noise levels along these roadway segments with and without the Project and the incremental increase are presented in **Table 3.10-13**. As shown in **Table 3.10-13**, the increases would not exceed the significance threshold of an increase of 5 dBA or greater. **Therefore, on-site operational noise during Project operation from future traffic conditions would not generate 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, and impacts would be less than significant.**

Impact NOI-2: The proposed Project would not generate excessive groundborne vibration or groundborne noise levels. (Less than Significant Impact.)

Construction Vibration

Project construction would generate low levels of groundborne vibration at the source as the operation of heavy equipment (i.e., loaders, excavators, backhoes, haul trucks, etc.) generates vibrations that propagate though the ground and diminish in intensity with distance from the source. Project construction would not use high-impact activities such as pile driving or blasting. Groundborne vibrations from construction activities very rarely reach the levels that can damage structures, but they may be perceived in buildings very close to a construction site.

There are no structures on the Project Site, and the Project Site is surrounded by roadways. The nearest off-site receptors to the Project Site that could be potentially be exposed to vibration levels generated from Project construction include inhabited structures surrounding the Project Site.

TABLE 3.10-13
FUTURE ROADWAY TRAFFIC NOISE LEVELS

Street	Roadway Segment	Land Uses Located Along Roadway Segment	Traffic Noise Levels (dBA CNEL)			Significant Impact?
			Future Year (2025)	Future Year (2025) with Project	Increase over Future Year	
Broadway	Between Del Mar Avenue and S. San Gabriel Boulevard	Multi-Family Residential/Commercial	67.5	67.6	0.1	No
Broadway	East of S. San Gabriel Boulevard	Commercial	68.0	68.0	0.0	No
Broadway	West of Del Mar Avenue	Residential/Commercial	66.1	66.2	0.1	No
California Avenue	North of Mission Road/E. Grand Avenue	Single-Family Residential	53.8	53.8	0.0	No
California Avenue	South of Mission Road//E. Grand Avenue	Single-Family Residential/Educational	59.9	59.9	0.0	No
Del Mar Avenue	Between Broadway and Mission Road	Commercial/Single-Family Residential	70.6	70.6	0.0	No
Del Mar Avenue	Between Las Tunas Drive and Broadway	Residential	70.8	70.8	0.0	No
Del Mar Avenue	Between Mission Road and Valley Boulevard	Single-Family Residential	71.2	71.2	0.0	No
Del Mar Avenue	North of Las Tunas Drive	Commercial	69.8	69.9	0.1	No
Del Mar Avenue	South of Valley Boulevard	Commercial	71.1	71.1	0.0	No
E. El Monte Street..	Between S. San Gabriel Boulevard and S. Gladys Avenue	Commercial	55.1	58.4	3.3	No
S. Gladys Avenue	Between E. El Monte Street and E. Grand Avenue	Multi-Family Residential/Commercial	57.6	58.9	1.2	No
S. Gladys Avenue	Between E. Grand Avenue and Mission Road	Multi-Family Residential/Commercial	54.4	56.7	2.4	No
S. Gladys Avenue	North of E. El Monte Street	Multi-Family Residential/Commercial	57.0	57.0	0.0	No
S. Gladys Avenue	South of Mission Rd.	Commercial/Single-Family Residential	55.3	55.3	0.0	No

Street	Roadway Segment	Land Uses Located Along Roadway Segment	Traffic Noise Levels (dBA CNEL)			Significant Impact?
			Future Year (2025)	Future Year (2025) with Project	Increase over Future Year	
E. Grand Avenue	Between S. Gladys Avenue and Walnut Grove Avenue	Commercial/Single-Family Residential	65.3	65.7	0.4	No
E. Grand Avenue	Between S. San Gabriel Boulevard and S. Gladys Avenue	Commercial	62.2	63.1	0.8	No
E. Grand Avenue	East of Walnut Grove Avenue	Commercial/Single-Family Residential	62.3	62.6	0.3	No
Hermosa Drive	East of S. San Gabriel Boulevard	Single-Family Residential	63.1	63.3	0.2	No
Hermosa Drive	West of S. San Gabriel Boulevard	Single-Family Residential	63.6	63.8	0.3	No
Junipero Serra Drive/Mission Road	Between Mission Road/San Gabriel Mission and Del Mar Avenue	Residential	66.7	66.8	0.1	No
Las Tunas Drive	Between Del Mar Avenue and S. San Gabriel Boulevard	Commercial	72.4	72.5	0.1	No
Las Tunas Drive	East of S. San Gabriel Boulevard	Commercial	72.9	72.9	0.0	No
Las Tunas Drive	West of Del Mar Avenue	Commercial	72.7	72.8	0.0	No
Mission Drive	East of Walnut Grove Avenue	Single-Family Residential	71.1	71.2	0.1	No
Mission Road	Between Del Mar Avenue and California Ave.	Commercial/Single-Family Residential	69.0	69.1	0.1	No
E. El Monte Street	Between Del Mar Avenue and S. San Gabriel Boulevard	Single-Family Residential	59.4	60.7	1.3	No
Mission Road	Between S. Gladys Avenue and Walnut Grove Avenue	Single-Family Residential	70.5	70.7	0.2	No
Mission Road	Between S. San Gabriel Boulevard and S. Gladys Avenue	Commercial	70.5	70.7	0.2	No
Mission Road/E. Grand Avenue (Mission)	Between California Avenue and S. San Gabriel Boulevard	Commercial/Single-Family Residential	68.3	68.3	0.1	No
Mission Road/E. Grand Avenue (Grand)	Between California Avenue and S. San Gabriel Boulevard	Single-Family Residential	53.2	53.6	0.4	No
Mission Road/E. Grand Avenue	East of California Avenue	Single-Family Residential/Educational	61.0	61.1	0.1	No
S. San Gabriel Boulevard	Between Broadway and E. El Monte Street	Commercial	73.7	73.9	0.2	No

Street	Roadway Segment	Land Uses Located Along Roadway Segment	Traffic Noise Levels (dBA CNEL)			Significant Impact?
			Future Year (2025)	Future Year (2025) with Project	Increase over Future Year	
S. San Gabriel Boulevard	Between E. El Monte Street and E. Grand Avenue	Commercial	73.6	73.7	0.1	No
S. San Gabriel Boulevard	Between E. Grand Avenue. and Mission Road	Commercial	73.5	73.7	0.2	No
S. San Gabriel Boulevard	Between Hermosa Drive and Las Tunas Drive	Commercial	73.0	73.1	0.1	No
S. San Gabriel Boulevard	Between Las Tunas Drive and Broadway	Commercial	73.3	73.5	0.2	No
S. San Gabriel Boulevard	Between Mission Road and Valley Boulevard	Commercial	73.2	73.4	0.2	No
S. San Gabriel Boulevard	North of Hermosa Drive	Commercial	73.2	73.3	0.1	No
S. San Gabriel Boulevard	South of Valley Boulevard	Commercial	71.8	71.9	0.1	No
Valley Boulevard	Between Del Mar Avenue and S. San Gabriel Boulevard	Commercial	73.0	73.1	0.0	No
Valley Boulevard.	East of S. San Gabriel Boulevard	Commercial	73.1	73.2	0.1	No
Valley Boulevard	West of Del Mar Avenue	Commercial	70.3	70.3	0.0	No
Walnut Grove Avenue	Between E. Grand Avenue and Mission Drive	Single-Family Residential	66.9	67.0	0.1	No
Walnut Grove Avenue	North of E. Grand Avenue	Commercial	68.0	68.1	0.1	No
Walnut Grove Avenue	South of Mission Drive	Single-Family Residential	67.6	67.6	0.0	No

SOURCE: Fehr & Peers 2020b; ESA 2019.

The PPV vibration velocities for several types of construction equipment that can generate perceptible vibration levels are identified in **Table 3.10-14**. Based on the information presented in **Table 3.10-14**, vibration velocities could range from 0.003 to 0.089 in/sec PPV at a reference distance of 25 feet from the source of activity.

TABLE 3.10-14
VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

	Approximate PPV (in/sec)				
Equipment	**25 Feet**	**50 Feet**	**60 Feet**	**75 Feet**	**100 Feet**
Large Bulldozer	0.089	0.031	0.024	0.017	0.011
Caisson Drilling	0.089	0.031	0.024	0.017	0.011
Loaded Trucks	0.076	0.027	0.020	0.015	0.010
Jackhammer	0.035	0.012	0.009	0.007	0.004
Small Bulldozer	0.003	0.001	0.0008	0.0006	0.0004

SOURCE: FTA, 2018.

As shown in **Table 3.10-14**, the highest vibration levels are generated by a large bulldozer, at approximately 0.089 in/sec PPV at 25 feet, which would not exceed the Caltrans construction vibration structural damage criteria of 0.5 in/sec PPV. All other structures are located farther away and vibration velocities would be substantially lower at these more distant structures. As such, the vibration impacts at the structures near the Project site would be less than significant, no mitigation measures would be required.

With respect to human annoyance, the vibration levels of a large bulldozer of approximately 0.089 in/sec PPV at 25 feet, would exceed Caltrans' vibration annoyance potential criteria of 0.04 in/sec PPV; however, at 50 feet vibration levels of 0.031in/sec PPV would not exceed the criteria. The multi- and single-family residences surrounding the Project Site would be at a distance greater than 50 feet, and therefore, would not be exposed to vibration levels exceeding the Caltrans' 0.04 in/sec PPV distinctly perceptible threshold. **Therefore, construction of the proposed Project would not generate excessive groundborne vibration, and impacts would be less than significant.**

Operational Vibration

The Project's operations would include typical commercial-grade stationary mechanical and electrical equipment, such as air handling units, condenser units, and exhaust fans, which would generate groundbourne vibration at the source. However, vibration isolators and mounts would be installed to reduce vibration velocities from typical commercial-grade station machinery. In addition, the primary sources of transient vibration would include passenger vehicle circulation within the proposed parking garages. Ground-borne vibration generated by each of the above-mentioned activities would generate approximately up to 0.005 in/sec PPV at the Project Site (FTA, 2018). The potential vibration levels from all Project operational sources at the closest existing sensitive receptor locations would be less than Caltrans' vibration annoyance potential criteria of

0.04 in/sec PPV. **Therefore, operation of the proposed Project would not generate excessive groundborne vibration, and impacts would be less than significant.**

3.10.7 Cumulative Impacts

The geographic context for the analysis of cumulative noise impacts depends on the impact being analyzed. Noise from stationary sources is by definition a localized phenomenon, and significantly reduces in magnitude as the distance from the source increases. As such, only cumulative projects and growth due to occur in the immediate Project area would contribute to cumulative on-site stationary source noise impacts. However, cumulative off-site mobile source noise impacts would be created by traffic from all cumulative projects throughout a larger vicinity.

Construction

The potential for cumulative construction noise impacts from on-site construction activities to occur is based on the distance between the Project and each of the cumulative projects. Noise from construction activities would normally affect the areas immediately adjacent to or near (i.e., 500 feet) each of the construction sites Therefore, the cumulative construction noise impacts analysis is limited to cumulative projects within approximately 1,000 feet of the Project Site, which is based on an assumption that a noise-sensitive receptor would be located halfway between the Project Site and the cumulative project.

As listed in **Table 3.0-1**, of Chapter 3, *Environmental Analysis*, of this Draft EIR, there are 37 cumulative projects identified in the vicinity of the Project Site. Three of these cumulative projects are within 1,000 feet of the Project Site: (1) No. 8, the Mixed-Use Residential Development at 600 S. San Gabriel Boulevard, approximately 400 feet to the north; (2) No. 18, the Mixed-Use Commercial Development at 902 E Mission Road, approximately 800 feet to the southwest; and (3) No. 19, the Senior Living Residential at 824 S. Gladys Avenue, approximately 100 feet to the east.

Although it is not possible to predict if contiguous properties may be constructed at the same time and create cumulative noise impacts that would be greater than if developed at separate times, based on known information, it is unlikely that adjacent properties will be undergoing active construction at the same time as the proposed Project. **However, in the unlikely event that adjacent properties are developed at the same time as the proposed Project, adherence to the SGMC provisions that regulate construction activities and other development standards would render the cumulative impacts of the proposed Project to less than significant levels.**

Operation

As for the Project, compliance with the SGMC-required provisions that limit stationary source noise from items such as mechanical equipment would ensure that noise levels would be less than significant at the property line for each cumulative project. In addition, on-site noise generated by each related project would be required to meet the applicable noise requirements of the City's Municipal Code for stationary noise sources and sufficiently distant from the Project Site that it would not result in an additive increase to Project-related noise levels. Further, noise from other on-site sources, including the parking garage and open space activity would be limited to areas in

the immediate vicinity of each related project. Although each related project could potentially impact an adjacent sensitive use, that potential impact would be localized to that specific area and would not contribute to cumulative noise conditions at or adjacent to the Project Site. **Therefore, the Project considered together with cumulative projects would have a less than significant cumulative impact with regard to stationary source noises.**

Cumulative Traffic

Cumulative off-site noise impacts would occur primarily as a result of increased traffic on local roadways due to operation of the Project and the related projects, as traffic is the greatest source of operational noise in the Project area. Cumulative off-site traffic-generated noise impacts were assessed based on a comparison of the noise levels generated by the future cumulative Project traffic volumes to the noise levels generated by the existing base traffic volumes. The future cumulative with Project traffic volumes represent an estimate of the ambient background growth, related projects traffic, and the Project volumes. Therefore, the cumulative increase represents the increase in traffic volumes attributed to ambient background growth, related project traffic, and the Project traffic volumes over existing conditions.

The average daily traffic noise levels along the roadway segments for existing and future with Project conditions and the incremental increase are presented in **Table 3.10-15**. **As shown in Table 3.10-15, the increases would not exceed the significance threshold of an increase of 5 dBA or greater, therefore, the future cumulative traffic noise levels would not be cumulatively significant.**

TABLE 3.10-15
FUTURE CUMULATIVE ROADWAY TRAFFIC NOISE LEVELS

			Traffic Noise Levels (dBA CNEL)			
Street	**Roadway Segment**	**Land Uses Located Along Roadway Segment**	**Existing**	**Future with Project**	**Cumulative Increase**	**Significant Impact?**
Broadway	Between Del Mar Avenue and S. San Gabriel Boulevard	Multi-Family Residential/Commercial	67.1	67.6	0.5	No
Broadway	East of S. San Gabriel Boulevard	Commercial	67.7	68.0	0.3	No
Broadway	West Del Mar Avenue	Residential/Commercial	65.8	66.2	0.4	No
California Avenue	North of Mission Rd./E. Grand Avenue	Single-Family Residential	53.7	53.8	0.1	No
California Avenue	South of Mission Rd./E. Grand Avenue	Single-Family Residential/Educational	59.8	59.9	0.1	No
Del Mar Avenue	Between Broadway and Mission Road	Commercial/Single-Family Residential	70.0	70.6	0.6	No
Del Mar Avenue	Between Las Tunas Drive and Broadway	Residential	70.1	70.8	0.6	No
Del Mar Avenue	Between Mission Road and Valley Boulevard	Single-Family Residential	70.4	71.2	0.8	No
Del Mar Avenue	North of Las Tunas Drive	Commercial	69.3	69.9	0.6	No
Del Mar Avenue	South of Valley Boulevard	Commercial	70.8	71.1	0.3	No
E. El Monte Street	Between S. San Gabriel Boulevard and S. Gladys Avenue	Commercial	53.6	58.4	4.8	No
S. Gladys Avenue	Between E. El Monte Street and E. Grand Avenue	Multi-Family Residential/Commercial	56.5	58.9	2.4	No
S. Gladys Avenue	Between E. Grand Avenue and Mission Road	Multi-Family Residential/Commercial	53.4	56.7	3.3	No
S. Gladys Avenue	North of E. El Monte Street	Multi-Family Residential/Commercial	53.8	57.0	3.2	No
S. Gladys Avenue	South of Mission Road	Commercial/Single-Family Residential	56.9	55.3	0.0	No
E. Grand Avenue	Between S. Gladys Avenue and Walnut Grove Avenue	Commercial/Single-Family Residential	61.9	65.7	3.8	No

Street	Roadway Segment	Land Uses Located Along Roadway Segment	Traffic Noise Levels (dBA CNEL)			
			Existing	Future with Project	Cumulative Increase	Significant Impact?
E. Grand Avenue	Between S. San Gabriel Boulevard and S. Gladys Avenue	Commercial	62.1	63.1	1.0	No
E. Grand Avenue	East of Walnut Grove Avenue	Commercial/Single-Family Residential	62.1	62.6	0.5	No
Hermosa Drive	East of S. San Gabriel Boulevard	Single-Family Residential	63.1	63.3	0.2	No
Hermosa Drive	West of S. San Gabriel Boulevard	Single-Family Residential	63.5	63.8	0.3	No
Junipero Serra Drive/Mission Road	Between Mission Road/San Gabriel Mission and Del Mar Avenue	Residential	67.5	66.8	0.0	No
Las Tunas Drive	Between Del Mar Avenue and S. San Gabriel Boulevard	Commercial	69.0	72.5	3.5	No
Las Tunas Drive	East of S. San Gabriel Boulevard	Commercial	72.5	72.9	0.4	No
Las Tunas Drive	West of Del Mar Avenue	Commercial	72.3	72.8	0.5	No
Mission Drive	East of Walnut Grove Avenue	Single-Family Residential	70.8	71.2	0.4	No
Mission Road	Between Del Mar Avenue and California Avenue	Commercial/Single-Family Residential	68.7	69.1	0.4	No
E. El Monte Street	Between Del Mar Avenue and S. San Gabriel Boulevard	Single-Family Residential	58.8	60.7	1.9	No
Mission Road	Between S. Gladys Avenue and Walnut Grove Avenue	Single-Family Residential	70.2	70.7	0.5	No
Mission Road	Between S. San Gabriel Boulevard. and S. Gladys Avenue	Commercial	70.2	70.7	0.5	No
Mission Road/E. Grand Avenue (Mission)	Between California Avenue and S. San Gabriel Boulevard	Commercial/Single-Family Residential	69.5	68.3	0.0	No
Mission Road/E. Grand Avenue (Grand)	Between California Avenue and S. San Gabriel Boulevard	Single-Family Residential	53.1	53.6	0.5	No
Mission Road/E. Grand Avenue	East of California Avenue	Single-Family Residential/Educational	59.4	61.1	1.7	No
S. San Gabriel Boulevard	Between Broadway and E. El Monte Street	Commercial	73.2	73.9	0.7	No
S. San Gabriel Boulevard	Between E. El Monte Street and E. Grand Avenue	Commercial	73.0	73.7	0.7	No

Street	Roadway Segment	Land Uses Located Along Roadway Segment	Traffic Noise Levels (dBA CNEL)			
			Existing	Future with Project	Cumulative Increase	Significant Impact?
S. San Gabriel Boulevard	Between E. Grand Avenue and Mission Road	Commercial	72.9	73.7	0.8	No
S. San Gabriel Boulevard	Between Hermosa Drive and Las Tunas Drive	Commercial	72.5	73.1	0.6	No
S. San Gabriel Boulevard	Between Las Tunas Drive and Broadway	Commercial	72.7	73.5	0.8	No
S. San Gabriel Boulevard	Between Mission Road and Valley Boulevard	Commercial	72.7	73.4	0.7	No
S. San Gabriel Boulevard	North of Hermosa Drive	Commercial	72.8	73.3	0.5	No
S. San Gabriel Boulevard	South of Valley Boulevard	Commercial	72.5	71.9	0.0	No
Valley Boulevard	Between Del Mar Avenue and S. San Gabriel Boulevard	Commercial	70.9	73.1	2.2	No
Valley Boulevard.	East of S. San Gabriel Boulevard	Commercial	72.0	73.2	1.2	No
Valley Boulevard	West of Del Mar Avenue	Commercial	72.2	70.3	0.0	No
Walnut Grove Avenue	Between E. Grand Avenue and Mission Drive	Single-Family Residential	66.7	67.0	0.3	No
Walnut Grove Avenue	North of E. Grand Avenue	Commercial	67.5	68.1	0.6	No
Walnut Grove Avenue	South of Mission Drive	Single-Family Residential	6.79	67.6	0.0	No

SOURCE: Fehr & Peers 2020b; ESA 2019

3.10.8 References

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3.11 Population and Housing

This section analyzes the potential effects of the proposed Project's contribution to population and housing growth within the geographical boundaries of the City of San Gabriel (City) by taking into account population and housing projections established in the Southern California Association of Governments' (SCAG) 2016-2040 Regional Transportation Plan and Sustainable Communities Strategy (2016 RTP/SCS) and policies established in the City's Comprehensive General Plan (General Plan). Project effects on these demographic characteristics are compared to adopted growth forecasts; and relevant policies and programs regarding planning for future development. Potential growth-inducing impacts of the Project are further addressed in Chapter 5, *Other CEQA Considerations*.

3.11.1 Existing Conditions

On-Site Conditions

The Project Site is currently undeveloped, vacant land that is bound by E. Grand Avenue on the south, S. Gladys Avenue on the east, E. El Monte Street on the north, and S. San Gabriel Boulevard on the west. The Project Site was previously occupied by San Gabriel Nursery & Florist operation, which continues to operate just north of the Project Site as a 2-acre garden and florist shop. All previously existing greenhouses and associated structures associated with the nursery operation have since been removed after an act of arson on February 14, 2018. The retail garden and florist shop associated with the nursery continues to operate just north of the Project Site on E. El Monte Street. As the Project Site is currently vacant, it does not support residences or generate jobs.

Population, Housing, and Employment Estimates

Current and future projected population, housing, and employment estimates for the City are based on data included in the SCAG's 2016 RTP/SCS. The 2016 RTP/SCS is based on growth projections for population, housing, and employment prepared for regional, county, and local jurisdictional areas. The 2016 RTP/SCS reports demographic data for 2012, and projections for 2020, and 2040. The 2016 RTP/SCS forecasts represent the likely growth scenario for the Southern California region in the future, taking into account recent and past trends, reasonable key technical assumptions, and local or regional growth policies. An estimate of the 2018 baseline population and growth projections for the projected Project buildout year of 2023 and the SCAG 2040 Horizon Year, are shown in **Table 3.11-1** and discussed below.

TABLE 3.11-1
PROJECTED POPULATION, HOUSING, AND EMPLOYMENT ESTIMATES FOR SAN GABRIEL

		Anticipated Buildout Year - 2023			SCAG 2040 Horizon Year		
	2018 Baseline	Projected	Total Growth	Percentage Increase as Compared to 2018	Projected	Total Growth	Percentage Increase as Compared to 2018
Population	41,500	42,700	1,200	2.89%	46,900	5,400	13.01%
Housing	13,100	13,600	500	3.82%	15,300	2,200	16.79%
Employment	14,600	15,100	500	3.42%	16,800	2,200	15.07%

SOURCE: Based on SCAG data prepared for the 2016 RTP/SCS. Estimates for years presented in the table are based on interpolation of data presented in the 2016 RTP/SCS. Compiled by ESA, 2019.

3.11.2 Regulatory Framework

Regional Level

Southern California Association of Governments

The Project Site is located within the jurisdiction of SCAG, a Joint Powers Agency established under California Government Code Section 6502 et seq. Pursuant to federal and state law, SCAG serves as a Council of Governments, a Regional Transportation Planning Agency, and the Metropolitan Planning Organization (MPO) for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties. SCAG's mandated responsibilities include developing plans and policies with respect to the region's population growth, transportation programs, air quality, housing, and economic development. Specifically, SCAG is responsible for preparing the Regional Comprehensive Plan (RCP), RTP/SCS, and Regional Housing Needs Assessment (RHNA), in coordination with other state and local agencies. These documents include population, employment, and housing projections for the region and its 13 subregions. The Project Site is located within the Los Angeles Subregion.

SCAG is tasked with providing demographic projections for use by local agencies and public service and utility agencies in determining future service demands. Projections in the SCAG 2016 RTP/SCS serve as the bases for demographic estimates in this analysis of Project consistency with growth projections. The findings regarding growth in the region are consistent with the methodologies prescribed by SCAG and reflect SCAG goals and procedures. Based on 2019 statistics for the City, SCAG has determined that the City has an average housing unit size of 3.2 persons per housing unit (SCAG, 2019).

SCAG data is periodically updated to reflect changes in development activity and provisions of local jurisdictions (e.g. zoning changes). Through these updates, public agencies have advance information regarding changes in growth that must be addressed in planning for their provision of services. Changes in the growth rates are reflected in the new projections for service and utilities planning through the long-term time horizon.

In addition, SCAG establishes policies pertaining to regional growth and efficient development patterns to reduce development impacts on traffic congestion and related increases in air quality emissions. These policies are discussed in detail in Section 3.9, *Land Use and Planning*.

Regional Housing Needs Assessment

The RHNA is mandated by State Housing Law as part of the periodic process of updating local housing elements of the General Plan. The RHNA quantifies the need for housing within each jurisdiction during specified planning periods. SCAG is in the process of developing the 6th cycle RHNA allocation plan which will cover the planning period October 2021 through October 2029. It is planned for adoption by SCAG in October 2020.

Communities use the RHNA in land use planning, prioritizing local resource allocation, and in deciding how to address identified existing and future housing needs resulting from population, employment and housing unit growth. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that collectively the region and sub region can grow in ways that enhance quality of life, improve access to jobs, promotes transportation mobility, addresses social equity, and fair share housing needs.

Local Level

City of San Gabriel General Plan

The City adopted a General Plan in 1990 which consisted of a general plan text and maps. Since 1990, the City has amended and revised the General Plan to address the technological, environmental, economic, and demographic changes that have affected the City. The City's last iteration of the General Plan was adopted on May 18, 2004 (City of San Gabriel, 2004). The following policies and goals that pertain to population and housing and applicable to the Project are as follows:

Land Use

The Land Use Chapter places an emphasis on "quality of life" issues in order to improve and enhance the development of the City. The following goals and policies are applicable to the Project and population and housing impacts:

> **Goal 1.4:** Encourage the sensible transition of properties in multi-family neighborhoods in realizing their potential to provide quality housing opportunities.

Housing and Demographics

The Housing and Demographics chapter is an assessment of the community's housing needs identified through San Gabriel's demographic, socioeconomic, and housing characteristics and the nature and extent of unmet housing needs.

> **Goal 2.1:** Expand the supply of housing in accordance with the land use designations and policies in the Land Use Element.
>
> **Goal 2.2:** Promote and encourage the provision of adequate housing to meet the needs of the community.

City of San Gabriel 2013-2021 Housing Element

The Housing Element was created to provide an assessment of current and future housing needs, and the constraints in and resources for meeting those needs. It also provides a comprehensive strategy that establishes housing goals, policies, and programs. State law requires Housing Elements to be updated at least every six years to reflect a community's changing housing needs. The most recent update was published in September 2013 and covers the 2013-2021 planning period.

3.11.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to population and housing if it would:

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); or

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

3.11.4 Methodology

The analysis of population and housing impacts evaluates whether the Project's contribution to population, housing, and employment growth are consistent with the future growth projections and related policies outlined above.

To determine the potential for impacts related to population and housing, the current uses, overall condition of the Project Site, current population, housing, and employment characteristics, and future projections for population, housing, and employment were identified. This analysis is based on data published by SCAG, as well as information presented in the City's General Plan.

3.11.5 Environmental Impact Analysis

Impact POP-1: The proposed Project would not 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.)

Construction

Construction of the Project would require construction workers who would be hired from a large, highly mobile regional construction work force already living and working within the Los Angeles metropolitan region that moves from project to project. Typically, construction workers pass through various construction projects on an intermittent basis as their particular trades are required. Given the short duration of the work for each job, and the large size and mobility of the construction labor pool that can be drawn upon in the region, construction employees would not be expected to

relocate their residences within this region or move from other regions into this region in response to the short-term Project-related construction employment opportunities.

Construction would commence in May 2021 and would be completed in December 2023, and would provide short-term employment for workers who are expected to be hired from a large mobile regional construction workforce that already lives and works within the Los Angeles metropolitan region. As discussed in Section 3.14, *Transportation*, of this Draft EIR, the number of construction workers needed would vary from an estimated 10 workers per day to a maximum of approximately 120 workers per day during more intensive construction phases. Construction workers are not expected to relocate their households permanently from other regions in response to short-term Project-related construction employment opportunities. **Consequently, Project construction would have less than significant direct and indirect impacts related to population growth.**

Operation

The proposed Project would develop 243 residential units and 8 live/work units, for a total of 251 housing units, and 76,046 square feet of commercial space within five occupied stories, plus a mezzanine for a total of six stories, at a maximum height of 65 feet along with supporting open space across the 5.85-acre Project Site. As shown in **Table 3.11-2**, the Project would generate an estimated 251 housing units, 804 people, and 171 employees. As shown in **Table 3.11-3**, The Project's contributions to population, housing, and employment are then compared to the growth projections for the City in SCAG's 2016 RTP/SCS for both the Project buildout year (2023) and the 2016 RTP/SCS horizon year (2040).

TABLE 3.11-2
PROJECTED INCREASES IN POPULATION, HOUSING, AND EMPLOYMENT

Housing Units and Population			
Use	**Amount**	**Average Household Size[a]**	**Total Population**
Residential	251 units	3.2	804
Employees			
Use	**Amount**	**Employment Generation Factor (per 1,000 square feet)[b]**	**Number of Employees**
Commercial	76,046 square feet	2.2371	171

[a] SCAG, 2019.

[b] San Gabriel Unified School District, 2018.

SOURCE: Compiled by ESA, 2019.

TABLE 3.11-3
PROJECTED POPULATION, HOUSING, AND EMPLOYMENT INCREASES FOR THE CITY

	Project Increase[a]	SCAG Forecasted Growth[b]	Project's Percentage of Forecasted Growth
Population			
2018-2023 Buildout	804	1,200	67%
2018 - 2040 Projection Horizon	804	5,400	15%
Housing Units			
2018-2023 Buildout	251	500	50%
2018 - 2040 Projection Horizon	251	2,200	11%
Employment			
2018-2023 Buildout	171	500	34%
2018 - 2040 Projection Horizon	171	2,200	8%

[a] From Table 3.13-2.
[b] From Table 3.13-1.

SOURCE: Compiled by ESA, 2019. Based on SCAG 2016 RTP/SCS projections.

As shown in Table 3.11-3 above, the Project's 804 residents would comprise approximately 67 percent of the City's estimated growth at buildout in 2023. The Project's residents would comprise only 15 percent of SCAG's longer-term projected population increase for the City in 2040. The Project's 251 units would comprise approximately 50 percent of the City's estimated growth at buildout in 2023 and only 11 percent of SCAG's longer-term projected housing increase for the City in 2040. The Project's 171 employees would comprise approximately 34 percent of the City's estimated growth at buildout in 2023 and only 8 percent of SCAG's longer-term projected employment increase for the City in 2040. As the Project's increases in population, housing, and employment would be within SCAG's projections for the City for both the near-term buildout year (2023) and for SCAG's projection horizon year (2040), the Project would not induce unplanned substantial population growth in the area directly through the development of new housing and employment opportunities.

Additionally, the Project would propose infill development in an urban area with an established infrastructure system. While the Project would generate an increase in population, housing, and employment, which would lead to increased demand on infrastructure to serve the Project Site and the surrounding area, the Project would link with and tie into existing infrastructure. New infrastructure that would be required, such as service connections to local water and sewer network and electricity and natural gas utilities would be sized to serve the Project's needs, as well as the demands of other uses in the area that would require the same infrastructure. Project operation would modify access (e.g., turn lanes, signalization) from the streets, but these implementations would represent improvements that would not induce substantial unplanned growth indirectly through the extension of roads or other infrastructure. **Therefore, impacts would be less than significant.**

Impact POP-2: The proposed Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. (No Impact.)

As previously discussed, the Project Site is undeveloped and vacant. No dwelling units are currently located on the Project Site and all previously existing greenhouses and associated structures have been removed. Because no people or housing would be displaced by the Project development, the construction of replacement housing elsewhere would not be necessary. **Therefore, the proposed Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere, and there would be no impacts.**

3.11.6 Cumulative Impacts

The geographic area for cumulative analysis for the discussion of population and housing impacts is the City of San Gabriel. As the analysis focused on growth within the direct area surrounding the Project Site (e.g., the City of San Gabriel), projects that are located outside of the City do not constitute the geographic area for this analysis. As shown in Table 3.0-1, of Chapter 3, *Environmental Analysis,* of this Draft EIR, there are 37 cumulative projects in the study area, 35 of which are located within the City of San Gabriel and 2 of which are located within the City of Rosemead.

Table 3.11-4 shows a summary of estimated cumulative growth for population, housing, and employment for the City.

TABLE 3.11-4
TOTAL CUMULATIVE DEVELOPMENT

Development[a]	Population	Housing Units	Employment
Cumulative Projects	3,820	1,190	1,210
Proposed Project - Total Buildout	804	251	171
Total Cumulative Growth	**4,624**	**1,441**	**1,381**

[a] A list of the related projects is provided in Table 3.0-1 of Chapter 3 of this Draft EIR.

SOURCE: ESA, 2019.

Projections focus on the SCAG RTP/SCS 2040 horizon as opposed to the Project's 2023 buildout date. The 2040 horizon is the appropriate timeframe for evaluating cumulative impacts because the cumulative projects represent a long-term development scenario for the City. SCAG projections incorporate regional policies and are based on long-term demographic trends that average out short-term variations, which may not be reflected in shorter-term 2023 projections.

Table 3.11-5 compares projected cumulative growth, inclusive of the Project, to the 2016 RTP/SCS's 2040 horizon year projections. The cumulative projects reflect a mix of development including residential, office, and hotel uses.

TABLE 3.11-5
CUMULATIVE POPULATION, HOUSING AND EMPLOYMENT IMPACTS

	Cumulative Increase Including Proposed Project[a]	SCAG Projected Growth[b]	Cumulative Percentage of Growth
Population	4,624	5,400	86%
Housing Units	1,441	2,200	66%
Employment	1,381	2,200	63%

[a] From Table 3.11-4.
[b] From Table 3.11-1.
SOURCE: ESA, 2019.

As indicated in Table 3.11-5, the cumulative population growth of 4,624 people is equal to 86 percent of the population growth estimated in the SCAG projection for the City by the 2040 horizon year. The Project and cumulative projects would result in the construction of approximately 1,441 housing units within the City, which is 66 percent of Citywide projected housing growth by the year 2040. The approximately 1,381 employment opportunities associated with the Project and cumulative projects on buildout would represent 63 percent of the projected new jobs Citywide by 2040.

The projected population, housing, and employment growth would be within the 2040 SCAG projections identified in the 2016 RTP/SCS for the City. The increases in population (86 percent), housing units (66 percent), and employment opportunities (63 percent) show that the City is achieving SCAG and City goals of expanding the housing supply and attracting proportionate amounts of housing and employment in the City. The increase in housing stock in the City provides opportunities for residents to locate within proximity to transit facilities, thereby reducing the demand for development in and of lower-density areas and achieving greater efficiency in the provision and use of existing services and infrastructure. The cumulative growth in the City indicates that the City's new developments are bringing more employment opportunities while improving its distribution of jobs and housing.

For these reasons, the Project, considered together with cumulative projects, would not induce substantial unplanned population growth through contributions to population, housing, or employment either directly or indirectly. Therefore, the Project's contribution to cumulative population, housing and employment growth is consistent with projected growth patterns for the City, and cumulative impacts would be less than significant.

3.11.7 References

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3.12 Public Services

This section of the EIR includes an evaluation of the proposed Project's potential to impact the provision of police services, fire services, and schools, and considers whether there would be any resulting physical environmental impacts associated with the adequate provision of these services as a result of the Project.

3.12.1 Existing Conditions

Police Protection

The San Gabriel Police Department (SGPD) is a full-service law enforcement agency that serves the more than 41,000 residents that live in the City. The SGPD services approximately 4 square miles and is located on the corner of S. Del Mar Avenue and E. Mission Road at 625 S. Del Mar Avenue. The SGPD handles a service demand of more than 23,080 incidents each year and has a current demand of 405 incidents per year per sworn officer. In 2011 the SGPD made 800 arrests and issued 26,309 citations (SGPD, 2019). There are no set response time goals but the federal response time goals are 5 minutes for Priority 1 calls (emergency), 15 minutes for Priority 2 (service need) calls, and 30 minutes for Priority 3 (business) calls. The SGPD is approximately 0.5 miles from the Project Site and would be able to respond to emergency calls in under 4 minutes.

Police services are paid for out of the City's General Fund. There are currently 71 employees working at the SGPD which includes 17 civilian employees and 54 sworn peace officers (SGPD, 2019). The SGPD also has a volunteer Reserve Police Officer Program, Senior Volunteer Program, and Police Explorer Post. According to the Federal Bureau of Investigation (FBI), Uniform Crime Reporting Program, the national average for police department staffing is 2.4 officers per 1,000 residents. By comparison, the nationwide average for cities of comparable size to San Gabriel is 1.2 officers per 1,000 residents, while the average for "west coast" area cities of comparable size is 1.2 officers per 1,000 residents (FBI, 2018). The police service ratio within the City is 1.3 officers per 1,000 citizens. Additionally, a new satellite police station opened on August 8, 2019 at Marshall Park, approximately 1.40 miles southwest from the Project Site, which is expected to increase the capacity and improve facilities for the City police department (San Gabriel Neighborhood Watch, 2019).

Fire Protection

The City of San Gabriel Fire Department (SGFD) is a member of Verdugo Fire Communications, which provides fire protection, fire prevention, and emergency services from Burbank to Monrovia to Montebello as well as Bob Hope Airport. Using GPS and Computer Aided Dispatch (CAD), Verdugo dispatches the closest available unit to an emergency call regardless of City boundaries. San Gabriel regularly sends resources to and receives emergency equipment and personnel from other agencies as the need arises.

The SGFD provides service to 40,275 residents in approximately 4.13 square miles (City of San Gabriel, 2018). It maintains two fire stations that, combined, house two engines, one paramedic ambulance, one division chief, and an urban search and rescue vehicle. According to

correspondence provided by Fire Chief Derrick Doehler and Art Stafford, Division Chief of the SGFD, the current response time goal for fire incidents is three to five minutes (SGFD, 2018). Calls for fire department service are transferred to the Verdugo Fire Dispatch (VFD), a multi-agency public safety dispatch center. In 2018, the amount of time VFD took to dispatch fire department response units exceeded the SGFD's performance goal (City of San Gabriel, 2018).

The City is served by 2 fire stations. The closest station to the Project Site by distance is Station #52 located at 115 N. Del Mar Avenue, approximately 0.82 miles northwest of the Project Site. According to the 2018 Standards of Coverage and Deployment Plan Findings Report, response workload is greatest around Fire Stations #52 (City of San Gabriel, 2018). However, Station #51 would be the designated first responder as it is not separated from the Project Site by the active Union Pacific railroad tracks. Fire Station #51 is located approximately 0.8 miles southwest of the Project Site. SGFD maintains response times of five minutes or less for fire incidents and emergency medical aid calls (which represent 90 percent of their calls) which is considered to be the maximum time standard for serving urban and suburban uses in accordance with the National Fire Protection Association (NFPA) 1710 standard. SGFD requires any new developments to follow current Fire Code requirements for fire protection such as, a fire sprinkler system, fire alarm system, illuminated exit signs, medical elevators, mechanical ventilation, emergency Responder Radio System, fire extinguishers, commercial hood systems for all restaurants, and fire lanes (SGFD, 2018).

Schools

The Project Site is served by the San Gabriel Unified School District (SGUSD) which operates eight schools that had a combined enrollment of 5,161 students during the 2017-2018 school year (SGUSD, 2018b). According to the California Department of Education DataQuest databases, the SGUSD's schools include five elementary schools, one middle school, and two high schools. The Project Site is within the Roosevelt Elementary School, Jefferson Middle School, and Del Mar High School attendance boundaries. Enrollment and capacities for each of these schools is shown in **Table 3.12-1**. SGUSD has indicated that, over the past 10 years, student enrollment has decreased by 278 students (SGUSD, 2018a).

TABLE 3.12-1
CURRENT AND PROJECTED ENROLLMENT FOR SCHOOLS SERVING PROJECT SITE

	Reported 2017-18	Projected 2018-19	Projected 2022-23	Projected 2023-24
Roosevelt Elementary	408	422	492	502
Jefferson Middle	1,181	1,140	987	996
Gabrielino High	1,763	1,740	1,629	1,590

SOURCE: San Gabriel Unified School District (SGUSD), 2018a.

3.12.2 Regulatory Framework

State Level

Fire

California Building and Fire Codes

The California Code of Regulations (CCR) Title 24 (California Building Code [CBC]) is a compilation of building standards, including fire safety standards for residential and commercial buildings. CBC standards are based on building standards that have been adopted by state agencies without change from a national model code; building standards based on a national model code that have been changed to address particular California conditions; and building standards authorized by the California legislature, not covered by the national model code. The California Fire Code is part of the CBC (Part 9 of CCR Title 24). Typical fire safety requirements of the California Fire Code include: the installation of fire sprinkler suppression systems in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and, the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. The California Fire Code applies to all occupancies in California, except where more stringent standards have been adopted by local agencies.

California Fire Service and Rescue Emergency Aid System

The SGFD participates in the California Fire Service and Rescue Emergency Mutual Aid System through which the California Emergency Management Agency, Fire and Rescue Division is responsible for the development, implementation and coordination of the California Fire Service and Rescue Emergency Mutual Aid Plan (Mutual Aid Plan), as managed by the Governor's Office of Emergency Services (OES) (CALOES, 2014). The Mutual Aid Plan outlines procedures for establishing mutual aid agreements at the local, operational, regional, and state levels, and divides the state into six mutual aid regions to facilitate the coordination of mutual aid. The SGFD is located in Region I. Through the Mutual Aid Plan, the OES is informed of conditions in each geographic and organizational area of the state, and the occurrence or imminent threat of disaster. All OES Mutual Aid Plan participants monitor a dedicated radio frequency for fire events that are beyond the capabilities of the responding fire department and provide aid in accordance with the management direction of the OES.

Cal/OSHA

The California Division of Occupational Safety and Health (Cal/OSHA) implements the provisions of the federal Occupational Safety and Health Act at the state level. Cal/OSHA is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. OSHA standards and requirements apply to this proposed Project (and all construction projects) because contractors would be required to comply with procedures for the protection of Project Site employees, most notably during the construction phase. Compliance with these procedures would reduce the likelihood of a SGFD response for emergency services, and provide on-site first response services should an incident occur.

Schools

California Education Code

Educational services for the proposed Project are subject to the rules and regulations of the California Education Code and governance of the State Board of Education. The State also provides funding through a combination of sales and income taxes. In addition, pursuant to Proposition 98, the State is also responsible for the allocation of educational funds that are acquired from property taxes. Further, the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities (California Education Code Section 17620(a)(1)).

Senate Bill 50

The Leroy F. Greene School Facilities Act of 1998 (known as Senate Bill [SB] 50), enacted in 1998, is a program for funding school facilities largely based on matching funds. The new construction grant provides funding on a 50/50 State and local match basis. The modernization grant provides funding on a 60/40 basis. Districts that are unable to provide some, or all, of the local match requirement and are able to meet the financial hardship provisions may be eligible for additional State funding (State of California, Office of Public School Construction).

SB 50 permits the SGUSD to levy a fee, charge, dedication, or other requirement against any development project within its boundaries, for the purpose of funding the construction or reconstruction of school facilities. SB 50 also sets a maximum level of fees a developer may be required to pay. Pursuant to Government Code Section 65995, the payment of these fees by a developer serves to mitigate all potential impacts on school facilities that may result from implementation of a project to a less-than-significant level.

Operation of California's public school districts, including SGUSD, is largely funded by local property tax. While property tax is assessed at a local level, it is the state which allocates the tax revenue to each district according to average daily attendance rates.

Regional Level

Police

County of Los Angeles Office of Emergency Management (OEM)

The Office of Emergency Management (OEM), established by Chapter 2.68 of the County Code, is responsible for organizing and directing emergency preparedness efforts, as well as the day-to-day coordination efforts, for the County's Emergency Management Organization (County of Los Angeles, n.d.). The OEM's broad responsibilities include, among others, planning and coordination of emergency services on a countywide basis.

The County organizes a formal mutual aid agreement among all police departments within its jurisdiction to provide police personnel and resources to assist other member agencies during emergency and/or conditions of extreme peril. Formal mutual aid requests between police departments can be made under the purview of the Los Angeles County Sheriff's Department (LACSD); however, additional informal agreements may be made directly between the police

agencies. The Mutual Aid Operations Plan provides a structure for response should an emergency arise that requires immediate response by a greater number of law enforcement personnel than would be available to SGPD using all other available resources (County of Los Angeles, 2012).

Local Level

City of San Gabriel General Plan

Public and Environmental Safety Element

This element identifies and addresses mitigation measures within the General Plan to reduce the risks on the community posed by seismic and geologic hazards, fire, crime, and hazardous waste. Goals and policies that apply to the proposed Project are as follows:

> **Goal 5.2** Assure that existing and new development address fire and police protection in a proactive and preventative way.
>
> > **Action 5.2.1.1** Incorporate an assessment of the impacts of new development on the level of police and fire services provided to the community; an impact fee to provide public safety should be considered for projects that have significant impacts to existing police and fire services.

Community Facilities Element:

This element documents ongoing needs in improving the City's underlying infrastructure. Applicable goals and polices are as follows:

> **Goal 6.2.** Provide a high level of police services for the City's residents, businesses and visitors.
>
> > **Action 6.2.2** Institute an impact fee on all new construction and substantial additions in order to assist in the construction of a new police department facility, and for technological upgrades to police department equipment.
>
> **Goal 6.3.** Provide a high level of fire protection and emergency response for residents and businesses
>
> > **Action 6.3.2.1** Ensure that all development and substantial additions pay for their fair share of improvements to the City's fire services.
>
> **Goal 6.6.** Update and expand the City's park system in order to provide the residents of San Gabriel with ample open space for recreation.
>
> > **Target 6.6.2** Undergo a search for alternative funding sources, implement park impact fees and other programs or policies that will increase funding for the Parks and Recreation Department, by 2007.

City of San Gabriel Ordinance No. 533 C.S.

The City Council adopted the Development Impact Fee Ordinance No. 533 C.S. (codified as SGMC Sections 154.001-154.006) on October 19, 2004, and the fees became effective January 17, 2005 (City of San Gabriel, 2019). The Development Impact Fees are used to fund the cost of key capital facilities that will be needed to meet the City's growth demands. The City's Fiscal Year 2018-2019 Report for annual Development Impact Fees include update facility impact fees for police and fire

impact fees. The police facility impact fee finances the acquisition, design, and construction of new police facilities identified by resolution of the City Council that are needed as a result of new development within the City. The fire facility impact fee finances the new fire facilities identified by resolution of the City Council that are needed as result of new development within the City.

3.12.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to Public Services if it would:

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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.
    i. Fire protection
    ii. Police protection
    iii. Schools
    iv. Parks
    v. Other governmental services

3.12.4 Methodology

The following evaluation of potential impacts is based on available information from the City, SGPD, SGFD, the SGUSD, and previous environmental documents prepared by the City. Project Site conditions were compared by evaluating the potential for the Project to impact public services while also being compared against CEQA thresholds. The threshold of significance for this topic focuses on whether or not the Project would result in substantial adverse physical impacts associated with new or physically altered governmental facilities for the provision of fire, police, schools, parks and other governmental services. The methodology evaluates the ability of the existing public services to provide adequate service to the proposed Project and whether the Project will require new or physically altered facilities.

The potential impacts of the proposed Project on park resources were evaluated in Section 3.13, *Recreation,* of this Draft EIR and are based on whether implementation of the proposed Project would result in increased use of existing recreation and park resources, or whether implementation of the proposed Project would necessitate the construction or expansion of recreation and park facilities. In addition, impacts associated with new or physically altered governmental facilities for other governmental services are evaluated based on the growth inducement impacts of the proposed Project. The residential, retail, and restaurant uses on the Project Site would generate an estimated 804 residents and 171 jobs, and would thus directly and indirectly induce population growth within the City (see Section 3.11, *Population and Housing,* for more details).

3.12.5 Environmental Impact Analysis

Impact PS-1: The proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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. (Less than Significant Impact.)

Police Protection

Construction

The Project Site is presently vacant and had previously contained greenhouses and other nursery-related structures that had been unused and sitting vacant. The site had posed a public safety concern in particular after an act of arson in February 2018, and has since been cleared of all structures. In its current condition, the large vacant site can also place demand on police protection services. Construction activities associated with the proposed Project, which would generally occur from May 2021 through December 2023 may temporarily increase the existing demand or the nature of the types of calls received by police protection services.

However, the Project Site would be properly secured by fencing and regularly monitored by contractor personnel. The construction efforts would be typical in size and character to similar housing and retail/commercial development projects and would not pose an unusual increase in demand to police services. No new or physically altered police protection facilities, construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives, are anticipated. **Impacts to police services and facilities during construction would be less than significant.**

Operation

Operation of the proposed Project would locate new uses on the Project Site, including 243 residential units, 8 live/work units, 76,046 square feet of commercial space, and associated publicly accessible open space, which would increase demand for police protection services. Potential impacts would take the form of a need for expanded police protection services routinely associated with mixed-use growth, including routine patrols, responding to calls for service such as graffiti or vandalism, robbery, domestic violence, etc. The number of additional service calls and call response times could increase; however, SGPD has indicated that the anticipated response times to the proposed Project would fit within the average response time parameters and expectations. The SGPD has indicated that the department would be able to maintain current service levels, particularly if additional staff (dispatcher position) is provided. The Project is subject to all applicable development impact fees (DIFs) and the Applicant will coordinate appropriately with the City.

Overall, SGPD has indicated that no new facilities would be necessary in order to provide services to the Project (SGPD, 2018). Therefore, operation of the Project would not necessitate new or physically altered police protection facilities, construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other

performance objectives, are anticipated. **Impacts to police services and facilities during long-term operation of the Project would be less than significant.**

Fire Protection

Construction

The proposed Project would locate new uses on the Project Site, including 243 residential units, 8 live/work units, 76,046 square feet of commercial space, and associated publicly accessible open space, which would increase demand for fire protection. Construction activities associated with the proposed Project, which would generally occur from May 2021 through December 2023, may temporarily increase the existing demand on fire protection and emergency medical services. However, the Project Site would be properly secured by fencing, regularly monitored by contractor personnel, and follow requirements of the most current California Building and Fire Code. The construction efforts would be typical in size and character to similar housing and retail/commercial development projects and would not pose an unusual increase in demand for fire protection services. No new or physically altered fire protection facilities, construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives, are anticipated. **Impacts to fire and emergency response times and facilities during construction would be less than significant.**

Operation

Implementation of the proposed Project would result in the development of new uses as described above on the approximately 5.85-acre Project Site and would increase the demand for fire protection services in the Project vicinity. Certain buildings to be developed would be five stories in height. The Project would be designed to meet all fire safety code requirements established in California Fire Code (24 CCR, Part 9), including sprinkler, extinguisher, and alarm systems, illuminated exit signs, adequate elevator systems, an emergency responder radio system, adequate ventilation systems, and sufficient emergency access. These uses would result in the need for expanded fire protection services routinely associated with mixed-use growth, including responding to calls for emergency services such as emergency medical service, fire suppression, rescue, fire alarm activation, etc. The number of additional service calls and call response times could increase.

As stated above, Fire Station #52 is the closest station to the Project Site, but because Fire Station #51 is not separated from the Project Site by the active railroad tracks, it would be the designated first responder to the Project Site. Four additional fire stations are also available to respond to the Project Site. These stations are located from 0.7 miles to 2.7 miles from the Project Site. The San Gabriel Fire Department Station #51, the designated first responder, is located approximately 0.8 miles southwest of the Project Site. San Gabriel Fire Department Station #52 is located approximately 0.82 miles northwest of the Project Site. The Los Angeles County Fire Department Station #42 is located approximately 1.5 miles southeast of the Project Site. The Los Angeles County Fire Department Station 4 is located approximately 2.6 miles south of the Project Site. The Los Angeles County Fire Department Station #47 are located approximately 2.7 miles from the Project Site. Altogether, these stations would provide adequate fire protection services to the proposed Project.

In addition to these stations within the City, if additional service were required, the SGFD participates in the California Fire Service and Rescue Emergency Mutual Aid System through which the California Emergency Management Agency, Fire and Rescue Division is responsible for the development, implementation and coordination of the California Mutual Aid Plan, as managed by the Governor's Office of Emergency Services (OES) (CALOES, 2014).

The SGFD has indicated that an additional 6 Rescue Ambulance (RA) personnel and 9 Engine Company personnel (no new equipment, just staff) could be necessary to serve a potential increase in the emergency call load that may be placed on the SGFD by the Project. They indicate that the current configurations of the existing Fire Stations would not be able to accommodate increased staff, should it be needed (SGFD, 2018). As with police services, the Project is subject to all applicable development impact fees (DIFs) to address staffing needs as a result of new development within the City, and the Applicant will coordinate appropriately with the City regarding staffing and spacing needs (City of San Gabriel, 2019). Should modifications to existing stations be needed to accommodate new staff, this would be coordinated by the City and appropriate environmental review would be conducted as necessary. It is not anticipated that the potential addition of 15 staff would result in improvements such that environmental impacts would result.

Based on the number of fire stations that are in relatively close proximity to the Project Site and the payment of DIFs, the implementation of the proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, construction of which could cause significant environmental impacts. **Therefore, the proposed Project would result in less than significant impacts on fire protection services and facilities.**

Schools

Construction

Based on the size and duration of construction, it is anticipated that the proposed Project would draw construction workers from the labor force within the region, where construction workers would commute daily to the Project Site and new housing for construction employees would not be required. Therefore, construction activities associated with the Project would not increase the population generated from the proposed Project and therefore would not generate additional students. **Construction of the proposed Project would have no impact on school services and facilities.**

Operation

The Project Site is currently vacant and has historically been a nursery that would have had little to no demand on school capacity. SGUSD has indicated that, over the past 10 years, TK-12 student enrollment in the district has decreased by 278 students and is projected to continue to decrease over the next ten years (SGUSD, 2018a). Based on the SGUSD's figures and the 243 residential units and 8 live/work units, the proposed Project would be expected to generate a total of 125 new students. Totals per grade level are shown in **Table 3.12-2**.

TABLE 3.12-2
STUDENTS GENERATED BY THE PROPOSED PROJECT

Grade Level/School	Students/Unit[a]	Students (at buildout)
K-5/Roosevelt Elementary	0.2	50
6-8/Jefferson Middle	0.1	25
9-12/Gabrielino High	0.2	50
Total	0.5	125

[a] Generation units were derived from the San Gabriel Unified School District Commercial/Industrial Development School Fee Justification Study.

SOURCE: SGUSD, 2018c.

SGUSD reviewed Project description information to consider whether or not the associated population generated by the Project would result in a substantial impact to schools serving the Project Site. After review, SGUSD Superintendent confirmed that the Project, as planned, would require adjustments at serving schools to be able to accommodate the Project-related growth. It was confirmed that the necessary adjustments would not encompass physical expansion of existing schools, or the need for new school facilities. As such, there would be no need for the expansion of existing or construction of new schools, and therefore no associated environmental impacts. Additionally, fees to be paid by the Project Applicant ($3.79 per square foot for residential development) would be required in accordance with Government Code 65995 and Education Code 17620 (SGUSD, 2018c). **Therefore, the Project's impact to school services and facilities during operation would be less than significant.**

3.12.6 Cumulative Impacts

There are 37 cumulative projects in the study area, 35 of which are located within the City of San Gabriel and 2 of which are located within the City of Rosemead, that have been recently built, are under construction, or are planned within the City of San Gabriel. The cumulative areas for police and fire protection services are the service areas for the City of San Gabriel. The need for the public services and associated facilities is measured by service area population, or the number of residents and workers within the City's service area. Service population, as well as the type and density of development, determines the need for new or expanded police and other public services. Utilizing statistical information, local planning policies, and by interacting with other agencies, fire and police service providers can delineate past patterns, emerging trends, and future issues of concern. Once identified, service providers can redeploy resources to meet future needs.

As additional development occurs in the City and San Gabriel Valley region, there may be an overall increase in the demand for law enforcement and fire protection services, including personnel, equipment, and/or facilities. Increases in demand are routinely assessed by these agencies as part of the annual monitoring and budgeting process. New development within the service areas of the SGPD and SGFD would be required to adhere to conditions established by fire and police service providers, and pay applicable DIFs to ensure adequate staffing and equipment levels. Therefore, there would be no cumulative impact on police and fire services in the City. **Accordingly, cumulative impacts to the environment resulting from new or expanded police**

and fire protection facilities would not occur, resulting in a less than significant impact and no mitigation is required.

The cumulative area for school-related issues encompasses the SGUSD that provides school services/facilities in the Project area, which has experienced an overall decline in student enrollment. When considered with other cumulative projects, there could be an overall increase in student population associated with other residential projects; however, they would be distributed to the various schools throughout the SGUSD. The proposed Project's incremental impact would not be cumulatively considerable because the proposed Project and all other projects would be required to pay their fair share of needed improvements through the payment of SB 50 fees. **Accordingly, cumulative impacts to the environment resulting from new or expanded school facilities would not occur, resulting in a less than significant impact and no mitigation is required.**

3.12.7 References

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State of California, Office of Public School Construction, School Facility Program Guide, October 24, 2012. Available at: https://www.documents.dgs.ca.gov/opsc/publications/handbooks/sfp_guide.pdf. Accessed December 21, 2018.

3.13 Recreation

This section analyzes the potential effects of the proposed Project's impacts on recreational services. The analysis in this section is based on review of the City's existing parks and recreational facilities, service ratios and goals as set forth in the City's General Plan, and the Project's residential population impacts on existing recreational facilities.

3.13.1 Existing Conditions

Formerly known as the San Gabriel Parks and Recreation Department, the San Gabriel Community Services Department (SGCSD) maintains approximately 19 acres of parks and park facilities. The SGCSD is responsible for a wide range of services including recreation programs, parks planning, citywide special events, aquatics, arts and leisure programming, transportation services, facility rentals, and passport assistance. SGCSD manages two community centers; provides park planning for three outdoor parks, one pocket park, and two open space park areas; and provides recreation amenities that greatly contribute to the quality of life for residents and visitors of the City (City of San Gabriel, 2018). The SGCSD also maintains and operates related facilities such as senior recreation centers and conference centers as well as playgrounds, pools, lighted sports fields and lighted sports fields at San Gabriel Unified School District (SGUSD) schools. The SGCSD recently added a new facility, Marshall Park, in December 2017. The closest SGCSD-managed park to the Project Site is Roosevelt Park approximately 0.30 miles northeast of the Project Site. A detailed description of the SGCSD parks and facilities is provided below, as well a list of parks within a two-mile radius of the Project Site that are outside the SGCSD jurisdiction.

Parks and Recreational Facilities Within Project Vicinity

The following parks are located within 2 miles of the Project Site and are within the boundaries of the City:

- Grapevine Arbor Park – This park is approximately 1-mile northwest of the Project Site and is located at the corner of Mission Drive and Santa Anita Street. This park hosts the historic Grapevine, the Adult Recreation Center, restrooms, and passive park area.
- Marshall Park – This park is approximately 1.5-miles southwest of the Project Site. This park offers multipurpose areas, game courts, a synthetic turf field and grass areas, playground equipment with shade structures, a walking/jogging trail, outdoor fitness equipment, picnic structures with picnic tables, a restroom building, pedestrian, security and athletic field lighting, seating areas, enhanced native landscaping, a demonstration garden, and sustainability elements.
- Plaza Park – This park is located approximately 1-mile northwest of the Project Site and is adjacent to the San Gabriel Mission. This park offers passive use areas, benches, and paved walkways.
- Roosevelt Park – This park is approximately 0.30-miles northeast of the Project Site and is considered the City's sole pocket park. Roosevelt Park amenities include two lighted tennis courts, passive park areas, and a playground.

- Smith Park – The park is located approximately 0.83-miles northwest of the Project Site and is the City's second largest park. Smith Park offers the most amenities in one location including playgrounds, a basketball court, handball courts, multipurpose fields, picnic areas, tennis/pickleball courts, a pool, and a wading pool.
- Vincent Lugo Park – This park is approximately 1-mile southwest of the Project Site. Recently renovated, Vincent Lugo Park offers a large multipurpose field, baseball field, batting cages, concessions, restrooms, a small meeting house that is currently being utilized by the Girl Scouts, a walking trail system, the historic playground structures known as La Laguna, and recently added picnic shelters and outdoor fitness equipment (City of San Gabriel, 2018).

The City also uses Joint Use Agreements with the SGUSD to provide additional open space and amenities for the community, and to allow facility space for additional programming for the neighborhood. The Master Plan identifies five schools with accessible or limited access for public use. The Master Plan also identifies various schools that could potentially be made available to the public with a joint-use agreement with the SGUSD. The following schools are joint-use facilities within the City:

- Coolidge Elementary School – This school is part of the Joint-Use Agreement pilot program and is open to residents in the evenings, on weekends, and on holidays. The school possesses a large multipurpose field, play equipment, playgrounds, handball courts, basketball courts, and multipurpose paved areas.
- Jefferson Middle School – The City has a joint-use agreement with the SGUSD for use of the gymnasium, but only for Community Services Department programs, not for public use.
- McKinley Baseball Field – This field is available for approved user groups and not for public use.
- Roosevelt Tennis Courts – The tennis courts are located within the grounds of Roosevelt Elementary School and are available for public use.
- Washington Elementary School (and Tennis Courts) – This school is part of the Joint-Use Agreement pilot program and is open to residents on a limited schedule. The school possesses a large multipurpose field, playground, handball courts, basketball courts, tennis courts, and multipurpose paved areas.

The following recreation center is located within one mile of the Project Site:

- Community Recreation Center – This center is located at Grapevine Arbor Park, which is approximately 1 mile northwest of the Project Site, and includes both the Adult Recreation and Community Recreation centers. The centers offer youth programs, adult programs, fitness, Zumba, dance, yoga, and educational programs.

The following are parks and recreational facilities located within two miles of the Project Site but are located outside of the boundaries of the City:

- Sally Tanner Park – This park is located in the City of Rosemead and is approximately 0.20-miles southeast of the Project Site. The park provides open space, a playground, gazebo, and restroom facility.

- Rosemead Park – This is the City of Rosemead's largest park located approximately 1.8-miles southeast of the Project Site. Park amenities include a public swimming pool, three playground areas, a number of picnic shelters with barbecues, two lighted softball/baseball fields, restroom facilities, a 0.5-mile trail, and expansive open space.
- The Rosemead Community Recreation Center – This community center is located approximately 1.5-miles southeast of the Project Site located in the City of Rosemead. The center is a multi-purpose facility used for events such as wedding receptions, dinner gatherings, meetings, workshops, and other special occasions. The Center also provides senior, youth and adult classes (City of Rosemead, 2018).

3.13.2 Regulatory Framework

State Level

Quimby Act

California Government Code Section 66477, also known as the Quimby Act, was enacted in 1965 to promote the availability of park and open space areas in response to California's rapid urbanization and the need to preserve open space and provide parks and recreation facilities in response to this urbanization. The Quimby Act authorizes cities and counties to enact ordinances requiring the dedication of land or payment of in-lieu fees for parks and recreational facilities by developers of residential subdivisions as a condition to parcel or tentative map approval.

Under the Quimby Act, dedications of land shall not exceed three acres of parkland per 1,000 persons residing within a subdivision, and in-lieu fee payments shall not exceed the proportionate amount necessary to provide three acres of parkland, unless the amount of existing neighborhood and community parkland exceeds that limit.

Local Level

City of San Gabriel General Plan

The City General Plan contains the following polices and goals regarding recreational facilities:

Land Use Element

Goal 1.13 Think and act creatively to maximize and increase public open space and greenery in our community.

Community Facilities Element

Goal 6.6 Update and expand the City's park system in order to provide the residents of San Gabriel with ample open space for recreation.

Goal 6.1 Ensure that community facilities provide an adequate level of service so that new development has efficient and orderly service.

Target 6.1.1 Implement measures such as reimbursement agreements and impact fees that will require all new development and large additions to pay their fair share of improvements to community facilities.

Target 6.1.2 Require that all new development, and significant additions to existing development, construct the necessary on-site infrastructure to serve the project in accordance with City standards.

Open Space and Recreation Element

Goal 7.1 Increase the City's open space resources

Target 7.1.1 Develop miniparks, medians, and other green spaces to offset the impacts of denser population and more intense development.

Target 7.1.2 Adopt a Citywide park standard of 4.0 acres for every 1,000 residents to include community, neighborhood and vest-pocket parks.

Goal 7.2 Develop new and increased funding sources to maintain, acquire and develop parks and recreational facilities.

Target 7.2.1 Ensure that new development pays its fair share for development of parks and recreational facilities.

City of San Gabriel Community Services Department Master Plan

The SGCSD provides a comprehensive system of public parks, trails, community centers, and recreation amenities that greatly contribute to the quality of life for residents and visitors of the City. To plan for the future of this valuable system, the SGCSD developed the *Dream Your Park - Parks and Open Space Master Plan* (Parks Master Plan) to identify the values of the community; provide a citywide vision for parks, open space, and facilities; and provide strategies for the planning, development, and administration of parks and recreation programming in the City (City of San Gabriel, 2018). The Parks Master Plan is a planning document to foster discussion of ideas that may be considered by Council members, commissioners, and planners, but is not an element of the City's General Plan and does not have the force of legislation of the City Council as an ordinance.

The Parks Master Plan analyzed the current park amenities and level of service for the City through a national comparison and found that there is a deficit in park acres and has a higher demand per park than seen in other jurisdictions across the country. **Table 3.13-1** shows the comparison between the City (0.5 acres of park land per 1,000 residents) and the average for the rest of the country (9.7 acres of park land per 1,000 residents). The Parks Master Plan determined that 82 percent of residents did not have access to a City park by way of a 5-minute walk, and that 23 percent of residents live within a 5-minute walk of a park or current joint-use park located at one of the SGUSD schools (City of San Gabriel, 2018).

TABLE 3.13-1
SAN GABRIEL PARK AMENITIES NATIONAL COMPARISON

Standard Metrics	City of San Gabriel Existing	City of San Gabriel Goal	National Recreation and Park Association Averages
Residents per Park (20,000-49,000 residents)	6,801	-	1,894
Acres of Park Land per 1,000 Residents	0.5	4.0	9.7

SOURCE: City of San Gabriel, 2018.

Given the current deficiencies in park resources in the City, twenty-three potential future opportunity sites have been identified and listed in the Parks Master Plan. These opportunity sites include pocket parks, utilization of right of way improvements, joint-use parks at schools, and trails throughout the City.

Open Space and Recreation Impact Fee

The City collects an Open Space and Recreation Impact Fee as outlined in Chapter 154 of the San Gabriel Municipal Code (SGMC) of Ordinances. The fees for each are collected when building permits are issued for new residential projects. The Open Space and Recreation Impact Fee was adopted in 2004 along with Ordinance No. 533-C.S. which implemented fees on new construction to help offset the impacts created by new development on City facilities and infrastructure. The most current Open Space and Recreation Impact Fee, adopted by the City Council on September 17, 2019, is $3,446.77 per residential unit (City of San Gabriel, 2019).

3.13.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to recreation if it would:

a) 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;

b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment; or

c) Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks.

3.13.4 Methodology

The analysis of recreation impacts is based on an estimate of the Project's residential population size (based on the number of units), which could potentially place additional demand and therefore impacts to recreational facilities. The commercial uses are not considered to generate additional demand to park and recreational facilities. The analysis also considers the Project's proposed recreation and open space features and whether the provision of those facilities could reduce Project-generated demand on other parks and recreational facilities. The analysis of impacts to parks and recreational facilities identifies the potential demand that would be generated by the Project and the potential for that additional demand to result in the need for expansion of existing and/or new facilities. The analysis considers the extent to which Project-provided facilities would reduce potential impacts and identifies the residual impacts that could occur to existing facilities.

3.13.5 Environmental Impact Analysis

Impact REC-1: The proposed Project would not 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.)

Construction

During construction of the proposed Project, the physical deterioration of recreational resources would be less than significant given the limited addition of people to the area, the short-term duration of construction, and the existing recreation opportunities in the Project vicinity. Additionally, construction staff would be temporary and would be more likely to use recreational facilities where they live, not where they work. Therefore, construction of the Project would not 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 during construction would be would be less than significant.**

Operation

As shown in Table 3.13-1, the City has an existing deficit of park amenities at 0.5 acres of park land per 1,000 residents. As discussed in Section 3.11, *Population and Housing*, of this Draft EIR, long-term operation of the Project would introduce 804 new residents to the Project Site, which would increase the demand on existing facilities, such that deterioration of these facilities could be accelerated. However, the proposed Project would incorporate on-site amenities that would meet some of the recreational needs of the residents as well as add communal open space. The proposed Project includes development of a 33,543 square-foot (0.77 acre) central park area and 24,280 square-foot (0.56 acre) plaza, which in total would be 1.33 acres and would equate to approximately 1.60 acres of park land per 1,000 residents. While the Project would not provide publicly accessible open space that would meet the open space goal of four acres per 1,000 residents, the Project would improve the City's existing deficit of park amenities. As the Project would provide publicly accessible open space, it is not expected that the future residents would make extensive use of off-site, existing recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Additionally, as further stated below under Impact REC-2, payment of the Open Space and Recreation Impact Fee would offset potential physical impacts and provide funding for new and/or renovated parks equipment and facilities. **Therefore, impacts would be less than significant.**

Impact REC-2: The proposed Project would not 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.)

Construction

The proposed Project includes the development of recreational facilities which might have an adverse physical effect on the environment associated with construction of the proposed Project. Physical impacts associated with construction of the proposed Project, including the central park area, are thoroughly assessed in other sections of the Draft EIR (see for example Section 3.2, *Air Quality* and Section 3.10, *Noise*), and construction-related impacts were determined to be less-than-

significant for all relevant areas (in some instances with mitigation measures). During construction of the proposed Project, there would be a less than significant impact given the limited addition of people to the area, the short-term duration of construction, and the existing recreation opportunities in the Project vicinity. **Therefore, Project construction would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment, and impacts would be less than significant.**

Operation

In addition to adding recreational areas to the City, the proposed Project is consistent with the City General Plan goals and policies relative to the provision of park facilities. The 251 residential units (243 residential units, 8 live/work units) proposed under the Project are expected to generate approximately 804 new residents. The goal of the City is to provide a minimum of four acres of parkland per thousand population. The proposed Project would generate an approximate need for three acres (approximately 140,090 square feet) of new park space.[1] The proposed Project development includes a 32,543 square-foot (0.77 acres) central park area and 24,280 square-foot (0.56 acres) plaza, which in total would be 1.33 acres and would not to satisfy the minimum four acres of parkland per thousand population goal as determined by the City's General Plan.

Since the proposed Project would not provide sufficient open space to meet the City's General Plan goal of four acres of parkland per thousand residents, the payment of a City-designated in-lieu fee would be allowed, as authorized by Quimby Act. The City authorizes the payment of in-lieu open space and recreation impact fees as outlined in Ordinance No. 533-C.S. The Applicant would pay the City-approved Development Impact Fee for Open Space of $3,446.77 per residential unit. Payment of these fees would offset parkland impacts by providing funding for new and/or renovated parks equipment and facilities. Therefore, the Project would comply accordingly with the Open Space and Recreation Impact Fee and would satisfy the Quimby Act.

Although the proposed Project's development of open space on the Project Site would not satisfy the open space goal of four acres per 1,000 residents, the Project would still be consistent with other goals and policies aimed to increase the City's open space resources; think and act creatively to maximize and increase public open space and greenery in our community; and update and expand the City's park system in order to provide the residents of San Gabriel with ample open space for recreation. **With a combination of the proposed onsite recreation facilities and the payment of Open Space and Recreation Impact Fee, impacts would be less than significant and no other recreational facilities would be required as a result of the proposed Project.**

[1] 804 residents * (4 acres / 1,000 residents) = 3.216 acres or approximately 140,090 square feet

Impact REC-3: The proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. (Less than Significant Impact.)

Construction

As previously stated under Impact REC-1, construction workers would not recreate at parks located in the Project vicinity, and if so, would only do so temporarily. As a result, the construction of the proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. **Impacts would be less than significant.**

Operation

As indicated previously, the existing recreational facilities within the City are currently strained due to the shortfall of public open space. The current service ratios for recreational facilities for the City, as shown in Table 3.13-1, is 0.5 acres per thousand residents for an estimated population of 40,514 (U.S. Census, 2017). As stated under Impact REC-2, the direct increase of approximately 804 residents under the proposed Project would require approximately 3 acres of parkland. Although implementation of the Project would develop approximately 1.35 acres of publicly accessible open space to the City, the rate of development for these new parks and recreational facilities may not be as fast as population growth in the City. Regardless of timing, because there is not enough land to provide the four acres per 1,000 residents, these additional open space features would not provide the necessary amount of parkland for the City's population at Project build out.

However, as concluded above, development under the Project would require payment of the Open Space and Recreation Impact Fee to offset parkland impacts. The fees collected would be used to renovate, rehabilitate, and acquire park and recreational space throughout the City. The payment of the Open Space and Recreation Impact Fee would ensure that the Project would have a less-than-significant impact to City parks and recreational facilities. Therefore, operation of the proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. **Impacts would be less than significant.**

3.13.6 Cumulative Impacts

The geographic scope for impacts related to recreation is the City of San Gabriel. Cumulative projects located within the City would be subject to the City's General Plan and Master Plan. Cumulative projects located in the City of Rosemead would be under the City of Rosemead's jurisdictions and would not affect the geographic scope for impacts on recreation. The proposed Project and cumulative projects would require the payment of fees or dedication of land for local

parks to the City, pursuant to the Open Space and Recreation Impact Fee as outlined in Chapter 154 of the SGMC of Ordinances. The list of 37 cumulative projects including their land use and size is included in Table 3.0-1, of Chapter 3, *Environmental Analysis,* of this Draft EIR. Of the 37 cumulative projects, 28 listed projects include a combination of proposed houses, a senior home, and condominiums in the Cities of San Gabriel and Rosemead. Implementation of the proposed Project would not increase the use of existing parks and recreation facilities. As future residential developments are proposed, the City will require developers to provide the appropriate amount of park and open space or payment of development impact fees, which would contribute to future recreational facilities. Payment of the Open Space and Recreation Impact Development Fee and/or implementation of facilities on a project-by project basis would offset cumulative parkland impacts by providing funding for new and/or renovated parks equipment and facilities. **As such, the cumulative impact of buildout associated with the implementation of the proposed Project, when considered with cumulative projects in the area, would be less than significant with implementation of the Project.**

3.13.7 References

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City of San Gabriel, 2019. 2019-20 Citywide Fee Schedule, adopted by City Council on September 17, 2019. Available at: https://www.sangabrielcity.com/DocumentCenter/View/10938/Fee-Schedule. Accessed July 17, 2020.

City of Rosemead, 2018. Rosemead Parks and Facilities. Available at: http://www.cityofrosemead.org/government/city_departments/parks_recreation/parks_facilities. Accessed January 9, 2019.

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3.14 Transportation

This section analyzes the potential transportation impacts associated with construction and operation of the proposed Project. Issues evaluated include: safety and performance of the circulation system, including transit, roadway, bicycle and pedestrian facilities; vehicle miles traveled (VMT); hazards due to geometric design features; and emergency access. This section is based on the Pacific Square Mixed-Use Project CEQA Transportation Impact Study (TIS) prepared for the proposed Project (Fehr & Peers, 2020), which is included as Appendix J of this Draft EIR.

3.14.1 Existing Conditions

Study Area and Roadway Systems

The Project Site is located at 700-800 S. San Gabriel Boulevard in the City of San Gabriel (City) and is bounded by E. El Monte Street on the north, E. Grand Avenue on the south, S. Gladys Avenue on the east, and S. San Gabriel Boulevard on the west. The primary freeways and streets that provide regional and local access to the study area are listed below and shown graphically in Figure 2-1, Regional and Site Location Map (see Chapter 2, *Project Description*).

Freeways

I-10 Freeway (San Bernardino Freeway) runs east/west approximately 1.5 miles from the Project Site. It connects Downtown Los Angeles to San Bernardino via the San Gabriel Valley, and passes through the City along its southern border. Access to the freeway is provided via ramps on San Gabriel Boulevard.

I-210 Freeway (Foothill Freeway) runs east/west approximately 4.1 miles north from the Project Site. It connects the San Fernando Valley to San Bernardino via the San Gabriel Valley. Access to the freeway is provided via ramps on San Gabriel Boulevard in Pasadena.

East/West Streets

El Monte Street is a local residential street that runs within San Gabriel between Del Mar Avenue and Gladys Avenue. It has one lane in each direction, with no posted speed limit. Because El Monte Street runs through a residential area, the default speed limit is 25 miles per hour (mph). Parking is permitted on both sides of the street, and sidewalks are present on both sides. El Monte Street fronts the Project Site to the north.

Grand Avenue is a local residential street that runs between Del Mar Avenue and Rosemead Boulevard in Temple City. It has one lane in each direction, with a posted speed limit of 35 mph. Parking is permitted on both sides of the street. Sidewalks are mostly present on the north side of Grand Avenue and missing on certain blocks on the south side. Grand Avenue fronts the Project Site to the south, where no sidewalks are present on the north side. Sidewalks are present on intermittent blocks south of the Project Site.

Mission Road is an arterial or collector street that connects East Los Angeles and Alhambra to Rosemead. It generally has four travel lanes, two in each direction. The segment of Mission Road between Junipero Serra Drive and San Gabriel Boulevard has one travel lane in each direction.

Street parking is available on both sides of Mission Road within the study area. Sidewalks are present on both sides of the street. The posted speed limit is 35 mph.

North/South Streets

Gladys Avenue is a local residential street that runs within the City between Santa Fe Avenue and Marshall Street. It has one lane in each direction, with no posted speed limit. Because Gladys Avenue runs through residential areas, the default speed limit is 25 mph. Parking is permitted on both sides of the street, and sidewalks are only present on the east side where there is new condominium development adjacent to the Project Site.

San Gabriel Boulevard is an arterial that connects San Marino to Rosemead via San Gabriel Boulevard. It directly fronts the Project Site. It has two travel lanes in each direction, and the posted speed limit is 35 mph. Parking is permitted on both sides of San Gabriel Boulevard, including in front of the Project Site. Sidewalks are present on both sides of the street. San Gabriel Boulevard also provides regional access to I-10 to the south, and I-210 to the north.

Public Transit

The transit facilities in the study area consist of a bus stop that is equipped with a bench, trash can, and a bus stop passenger-activated light. The bus stop and its amenities are located on the southeast corner of S. San Gabriel Boulevard at the intersection of Pearl Street, fronting the Project Site. Two bus lines, one operated by the Los Angeles Metropolitan Transportation Authority (Metro) and one operated by Montebello Bus Lines, currently serve the study area.

Metro Local 176 is an east/west bus line that runs from Highland Park to Montebello. The line travels along Mission Road in the study area with the nearest stop at the intersection of San Gabriel Boulevard and Mission Road. This bus line runs hourly during weekdays. No weekend service is provided.

Montebello Bus Line 20 is a north/south bus line that runs from Montebello to the City. The line travels along San Gabriel Boulevard in the study area with the nearest stop at San Gabriel Boulevard and Pearl Street. The bus line runs every forty minutes during weekdays. No weekend service is provided. In Spring 2020, bus service to this bus stop was temporarily suspended by Montebello Bus Lines due to the COVID-19 pandemic. It is currently unknown if or when service to this bus stop will be restored.

Bicycle and Pedestrian Facilities

The existing bicycle network in the study area consists of Class II facilities (designated bicycle lane, noted by striping and signage) on Del Mar Avenue between Mission Road and Valley Boulevard. Another Class II facility exists on Las Tunas Drive between San Gabriel Boulevard and Muscatel Avenue.

Future planned bicycle facilities are identified in the San Gabriel Valley (SGV) Bicycle Master Plan in the vicinity of the Project Site. Class II bicycle facilities are planned for the entirety of Del Mar Avenue, Las Tunas Drive, and Mission Road. Class III facilities (shared roadway, noted by signage) within the study area are planned on San Gabriel Boulevard, Grand Avenue, California

Street, Fairview Avenue, Angeleno Avenue, and Broadway. Class I facilities (off-street bicycle/pedestrian paths) within City limits are planned along the newly constructed San Gabriel Trench and the Rubio Wash. Both proposed Class I facilities are located within one-quarter mile of the Project Site.

The pedestrian network in the study area except for the Project frontage along E. Grand Avenue and S. Gladys Avenue consists of sidewalks and curbs, marked crosswalks, and unmarked pedestrian crossings. Currently, the Project frontage along S. Gladys Avenue is unimproved, as there are no curbs, ramps, driveways, or sidewalks. Along E. Grand Avenue, curbs are present, but there are no sidewalks. At all signalized intersections in the study area, marked crosswalks and pedestrian signals are present.

Parking

Street parking is available on all sides of the Project Site. Continued field visits and Google Street View imagery show that the on-street parking surrounding the Project Site frontages is not heavily utilized.

3.14.2 Regulatory Framework

State Level

Senate Bill (SB) 743

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law and started a process that fundamentally changed transportation impact analysis conducted as part of California Environmental Quality Act (CEQA) compliance. The Governor's Office of Planning and Research (OPR) was charged with developing new guidelines for evaluating transportation impacts under CEQA using methods that no longer focus on measuring automobile delay and level of service (LOS).

OPR issued proposed updates to the CEQA guidelines in support of these goals in November 2017 and a supporting technical advisory in December 2018 (State of California Governor's Office of Planning and Research, 2017 and 2018). The updates establish VMT as the primary metric for evaluating a project's environmental impacts on the transportation system. The changes to CEQA Guidelines Section 15064.3 to implement SB 743 were certified by the State in December of 2018. The City of San Gabriel, as the Lead Agency, adopted new significance thresholds for transportation impacts based on VMT on July 7, 2020 (City of San Gabriel, 2020). Therefore, as of July 1, 2020, LOS, may not be used as a metric to determine significant transportation impacts under CEQA.

California Department of Transportation Safety Review

The California Department of Transportation (Caltrans) issued the Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance in July 2020 (Caltrans, 2020). This guidance was developed in response to the removal of LOS/delay transportation metrics from CEQA (see discussion above), and includes a simplified safety analysis approach that is intended to reduce risks to all road users and that focuses on multi-modal conflict analysis as well as access management issues.

Regional Level

Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG), in which the City is a part of, has a 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) that balances future mobility and housing needs with economic, environmental, and public health goals. The Plan charts a course for closely integrating land use and transportation, so that the region can grow smartly and sustainably. Below are specific goals and objectives in the 2016 RTP/SCS that are applicable to the proposed Project:

- Identify Regional Strategic Areas for Infill and Investment
- Focus New Growth Around Transit
- Plan for Growth Around Livable Corridors
- Provide More Options for Short Trips

Local Level

City of San Gabriel General Plan

The Comprehensive General Plan of the City of San Gabriel (General Plan), adopted in 2004 (City of San Gabriel, 2004), provides a long-range policy guide to address changes to the City and a roadmap for future development. Chapter 3 of the General Plan, the Circulation Element, outlines goals and actions that are applicable to transportation and the proposed Project as follows:

- **Goal 3.2:** To reduce traffic congestion in commercial/retail areas on Valley Boulevard, San Gabriel Boulevard, and Las Tunas Drive.
- **Goal 3.5:** Promote the use of bicycles for transportation.
- **Goal 3.6:** Enhance pedestrian access and circulation.
- **Goal 3.7:** To Provide adequate parking to serve the needs of residential areas and business activities.

3.14.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to transportation if it would:

a) Conflict with a program, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or

d) Result in inadequate emergency access.

3.14.4 Methodology

Plans, Programs, Ordinances, and Polices

CEQA requires a review of a project's potential to conflict with adopted transportation-related plans, programs, ordinances, or policies. The focus of this analysis is on whether a project would conflict with adopted transportation-related program, policy, plan, or ordinance that has been adopted to protect the environment. A project does not necessarily result in a significant impact under CEQA merely because it is not consistent with a program, policy, plan or ordinance. Rather, it is the intention of this threshold test to ensure that proposed development does not conflict with nor preclude the City from implementing adopted programs, plans, and policies that protect the environment. This evaluation was conducted by reviewing City documents such as the General Plan, local bicycle plans, and the SCAG 2016 RTP/SCS.

Vehicle Miles Traveled (Section 15064.3, subdivision [b])

On July 7, 2020, the City, as a member of the San Gabriel Valley Council of Governments (SGVCOG), adopted the following VMT thresholds and guidelines, which are based on OPR guidance. The City's adopted VMT thresholds state that proposed land uses must achieve a 15 percent reduction in VMT per capita, VMT per worker, or VMT per service population as compared to the existing Baseline VMT, defined as the existing SGVCOG regional average. A significant VMT impact would occur if a project generates VMT (per capita, per employee, or per service population) higher than 15 percent below the Baseline VMT. Projects that result in a significant VMT impact would be required to provide mitigations such as modifications to the land use mix to reduce VMT, implementing transportation demand management (TDM) measures to reduce VMT, and/or participation in a VMT fee program, mitigation exchange, or banking program (if available).

In addition, new City guidelines state that project impact analysis may be streamlined through project screening. Projects identified as VMT reducing or VMT efficient projects have a presumption of a less-than- significant impact on VMT, and therefore do not require a full VMT assessment. Consistent with OPR guidance, the City identifies the following project types as appropriate for screening, of which only one criteria would need to be met in order to be screened from a VMT analysis:

- Projects that generate fewer than 110 daily trips
- Retail (or retail components of) projects up to 50,000 square feet in floor area
- Projects located in low-VMT areas (defined as 15 percent below the Baseline VMT Metric)[1]
- Projects located in a Transit Priority Area (TPA). TPAs are defined as areas within one-half mile of an existing major transit stop or existing stop along a high-quality transit corridor with headways of 15 minutes of less
- Projects that are affordable housing developments

[1] A transportation analysis zone (TAZ) is determined by census block information and can be attributed based on various socioeconomic data (e.g., automobiles per household, employment, etc.). TAZs are used to help further the understanding of vehicle trips that are produced and attracted within the zone. The low-VMT area, as depicted in this criteria, is determined by the land uses within a TAZ. Projects that are similar in land use to already existing land uses in a low-VMT area TAZ are expected to produce similarly low VMT.

Design Hazards or Incompatible Uses

For vehicle, bicycle and pedestrian safety impacts, a review is conducted for all new driveways or vehicle access points, internal circulation, and parking access from an operational and safety perspective (e.g., turning radii, driveway queuing, line-of-sight for turns into and out of project driveway[s]). Where project driveways would cross pedestrian facilities or bicycle facilities (bike lanes or bike paths), the analysis considers operational and safety issues related to the potential for vehicle/pedestrian and vehicle/bicycle conflicts and the severity of consequences that could result.

Emergency Access

For emergency access impacts, a review is conducted for project access points, internal circulation, and parking access to determine if adequate emergency access is provided. The analysis considers the physical conditions of a project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers. Also, a determination is made as to whether a project would preclude adequate emergency access within the adjacent roadway network.

3.14.5 Environmental Impact Analysis

Impact TRA-1: The proposed Project would conflict with a program, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. (Potentially Significant Impact.)

Construction

A temporary increase in traffic, particularly heavy trucks, and parking would occur in the vicinity of the Project Site during the two phases of Project construction. Additional trips generated by construction vehicles, truck deliveries, and construction employees could affect traffic flow in the study area for all roadway and sidewalk users, including pedestrians and bicyclists. The number of construction workers needed would vary from an estimated 10 workers per day to a maximum of approximately 120 workers per day during more intensive construction phases. Construction activity could affect traffic along S. San Gabriel Boulevard, E. El Monte Street, E. Grand Avenue, and S. Gladys Avenue. Pedestrian traffic flow near the Project Site, particularly along E. El Monte Street and S. San Gabriel Boulevard, could be altered as a result of construction. Additionally, the availability of on-street parking in the study area could be affected if insufficient internal on-site parking for construction employees is not provided for the duration of construction.

Haul trucks would be used to transport construction and excavation materials to and from the Project Site. During construction, there would be approximately 72 haul trucks entering and leaving the site each day, assuming a daily export of 1,000 cubic yards and trucks with a capacity of 14 cubic yards. Locally, San Gabriel Boulevard and Mission Road would be available for construction truck trips. Both of these haul routes are currently designated as truck routes in the City (City of San Gabriel, 2016). San Gabriel Boulevard directly links to I-10 to the south and I-210 to the north.

Overall, the increase in vehicle trips (trucks and construction workers) generated by construction of the proposed Project could impede access by passenger vehicles, public transit, bicyclists, and pedestrians in the vicinity of the Project Site. This would be considered a potentially significant impact. However, with implementation of Mitigation Measure MM-

TRA-1, impacts resulting from Project construction activities would be reduced to a less than significant level.

Mitigation Measures

The incorporation of the following Mitigation Measure MM-TRA-1 would reduce short-term construction-related traffic impacts associated with the Project:

> **Mitigation Measure MM-TRA-1:** Prior to issuance of a grading permit and the first building permit for each phase of development, the Applicant shall submit a Construction Traffic Mitigation Plan (CMP) to the City for review and approval. The Plan shall outline how construction traffic, parking, and other localized impacts from Project construction activities will be minimized. At a minimum, the Plan shall include the following elements:
>
> - Traffic Controls: include parking and travel lane configurations; warning, regulatory, guide, and directional signage; and area sidewalks, bicycle lanes, and parking lanes. Include specific information regarding the Project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions.
> - Emergency Access: Description of emergency response vehicle access. If the road or area is completely blocked, preventing access by an emergency responder, a contingency plan must be included.
> - Employee Parking: ensure that construction period employees can either park on-site or at an off-site, off-street location within 500 feet of the Project Site to decrease the impact of construction parking on surrounding neighborhoods.
> - Pedestrian Safety: If sidewalks are closed during construction, pedestrians would need to be advised of the closure with signage. It may also be necessary for the applicant to provide a protected walkway, approved by the City.

Operation

General Plan

As stated previously, the Circulation Element of the General Plan, outlines goals and actions that are applicable to transportation and the proposed Project as follows:

- **Goal 3.2:** To reduce traffic congestion in commercial/retail areas on Valley Boulevard, San Gabriel Boulevard, and Las Tunas Drive.
- **Goal 3.4:** To balance the need for adequate traffic capacity with safety and quality of life considerations.
- **Goal 3.5:** Promote the use of bicycles for transportation.
- **Goal 3.6:** Enhance pedestrian access and circulation.
- **Goal 3.7:** To Provide adequate parking to serve the needs of residential areas and business activities.

The proposed Project would support Goal 3.2 by providing locally-serving retail at the Project Site, which would decrease driving trip distances and VMT. The proposed Project would support Goals

3.4, 3.5, and 3.6 by increasing residential and commercial density in the area, which would increase the number of destinations within walking and biking distance. Consistent with Goal 3.7, the proposed Project would provide guest and resident bicycle and vehicle parking that meets or exceeds the City's parking requirements. **Therefore, the Project impact would be less than significant.**

SCAG 2016-2040 RTP/SCS

As stated previously, the 2016 RTP/SCS[2] includes the following goals/objectives that are applicable to the proposed Project:

- Identify Regional Strategic Areas for Infill and Investment
- Focus New Growth Around Transit
- Plan for Growth Around Livable Corridors
- Provide More Options for Short Trips

The proposed Project is consistent with the 2016-2040 RTP/SCS in that it would provide additional density and infill development around bus lines. The proposed Project would also shorten trips by providing more locally serving retail options to the area. Furthermore, the proposed Project would build new infill development in a designated Redevelopment Area per Figure 1-4 in the City of San Gabriel General Plan.

The proposed Project design includes features to minimize impacts to the public right-of-way and enhance the user experience by integrating multimodal transportation options. The proposed Project would add new sidewalks and street trees within the Project Site and along the building perimeters, as well as improve street and pedestrian lighting to enhance connectivity to the existing pedestrian network. The proposed open space and plaza located midblock between both Plazas would facilitate pedestrian activity within the Project Site and from the neighboring areas to the east and west. The proposed Project would also to add a new traffic signal at the intersection of S. San Gabriel Boulevard and Pearl Street, which would provide for a safe signalized pedestrian crossing. The proposed Project would not narrow sidewalks or remove streetscape amenities or features. The proposed Project would provide streetscaping on all public frontages, such as street trees, sidewalks, turf parkway, raised planters, and green screen planters, which would provide a buffer between the proposed development and the surrounding neighbors. The locations of driveways are intended to minimize disruptions to the pedestrian right-of-way. The proposed Project would provide 30 bicycle parking spaces, which is in excess of the bicycle parking spaces required by code (i.e., 27 bicycle parking spaces). The proposed Project would contribute to overall walkability through enhancements to the Project Site. **Therefore, the Project impact would be less than significant.**

[2] Connect SoCal - 2020-2045 SCAG RTP/SCS had been approved by the Regional Council, but has yet to be approved by the California Air Resources Board (CARB) at the time of the writing of this EIR.

Caltrans Facilities

In consultation with Caltrans District 7, a freeway ramp safety (queuing) analysis was conducted at four freeway ramp terminal intersections under all scenarios. These four freeway ramp intersections all serve the cloverleaf style interchange between I-10 and San Gabriel Boulevard. The vast majority of regional Project-related trips that would utilize freeways would use the San Gabriel Boulevard ramps at I-10, as San Gabriel Boulevard directly fronts the Project Site 1.5 miles to the north. Based on the analysis, which is presented in Appendix J of this Draft EIR, none of the four ramps would experience any queuing greater than 85 percent of the available storage capacity during the peak morning and afternoon commute hours with implementation of the proposed Project. Therefore, as the vehicle queue lengths do not back up to the freeway mainline, there are no potential safety impacts at the I-10 and San Gabriel Boulevard off-ramps due to the addition of Project traffic. **Therefore, the Project impact would be less than significant.**

Alternative Transportation Impacts

Bicycle Facilities

Existing and planned bicycle facilities are described above in Subsection 3.14.1, *Existing Conditions*. Because the proposed Project does not directly front any existing bicycle facilities or preclude the construction of any of the planned bicycle facilities, the Project impact would be less than significant. Also, as noted above, the proposed Project would provide 30 bicycle parking spaces, which is in excess of the bicycle parking spaces required by code (i.e., 27 bicycle parking spaces). **Therefore, the Project impact would be less than significant.**

Pedestrian Facilities

There are existing sidewalks along the east side of S. San Gabriel Boulevard along the Project frontage, a bus stop that is currently not in use, and a mid-block crosswalk at S. San Gabriel Boulevard and Pearl Street. The proposed Project would install a new traffic signal at this intersection, which would upgrade the crosswalk to be signalized. The proposed Project would not preclude the City from constructing other pedestrian facilities. **Therefore, the Project impact would be less than significant.**

Transit Facilities

The transit facilities in the study area consist of a bus stop on northbound San Gabriel Boulevard that is equipped with a bench, trash can, and a bus stop passenger-activated light. The bus stop and its amenities are located on the southeast corner of S. San Gabriel Boulevard at the intersection of Pearl Street. However, Montebello Bus Lines bus service (Line 20 San Gabriel) at this bus stop was recently suspended. **If bus service were to return to this location, the proposed Project's driveway on S. San Gabriel Boulevard would interfere with transit operations. This would be considered a potentially significant impact. However, with implementation of Mitigation Measure MM-TRA-2, impacts to transit operations resulting from Project implementation would be reduced to a less-than-significant level. The proposed Project would not alter or affect any other transit facilities in the area.**

Mitigation Measures

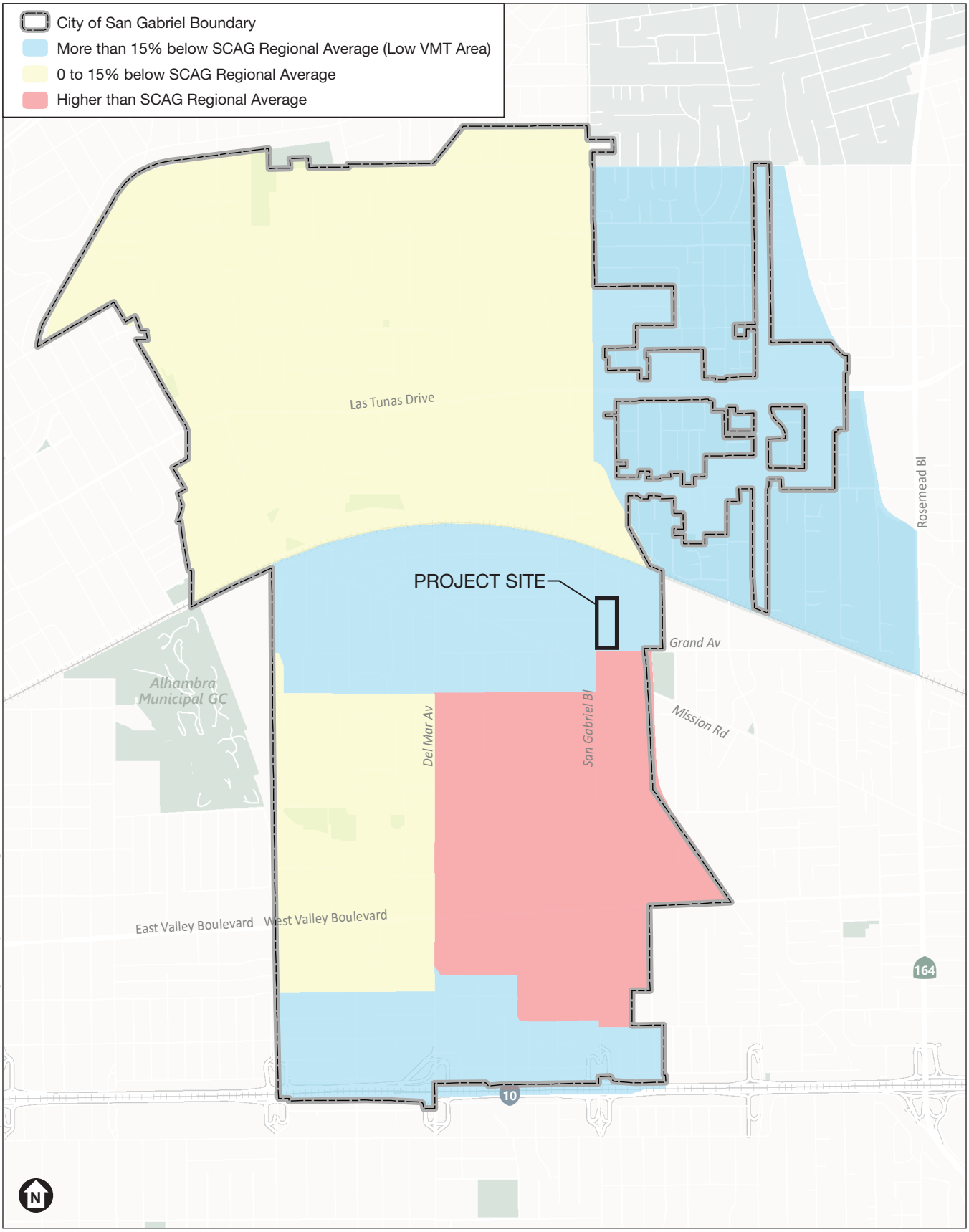
The incorporation of the following Mitigation Measure MM-TRA-2 would reduce operation-related transit facilities impacts associated with the Project:

> **Mitigation Measure MM-TRA-2**: Prior to issuance of the certificate of occupancy for the first phase of development, the Applicant shall consult with Montebello Bus Lines to determine whether Line 20 San Gabriel service has been or will be restored to the bus stop on San Gabriel Boulevard adjacent to the Project Site. If service has been or is expected to be restored, then the Applicant would be required to relocate this bus stop to the northeast corner of S. San Gabriel Boulevard and Pearl Street, approximately 100 feet to the north of the proposed signalized intersection.

Impact TRA-2: The proposed Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). (Less than Significant Impact.)

Because the proposed Project is of mixed-use nature, VMT would be measured using the VMT per service population metric, which combines residents and employees in its methodology. As shown in **Figure 3.14-1**, the proposed Project and its corresponding transportation analysis zone (TAZ) are located in a low VMT area. The Project Site's TAZ also includes adjacent parcels to the east of the Project Site and the neighborhood northwest of the Project Site bounded by S. Del Mar Avenue, S. San Gabriel Boulevard, E. El Monte Street, and the Southern Pacific Railroad tracks. **Therefore, the proposed Project is exempt from further VMT analysis.**

In addition, the proposed land uses under the Project would be similar in type to existing land uses in the TAZ, which means that the TAZ would maintain similar uses and would remain a low VMT area even with inclusion of the Project. Mixed-use projects by their nature of co-locating residential with other residential-serving uses within immediate proximity generate shorter trips than single-use projects and are considered VMT-efficient. The proposed retail components for the 700 Plaza and 800 Plaza are each under 50,000 square feet, would be locally-serving (as opposed to a larger regional-serving use) and would thereby reduce the distance local residents would have to travel to access key residential-supporting uses such as supermarkets, restaurants, and gyms. **Therefore, according to the City's VMT screening criteria, the proposed Project is assumed to result in a less-than-significant VMT impact.**



SOURCE: Fehr & Peers, 2020

Pacific Square San Gabriel Mixed-Use Project

Figure 3.14-1
City of San Gabriel Daily VMT per Service Population Map

ESA

Impact TRA-3: The proposed Project would not 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.)

As shown in Figure 2-4 (see Chapter 2, *Project Description*), the proposed Project would have six driveways:

- 3 driveways on S. Gladys Avenue
- 1 driveway on E. Grand Avenue
- 1 driveway on S. San Gabriel Boulevard
- 1 driveway on E. El Monte Street

Each driveway would provide full access to the Project Site. However, the S. San Gabriel Boulevard driveway would prohibit through movements from the Project Site onto Pearl Street. Two of the driveways on S. Gladys Avenue would lead to one level of underground parking exclusively for residential purposes, while the other driveways would lead to surface-level covered parking and one level of mezzanine parking for non-residential visitors. A loading dock would be provided to serve the supermarket use, which would be located adjacent to the driveway serving E. Grand Avenue. All roadways and driveways would be designed to intersect at right angles and would otherwise be designed to comply with City standards, ensuring the safety and maneuverability of vehicles turning into and out of the Project Site.

Pedestrians and Bicyclists

Pedestrian access to the Project Site would be provided via new sidewalks around the perimeter of the Project Site and through the central plaza accessible to the neighborhood. Residents and visitors arriving to the Project Site by bicycle would have the same access opportunities as pedestrians and would be able to utilize on-site bicycle parking facilities. The proposed Project's access locations would be designed to meet the City's standards and would provide adequate sight distance, sidewalks, crosswalks, and pedestrian movement controls that conform to best practices to protect pedestrian safety. Street trees and other potential impediments to driver and pedestrian visibility would be minimal. Pedestrian entrances separated from vehicular driveways would provide access from the adjacent streets, parking facilities, and transit stops.

Transit

The S. San Gabriel Boulevard driveway may require the removal or relocation of the existing northbound passenger transit stops serving Montebello Bus Line 20 as indicated in Mitigation Measure MM-TRA-2 above. As noted previously, service is currently temporarily suspended at this stop. Driveways would be designed and configured to avoid or minimize potential conflicts with transit services and pedestrian traffic. As a result, the proposed Project would not substantially increase hazards or conflicts and would contribute to overall walkability through enhancements to the Project Site.

Freight

Freight deliveries would access the Project study area via S. San Gabriel Boulevard and/or Mission Road, which are designated truck routes in the City. San Gabriel Boulevard connects to both I-10 to the south, and I-210 to the north. The Project Site would be accessed from the E. Grand Avenue driveway, where a designated loading dock would be provided adjacent to the driveway off of the parking aisle. Trucks would travel eastbound on E. Grand Avenue from S. San Gabriel Boulevard and drive forwards into the Project Site. A truck turning slot would be provided to aid inbound truck maneuvers into the loading dock without needing to maneuver backwards on City streets. Since designated truck routes would be used to access the Project Site and adequate loading facilities would be provided on-site, hazardous conditions resulting from freight access would be less than significant.

Parking

Based on the San Gabriel Municipal Code (SGMC) Section 153.220, the total number of off-street parking spaces required for the proposed land uses and intensities is 975 spaces. The proposed Project would include 983 off-street parking spaces, which is above the minimum required. The SGMC provides for a reduction in the number of parking spaces required if certain conditions are met, such as a maximum 20 percent reduction for the existence of regular weekday scheduled transit service within one-quarter mile of the Project Site, a maximum 5 percent reduction if motorcycle or bicycle parking is provided, and/or a maximum 40 percent reduction with Planning Commission approval if parking is to be shared among more than one land use. Although the proposed Project does not assume any parking minimum reductions, the provided 983 parking spaces would be more than what is required according to the SGMC, without available reductions. Since on-site parking would meet the City's parking requirements, hazardous conditions resulting from parking would be less than significant.

Conclusion

Based on the discussion above, the proposed Project would result in a less-than-significant impact with respect to increased hazards due to a geometric design feature or incompatible uses.

Impact TRA-4: The proposed Project would not result in inadequate emergency access. (Potentially Significant Construction Impact. Less than Significant Operational Impact.)

Construction

With regard to construction, truck and workers would travel to and from the Project Site, which would result in traffic congestion on the streets in the Project vicinity. In addition, temporary lane closures or sidewalk closures could result periodically. Increased construction traffic on City streets, particularly large haul trucks and other heavy equipment, may disrupt traffic flows, limit turn lane capacities, and generally slow traffic movement. **Therefore, during construction emergency access could be impeded and short-term impacts on emergency access would be potentially significant. However, the proposed Project would prepare a Construction Traffic Mitigation Plan as required by Mitigation Measure MM-TRA-1, which would address construction traffic routing and control, vehicular and pedestrian safety, pedestrian/bicycle**

access and parking, street closures, and construction parking. Thus, the Construction Traffic Management Plan would ensure the continued provision of emergency access during Project construction. With implementation of Mitigation Measure MM-TRA-1, emergency access construction impacts would be reduced to a less-than-significant level.

Operation

Emergency access to the Project Site is currently available directly from adjacent roadways, including S. San Gabriel Boulevard, E. Grand Avenue, S. Gladys Avenue, and E. El Monte Street. The proposed Project does not propose the closure or major modification of these streets. The six proposed driveways would be reviewed and approved by multiple City Departments to ensure compliance with City code requirements and the provision of adequate emergency access. **Therefore, emergency access would be maintained during Project operation and impacts would be less than significant.**

3.14.5 Cumulative Impacts

As described in Chapter 3, *Introduction to Environmental Analysis*, there are 37 cumulative projects in the study area, consisting of a range of land uses such as condominiums, apartments, senior residences, retail, restaurant, medical office, office, hotel, and storage facilities. The nearest cumulative project to the Project Site is 806-824 Gladys Avenue, known as Symphony at San Gabriel. Each of the cumulative projects considered in this cumulative analysis of consistency with programs, plans, policies, and ordinances would be separately reviewed and approved by the lead agency with jurisdiction over the related project location (i.e., City of San Gabriel, City of Rosemead), including a check for consistency with applicable policies of the respective jurisdiction. **Therefore, the proposed Project in combination with the cumulative projects would not create inconsistencies nor result in cumulative impacts with respect to the identified programs, plans, policies, and ordinances.**

For impacts related to alternative transportation, VMT, hazardous conditions due to a geometric design feature or incompatible land us, and emergency access, the proposed Project would only result in incremental (i.e., less than significant) cumulative transportation impacts. **Therefore, the proposed Project in combination with cumulative projects would not result in a cumulative impact related to these transportation topics.**

3.14.7 References

California Department of Transportation (Caltrans), 2020. Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance, July 2020. Available at: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-07-01-interim-ldigr-safety-guidance-a11y.pdf. Accessed September 24, 2020.

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3.15 Tribal Cultural Resources

This section of the EIR analyzes potential effects of the proposed Project's impacts related to tribal cultural resources that could result from implementation of the proposed Project. The analysis in this section is based, in part, on a Sacred Lands File (SLF) search conducted by the California Native American Heritage Commission (NAHC), Project notification letters submitted by the City to Native American individuals and organizations, and follow-up Native American consultations pursuant to Assembly Bill (AB) 52.

3.15.1 Existing Conditions

Tribal Cultural Resources Definition

Tribal cultural resources are defined by the California Public Resources Code Section 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources (California Register) or included in a local register of historical resources, or a resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant.[1] Historical resources, unique archaeological resources, or non-unique archaeological resources may also be tribal cultural resources if they meet these criteria.

Ethnographic Setting

The Project Site is located in a region traditionally occupied by the Takic-speaking Gabrielino Indians. The term "Gabrielino" is a general term that refers to those Native Americans who were administered by the Spanish at the Mission San Gabriel Arcángel. Prior to European colonization, the Gabrielino occupied a diverse area that included: the watersheds of the Los Angeles, San Gabriel, and Santa Ana rivers; the Los Angeles basin; and the islands of San Clemente, San Nicolas, and Santa Catalina (Kroeber, 1925). Their neighbors included the Chumash to the north, the Juañeno to the south, and the Serrano and Cahuilla to the east. The Gabrielino are reported to have been second only to the Chumash in terms of population size and regional influence (Bean and Smith, 1978). The Gabrielino language is part of the Takic branch of the Uto-Aztecan language family.

The Gabrielino Indians were hunter-gatherers and lived in permanent communities located near the presence of a stable food supply. Subsistence consisted of hunting, fishing, and gathering. Small terrestrial game was hunted with deadfalls, rabbit drives, and by burning undergrowth, while larger game such as deer were hunted using bows and arrows. Fish were taken by hook and line, nets, traps, spears, and poison (Bean and Smith 1978; Reid 1939 [1852]). The primary plant resources were the acorn, gathered in the fall and processed with mortars and pestles, and various seeds that were harvested in late spring and summer and ground with manos and metates. The seeds included chia and other sages, various grasses, and islay or holly leafed-cherry (Reid 1939 [1852]).

[1] A cultural landscape that meets these criteria is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

Community populations generally ranged from 50 to 100 inhabitants, although larger settlements may have existed. The Gabrielino are estimated to have had a population numbering around 5,000 in the pre-contact (before Spanish exploration) period (Kroeber, 1925). Gabrielino villages are reported by early explorers to have been most abundant near the Los Angeles River, in the area north of downtown, known as the Glendale Narrows, and those areas along the river's various outlets into the sea. Among those villages north of downtown are *Maawnga* in the Glendale Narrows; *Totongna* and *Kawengna,* in the San Fernando Valley; *Hahamongna,* northeast of Glendale; and the village of *Yaangna*, in the vicinity of present-day downtown Los Angeles (McCawley, 1996).

On October 30, 2017, ESA conducted a phone conversation with Andy Salas, Gabrielino Band of Mission Indians-Kizh Nation, regarding his family involvement with the Yoshimura family and the former San Gabriel Nursery & Florist. He stated that his second cousin, Gene Perez, worked for and was friendly with the Yoshimura family. As described in Section 3.3, *Cultural Resources,* of this Draft EIR, in the 1940s, the Yoshimura's were sent to a Japanese internment camp, and while many Japanese business owners lost everything, the Yoshimura's were able to sell their business to a E. Manchester Boddy, publisher of the Los Angeles Daily News and previous owner of what is now the Descanso Gardens. While the Yoshimuras were in the internment camps, Mr. Perez and his wife, Elena Chowa, worked at the nursery and looked after the Yoshimura's personal belongings. Upon return, Mr. Perez, helped the Yoshimura's start over again. In gratitude, the Yoshimura's gave Mr. Perez and his wife a house on the property (likely one of the residences formerly on the southern portion of the Project Site). More information regarding the history of the San Gabriel Nursery can be found on the business webpage (Salas, 2018 and San Gabriel Nursery, 2018).

Native American Heritage Commission Sacred Lands File

The NAHC maintains a confidential SLF which contains sites of traditional, cultural, or religious value to the Native American community. The NAHC was contacted on July 5, 2018 to request a search of the SLF. The NAHC responded to the request in a letter dated July 6, 2018. The letter states that the SLF search yielded negative results and indicated that "the absence of specific site information…does not indicate the absence of Native American cultural resources" within a project site (Lienert, 2018). The City, as the Lead Agency, has conducted consultation with tribes who are traditionally and culturally affiliated with the geographic area associated with the project site pursuant to AB 52 and its relevant implementing regulations, as discussed later in this section.

South Central Coastal Information Center Records Search

A records search for the Project Site was conducted on July 9, 2018 at the South Central South Central Coastal Information Center (SCCIC) housed at the California State University, Fullerton. The records search included a review of all previously documented cultural resources and cultural resources investigations within a 0.5-mile radius of the Project Site. The records search also included a review of California Points of Historical Interest, California Historical Landmarks, the California Register, the National Register, the California State Historic Resources Inventory listings, and the Los Angeles Historic-Cultural Monument listings.

Previous Cultural Resources Investigations

The records search results indicate that 11 cultural resources studies have been conducted within a 0.5-mile radius of the Project Site. Less than 25 percent of the 0.5-mile records search radius has been included in previous cultural resources surveys. Of these 11 studies, one (LA-5457) included portions of the Project Site, but did not result in the recordation of any prehistoric archaeological sites.

Previously Recorded Cultural Resources

No prehistoric archaeological resources have been previously recorded within the Project Site or within the 0.5-mile records search radius.

Archaeological Resources Survey

An archaeological resources survey of the Project Site was conducted on July 17, 2018 by ESA archaeologist Amber-Marie Madrid, B.A. The survey was aimed at identifying surface evidence of archaeological resources within the Project Site. In addition to this survey, ESA conducted archaeological monitoring, with a Native American monitor from the Gabrieleno/Tongva San Gabriel Band of Mission Indians, during the demolition and removal of a vault that was part of the previous boiler room that was present at the northern portion of the Project Site. The majority of the Project Site, approximately 60 percent, was obscured by non-native gravel fill. Approximately 95 percent of the Project Site was surveyed. The soils observed on the surface included a red-brown loamy sand, often characterized as historic fill soils to about 1-foot below ground surface (bgs). Soil observed below the fill line included a light-brown to brown fine grained sand to approximately 6-feet bgs. All previous structures within the Project Site had been destroyed by fire or removed from the Project Site, with the exception of the boiler room vault. The survey and archaeological monitoring did not yield the identification or archaeological resources, however the boiler room was documented on a California Department of Parks and Recreation (DPR) Archaeological Form appended to the *Archaeological Resources Assessment* in Appendix C-2.

Native American Consultation

In compliance with the requirements set forth in AB 52, the City of San Gabriel Planning Division provided formal notification of the Project to three tribes that are on the City's request for notification list: (1) the Gabrieleno Band of Mission Indians – Kizh Nation, (2) the Gabrielino/Tongva San Gabriel Band of Mission Indians, and (3) the Gabrielino – Tongva Tribe. A summary of the consultation with each tribe is presented below.

Gabrielino/Tongva San Gabriel Band of Mission Indians

In response to the City's request for consultation with the Gabrieleño Band of Mission Indians-Kizh Nation (Kizh Nation) on September 5, 2018, the City received a letter via email from Andrew Salas, Tribal Chairman that requested formal consultation and included a map entitled "Original Peoples County Map"[2]. The City participated in two subsequent phone call consultations with the Kizh Nation. During both calls the Kizh Nation described their history and connection to the Project

[2] The original request for consultation was received from the Kizh Nation on September 5, 2018. An exact duplicate was received on September 10, 2018. Both responses are considered one request for consultation.

Site, surrounding vicinity, and San Gabriel in general. They described that Rubio Wash, located north of the Project Site, was an important location to the Kizh Nation and that there was a village site in proximity to the Project Site. They also discussed their family's association with the Yoshimora family and indicated that other family members lived nearby in the City. During these consultation conversations and sharing of maps and information, no tribal cultural resources were specifically identified by the Kizh Nation within the Project Site.

While no specific tribal cultural resource (as defined in Public Resources Code Section 21074) was identified during consultation, the sensitivity of the Project Site for archaeological resources was communicated by the Kizh Nation. As such, the City developed draft mitigation regarding the protection of previously unknown archaeological resources that may be encountered during construction, which was shared with the tribe via email. The Kizh Nation requested several modifications to the mitigation. The City accepted and made some of these revisions, and also maintained consistency with the City's Historic Preservation and Cultural Resource Ordinance. The City provided the revised mitigation, which is now included in this Draft EIR as Mitigation Measure MM-CUL-1 through CUL-5, back to the Kizh Nation along with an official close of consultation on June 19, 2020. In response to the close of consultation, the Kizh Nation indicated that the mitigation should be "specific to the TCR" and requested that the Kizh Nation be utilized for the Project.

Gabrielino/Tongva San Gabriel Band of Mission Indians

The City sent a formal request for consultation on September 5, 2018 and a subsequent follow up request email to the Gabrielino/Tongva San Gabriel Band of Mission Indians (Gabrielino/Tongva). Mr. Anthony Morales of the Gabrielino/Tongva contacted the City by phone to initiate consultation for the proposed Project. During consultation, Mr. Morales requested that the Gabrielino/Tongva be onsite for Native American monitoring purposes during excavation. The City requested that Mr. Morales provide any expectations of the Gabrielino/Tongva in writing to the City. A follow up email was sent to Mr. Morales after the conversation summarizing the consultation that included the following:

- The tribe wishes to have a monitoring presence at the 700-800 S. San Gabriel Blvd. project site during construction.
- The tribe will provide something in writing to City staff for consideration and/or inclusion in the environmental document that is considered by the Planning Commission and City Council.
- This will be submitted to City staff on this message to ensure the right City staff receive it.
- Correspondence will be submitted in approximately one week.

To date, no additional information was provided by the tribe. The City subsequently closed consultation via letter on April 27, 2020.

Gabrielino – Tongva Tribe

On August 14, 2019, subsequent to the initial consultation described above, the City received a request from Linda Candelaria, Chairwoman, of the Gabrielino Tongva Tribe to consult under AB

52 on all projects in the City. On February 13, 2020 the City sent AB 52 notification of the proposed Project. No response was received and the City sent a close out letter on March 31, 2020.

3.15.2 Regulatory Framework

State Level

Assembly Bill 52

AB 52 was approved on September 25, 2014. The act amended California Public Resources Code Section 5097.94, and added Public Resources Code Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation (NOP) or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration (MND) is filed on or after July 1, 2015. The primary intent of AB 52 was to involve California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans, that require consideration under CEQA, known as tribal cultural resources. Public Resources Code Section 21074(a)(1) and (2) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the California Register or included in a local register of historical resources, or a resource that is determined to be a tribal cultural resource by a Lead Agency, in its discretion and supported by substantial evidence. On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to Appendix G of the CEQA Guidelines, which was approved by the Office of Administrative Law on September 27, 2016.

Public Resources Code Section 21080.3.1 requires that, within 14 days of a Lead Agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the Lead Agency provide formal notification to the designated contact, or a tribal representative, of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in Public Resources Code Section 21073) and who have requested in writing to be informed by the Lead Agency of projects within their geographic area of concern.[3] Tribes interested in consultation must respond in writing within 30 days from receipt of the Lead Agency's formal notification and the Lead Agency must begin consultation within 30 days of receiving the tribe's request for consultation.[4]

Public Resources Code Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a

3 Public Resources Code Section 21080.3.1(b)

4 Public Resources Code Sections 21080.3.1(d) and 21080.3.1(e)

significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.[5]

If a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the Lead Agency, or otherwise failed to engage in the consultation process, or if the Lead Agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the Lead Agency may certify an EIR or adopt an MND.[6]

Public Resources Code Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the Lead Agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the Lead Agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

However, confidentiality, does not apply to data or information that are, or become publicly available, are already in lawful possession of the project applicant before the provision of the information by the California Native American tribe, are independently developed by the Project applicant or the Project applicant's agents, or are lawfully obtained by the Project applicant from a third party that is not the Lead Agency, a California Native American tribe, or another public agency.[7]

3.15.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to Tribal Cultural Resources if it would:

a) 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), or

   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

5 Public Resources Code Section 21080.3.2(b)
6 Public Resources Code Section 21082.3(d)(2) and (3)
7 Public Resources Code Section 21082.3(c)(2)(B)

Public Resource Code Section 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe.

3.15.4 Methodology

The evaluation of impacts to tribal cultural resources for the proposed Project consists of two-parts: (1) identification of tribal cultural resources within the project site or immediate vicinity through AB 52 consultation, as well as a review of pertinent academic and ethnographic literature for information pertaining to past Native American use of the project area, SLF search, and SCCIC records review; and (2) a determination of whether the project may result in a "substantial adverse change" in the significance of the identified resources.

3.15.5 Environmental Impact Analysis

Impact TCR-1: The proposed Project would not result in 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)? (Potentially Significant Impact.)

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 Section 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe? (Potentially Significant Impact.)

No prehistoric archaeological resources have been previously recorded within the Project Site itself or within a 0.5-mile radius of the Project Site. The SLF search conducted by the NAHC indicated that the Project Site was negative for known sacred tribal lands. While both the Kizh Nation and Gabrielino/Tongva San Gabriel Band of Mission Indians indicated that the Project Site was within their tribal territory and nearby to known village sites and other sensitivity for buried archaeological sites that could be determined to be tribal cultural resources, no known tribal cultural resources have been identified as a result of the research or consultation with the tribes. Therefore, the Project would not cause a substantial adverse change in the significance of a known tribal cultural resource, as defined in Public Resources Code Section 21074.

During consultations, the Kizh Nation stated that Rubio Wash represented a significant source of water for tribes in the area and, as a result, Tribal resources might be located there. The historic ethnographic information provided by the tribes has been included as context in the *Archaeological Resources Assessment Report* (see Appendix C-2) and considered for this analysis.

The determination that the Project Site itself has a medium to high sensitivity for archaeological resources is based on the factors described in Section 3.3, *Cultural Resources*, of this EIR. The record searches, historic maps and the land use history, were all used to determine the proximity of a sustainable source of water and other natural resources such as wetlands that may be indicators

of prehistoric habitation. The materials studied did not indicate that such resources existed at, or in the immediate vicinity of, the Project Site. Although evidence was provided by the Kizh Nation that indicates the location of villages and known archaeological sites, none of these resources is located within the Project Site. In the course of the City's review and consultations with the tribes, the City has not obtained evidence that sacred lands or tribal cultural resources overlap with or occur within the 5.85-acre Project Site. Therefore, the City concludes that the Project Site does not contain any tribal cultural resources.

Based on all available information, including the information provided by the tribes during consultations, the City does not have evidence of known tribal cultural resources as defined in Public Resources Code Section 21074(a)(1) that are listed or eligible for listing in the California Register, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or that are determined by the Lead Agency (here the City), in its discretion and supported by substantial evidence, to be significant pursuant to Public Resources Code Section 5024.1, within the Project Site.

As described above, no sensitive tribal cultural resources have been identified within the Project Site. **However, the Project Site has a medium to high sensitivity for buried archaeological resources that, if encountered, could potentially be considered a tribal cultural resource as defined in Public Resources Code Section 21074, 5020.1(k), or 5024.1, and impacts would be potentially significant. Should unanticipated archaeological resources be encountered during ground disturbance, implementation of Mitigation Measures MM-CUL-1 through MM-CUL-5 in Section 3.3, *Cultural Resources,* of this EIR would reduce potentially significant impacts to unanticipated archaeological resources to a less than significant level under CEQA.**

3.15.6 Cumulative Impacts

As demonstrated above, the Project would have a less-than-significant impact on tribal cultural resources. Specifically, there are no resources listed or determined eligible for listing, on the national, State, or local register of historical resources, and the Lead Agency determined that no resources were identified during AB 52 tribal consultation that are eligible for listing under the criteria in Public Resources Code Section 5024.1(c). As with the Project, each related project would also be required to engage in AB 52 consultation with Native American tribes in order to identify any tribal cultural resources that could potentially be impacted by the related project and to address potentially significant impacts, if identified. The related projects would also be required to comply with the City's Historic Preservation and Cultural Resource Ordinance. **As such, cumulative impacts on tribal cultural resources would be less than significant.**

3.15.7 References

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3.16 Utilities and Service Systems

This section analyzes the potential effects of the proposed Project's impacts related to utilities and service systems. Information found in this analysis is based on information provided in the City of San Gabriel 2004 General Plan, the San Gabriel County Water District (SGCWD) 2015 Urban Water Management Plan (UWMP) Update, the Water Demand Assessment (WDA) prepared for the proposed Project, and the County of Los Angeles' Countywide Integrated Waste Management Plan (CoIWMP).

3.16.1 Existing Conditions

The Project Site is currently vacant and unoccupied as all previously existing greenhouses and associated structures on-site were removed after an act of arson in 2018. The Project Site was previously occupied by San Gabriel Nursery & Florist, which continues to operate on a 2-acre parcel just north of the Project Site as a retail garden and florist shop. The Project Site does not currently contain any operational uses and therefore does not consume water, generate wastewater, or generate solid waste. Therefore, for the purposes of this EIR, all construction and operational water supply, wastewater, and solid waste generation associated with the proposed Project are considered to be net new.

Water Supply

The City receives potable water primarily from groundwater. Imported water from the Metropolitan Water District of Southern California (MWD) is used as recharge for groundwater basins or for emergency water supply. As discussed in the WDA, approximately 60 percent of the SGWCD service area is in the City of San Gabriel, and 40 percent is in the City of Rosemead, City of Temple City, and unincorporated Los Angeles County. Residential and commercial demands account for over 90 percent of water demand in the SGCWD. The Project Site is located within the service area of the SGCWD which owns, operates, and maintains the water system within the limits of the City. The SGCWD's service area encompasses approximately 2,680 acres and has been (for prior nursery uses) and will be the purveyor of water to the Project Site (SGCWD, 2016). The 2015 UWMP Update states that the water supply available to the SGCWD is dependent on groundwater supplies from nine wells as its existing and planned source of potable water. The SGCWD has the legal right to pump groundwater from the eight wells in the Main San Gabriel Basin (Main Basin) and one well in the Raymond Basin (Todd Groundwater, 2020). The Main Basin is naturally recharged by stream runoff from surrounding mountains, precipitation, inflow from surrounding basins, and return flow. The Main Basin is also recharged with imported water from MWD. When the water demand is high or pumping is more limited in dry periods, the Water District purchases imported water that recharges the Main Basin to make up for the extra water use. Even in dry periods, the water source for most of the City is still entirely groundwater. As the proposed Project is within the boundaries of SGCWD, the proposed Project would use groundwater to serve the water demands of the proposed Project (Todd Groundwater, 2020).

In May of 2016, the SGCWD adopted its 2015 UWMP Update, which details the SGCWD's current and future water supply. The plan found that based on Ordinance No. 2015-44, which was adopted and approved on June 9, 2015 during the 2013-2015 drought, and historical data of meeting its

demands during multiple dry year periods, with all of its existing and planned supplies, the SGCWD can meet 100 percent of projected demand through 2040, even with a repeat of a severe drought. The determination was a result of the SGCWD's three-year drought sequence for fiscal years 2011-12, 2012-13, and 2013-14, where the demand projected was adequately met from groundwater from the Main Basin and Raymond Basin. The SGCWD 2015 UWMP Update projects water supplies over the next 25 years based on the minimum supplies needed by SGCWD to meet projected demands. Therefore, as indicated within the SGCWD 2015 UWMP Update, the total dry demand and total supply are equal to show that the SGCWD can meet water demands over the next 25 years. **Tables 3.16-1** through **3.16-3** below show the City's water supply and demand comparisons for normal year, single dry year, and multiple dry year conditions through 2040 (SGCWD, 2016).

TABLE 3.16-1
SGCWD NORMAL YEAR SUPPLY AND DEMAND COMPARISON IN ACRE FEET PER YEAR (AFY)

Water Sources	2020	2025	2030	2035	2040
Available Supply					
Groundwater – Main San Gabriel Basin	5,676.3	5,837.3	6,003.3	6,172.3	6,346.3
Groundwater – Raymond Basin	763.7	763.7	763.7	763.7	763.7
Imported Water	0	0	0	0	0
Total Available Supply	6,440	6,601	6,767	6,936	7,110
Demand					
Total Normal Demand	6,440	6,601	6,767	6,936	7,110
Supply/Demand Comparison					
Supply/Demand Difference	0	0	0	0	0

SOURCE: SGCWD, 2016.

TABLE 3.16-2
SGCWD SINGLE YEAR SUPPLY AND DEMAND COMPARISON IN ACRE FEET PER YEAR (AFY)

Water Sources	2020	2025	2030	2035	2040
Available Supply					
Total Supply	6,566	6,730	6.900	7,072	7,249
Normal Year Supply	6,440	6,601	6,767	6,936	7,110
% of Normal Year	98%	98%	98%	98%	98%
Demand					
Total Dry Demand	6,566	6,730	6.900	7,072	7,249
Normal Year Demand	6,440	6,601	6,767	6,936	7,110
% of Normal Year	98%	98%	98%	98%	98%
Supply/Demand Comparison					
Supply/Demand Comparison	0	0	0	0	0

SOURCE: SGCWD, 2016.

TABLE 3.16-3
SGCWD MULTIPLE DRY YEAR SUPPLY AND DEMAND COMPARISON IN ACRE FEET PER YEAR (AFY)

Water Sources	2020	2025	2030	2035	2040
First Year					
Supply Totals	6,321	6,479	6,642	6,808	6,978
Demand Totals	6,321	6,479	6,642	6,808	6,978
Difference	0	0	0	0	0
Second Year					
Supply Totals	6,540	6,703	6,872	7,044	7,220
Demand Totals	6,540	6,703	6,872	7,044	7,220
Difference	0	0	0	0	0
Third Year					
Supply Totals	6,556	6,730	6,900	7,702	7,249
Demand Totals	6,556	6,730	6,900	7,702	7,249
Difference	0	0	0	0	0

SOURCE: SGCWD, 2016.

The 2015 UWMP Update estimated a 2 percent increase in water demand during single dry year periods and then a decrease during four-year dry periods. Future dry periods may see a relatively decreased demand due to Ordinance No. 2015-44 and other efforts to decrease water demand from conservation (Todd Groundwater, 2020).

Wastewater

The City of San Gabriel (City) operates and maintains a sewage collection system comprised of 72 miles of gravity sewer, 1,350 manholes, and one lift station (City of San Gabriel, 2018). The Project Site contains a network of existing sewer lines, including connecting lines in E. El Monte Street and S. Gladys Avenue that drain south to E. Grand Avenue then west into a sewer main in S. San Gabriel Boulevard (12-inch diameter). The S. San Gabriel Boulevard main connects with a 24-inch sewer that outfalls to the Los Angeles County Sanitation District (LACSD) trunk sewer, north of I-10.

Wastewater generated by the City is treated by the LACSD. LACSD's Joint Water Pollution Control Plant (JWPCP) treats approximately 260 million gallons per day (mgd) and has a total permitted capacity of 400 mgd (LACSD, n.d.). The treatment level is primary and secondary treatment with disinfection. Solids collected in primary and secondary treatment are processed in anaerobic digestion tanks where bacteria break down organic material and produce methane gas. Treated wastewater is ultimately disinfected prior to being discharged to the Pacific Ocean. Though highly treated, effluent from the JWPCP does not meet recycled water standards and is therefore not re-used for such purposes. However, all water discharged to the ocean is monitored to ensure compliance with applicable local, state, and federal standards for discharge water (SGCWD, 2016).

Stormwater Drainage

As described in Section 3.8, *Hydrology and Water Quality*, other than several curb drains located along E. Grand Avenue, there are no other existing drainage systems on the Project Site. There are no direct connections to any off-site public storm drain facilities. On-site storm water is routed via surface flow downstream to a City of San Gabriel catch basin located 200-feet south of the intersection of E. Grand Avenue and S. San Gabriel Boulevard, to the southwest, along S. San Gabriel Boulevard (Fuscoe Engineering, 2019).

South of the Project Site there is an existing Los Angeles County Flood Control District (LACFCD) catch basin located at the southwest corner of S. San Gabriel Boulevard and E. Grand Avenue. The catch basin drains into an existing 6-inch vitrified clay pipe (VCP) storm drain lateral within S. San Gabriel Boulevard. From there it is routed to a 57-inch reinforced concrete pipe (RCP) trunk line that flows northwest through E. Mission Road and is tributary to the Rubio Wash. The Rubio Wash, which is located approximately 800 feet east of the Project Site, is a subgrade concrete-lined subsurface tributary of the Rio Hondo.

North of the property there are seven existing LACFCD catch basins, four at the intersection of E. El Monte Street and S. San Gabriel Boulevard and three downstream at the intersection of E. El Monte Street and S. Gladys Avenue. The four catch basins at the intersection of E. El Monte and San Gabriel drain into a 42-inch RCP storm drain line within E. El Monte Street. The three catch basins at the intersection of E. El Monte Street and S. Gladys Avenue drain into a 45-inch RCP storm drain line within E. El Monte. This trunk line flows east through E. El Monte Street and is tributary to the Rubio Wash.

Storm drain systems in the City of San Gabriel are operated and maintained by the City Utilities Department Operations Division's sewer and storm drain section. The larger, high capacity storm drains within the City are operated and maintained by the Los Angeles County Department of Public Works (LACDPW) (Fuscoe Engineering, 2019).

Electric Power

There are a number of existing overhead utility lines (electrical, Southern California Edison [SCE]) around the perimeter of the Project Site. Six power poles are situated in the public right-of-way (sidewalk) along S. San Gabriel Boulevard, three along E. Grand Avenue, six along S. Gladys Avenue, and two within E. El Monte Street. SCE is the electricity provider for the City of San Gabriel. SCE provides electrical services to approximately 15 million people, 180 incorporated cities, 15 counties, 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area (SCE, 2019). In 2018, SCE's total electricity sales in the SCE service area was estimated to be 87,143 gigawatt hours (GWh) (SCE, 2018a). The proposed Project would connect to electric power lines that surround the perimeter of the Project Site.

Natural Gas

The City of San Gabriel is served by the Southern California Gas Company (SoCalGas), which is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.6 million customers in more than 500

communities encompassing approximately 20,000 square miles throughout central and southern California (SoCalGas, 2019). There are existing natural gas connections on all streets surrounding the Project Site except for E. El Monte Street.

Solid Waste

The Project Site is currently vacant and undeveloped land and therefore not being serviced by any solid waste hauler. Solid waste disposal and recycling services for the Project Site would be provided by Athens Services. Athens would transfer solid waste to regional landfills operated by the LACSD. Currently, the LACSD operates two Class III sanitary landfills, which include the Calabasas and Scholl Canyon Landfills (LACSD, 2018). The Calabasas Landfill is located approximately 42 miles from the Project Site. The Calabasas Landfill has a permitted maximum daily capacity of 3,500 tons and has a remaining permitted capacity of 4,908,186 tons (Los Angeles County Public Works, 2019). The Scholl Canyon Landfill is located approximately 11 miles from the Project Site. The Scholl Canyon Landfill has a permitted maximum daily capacity of 3,400 tons and has a total remaining permitted capacity of 4,294,664 tons (Los Angeles County Public Works, 2019).

Telecommunications

The Project Site is vacant and does not have any existing onsite telecommunications infrastructure. There are aerial Charter connections available on S. Gladys Avenue, or underground facilities on S. Gladys Avenue and east of the Project Site past S. San Gabriel Boulevard.

3.16.2 Regulatory Framework

Water Supply

Federal Level

Federal Water Pollution Control Act

The Federal Water Pollution Control Act requires discharges (from point and non-point sources) into navigable waters to meet stringent National Pollutant Discharge Elimination System (NPDES) permit standards. The U.S. Environmental Protection Agency (USEPA) has published regulations establishing requirements for application of storm water permits for specified categories of industries, municipalities, and certain construction activities. The regulations require that discharges of storm water from construction activity of 1.0 acre or more must be regulated and covered by an NPDES permit. When a construction area exceeds 1.0 acre in size, such as the Proposed Project, the applicant must develop and implement a Storm Water Pollution Prevention Plan (SWPPP). Additional analysis and information regarding NPDES requirements and regulations is provided in Section 3.8, *Hydrology and Water Quality*, of this Draft EIR.

Government Code Section 66473.7

According to Government Code Section 66473.7 (a) (2), "sufficient water supply" means the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection that will meet the projected demand associated with the proposed subdivision, in addition to existing and planned future uses, including, but not limited to, agricultural and industrial

uses. In determining "sufficient water supply, all of the following factors shall be considered, including the availability of water supplies over a historical record of at least 20 years.

State Level

California Urban Water Management Planning Act

The 2015 UWMP Update has been prepared in accordance with the Urban Water Management Planning Act (UWMP Act), as amended, California Water Code (CWC) Division 6, Part 2.6, Sections 10610 through 10657. The UWMP Act became part of the CWC with the passage of Assembly Bill (AB) 797 during the 1983-1984 regular session of the California legislature. The UWMP Act requires every urban water supplier that provides water for municipal purposes to more than 3,000 connections or supplying more than 3,000 acre-feet of water annually to adopt and submit a plan every five years to the California Department of Water Resources (DWR). The UWMP Act was amended in November 2009 with the adoption of Senate Bill (SB) X7-7.

Senate Bill 610

State legislation addressing water supply, SB 610 became effective January 1, 2002. SB 610, codified in CWC Section 10910 et seq., creates and describes requirements for preparing Water Supply Assessments (WSAs) and described the role UWMPs play in creating WSAs. SB 610 projects which meet specific criteria below to have a WSA prepared by the project's water supplier. The WSA must determine whether the water supplier has sufficient water supplies to meet the projected water demand associated with a project based on the analysis of the supplier's water supply within its most recent UWMP. In addition, where applicable, a WSA must describe the water supply projects and programs that may be undertaken to meet the total project water use of the service area. If groundwater is identified as a source of water available to the supplier, the following additional information must be included in the UWMP: (1) a groundwater management plan; (2) a description of the groundwater basin(s) to be used and the water use adjudication rights, if any; (3) a description and analysis of groundwater use in the past five years; and (4) a discussion of the sufficiency of the groundwater that is projected to be pumped by the supplier.

In accordance with SB 610, projects for which a WSA must be prepared are those subject to CEQA that meet any of the following criteria:

- Residential developments of more than 500 dwelling units;
- Shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- Commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- Hotels, motels, or both, having more than 500 rooms;
- Industrial, manufacturing, or processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- Mixed-use projects that include one or more of the projects specified in this subdivision; or
- Projects that would demand an amount of water equivalent to or greater than the amount of water required by a 500-dwelling unit project.

The proposed Project would include 251 dwelling units (243 residential units, 8 live/work units) and 76,046 square feet of commercial space, and is therefore well below the criteria that trigger the requirement to prepare a WSA. Accordingly, the proposed Project is not subject to Senate Bill 610, as the proposed Project does not meet the requirements of SB 610 listed above. As such, a WSA is not required.

Senate Bill X7-7

SB 7, which was part of the Seventh Extraordinary Session of 2009 and referred to as SB X7-7, was enacted on November 10, 2009. SB 7 mandates water conservation goals for UWMPs, requiring Urban Water Suppliers to achieve a 20 percent per capita water consumption reduction by the year 2020 statewide, as described in the "20 x 2020" State Water Conservation Plan (DWR, 2010). As such, each updated UWMP must incorporate a description of how each respective Urban Water Supplier will quantitatively implement this water conservation mandate, which requirements in turn must be taken into consideration in preparing and adopting WSAs under SB 610. SGCWD addresses water conservation goals within Chapter 5, SB X7-7 Baseline and Targets, of the 2015 UWMP Update.

Regional Level

San Gabriel County Water District 2015 Urban Water Management Plan Update

In adherence to the UWMP Act, the SGCWD adopted their 2015 UWMP Update in May 2016. The purpose of the 2015 UWMP Update is for urban water suppliers, such as the SGCWD, to evaluate the reliability of their water sources over a 20-year planning period to ensure adequate water supplies are available. According to the 2015 UWMP Update, the City provides funds to purchase untreated imported water from Upper District. Upper District is a wholesaler which supplies supplemental imported water from MWD to its member agencies, including SGCWD. The SGCWD purchases water from Upper District to offset groundwater demands in excess of SGCWD's water rights. In case of emergency, the SGCWD has two emergency water interconnections; one is with California American Water Company and the other is with the City of Alhambra. These interconnections are manually activated and can supply water between each water supplier in the event that one or the other water agency may need additional water (SGCWD, 2016). As discussed in the WDA, SGCWD developed a 4-stage water shortage contingency plan (Ordinance No. 2015-44) to decrease water demand during periods of water shortage. Along with the adoption of Ordinance No. 2015-44 for drought periods, water conservation is supported through year-round mandates and practices.

San Gabriel County Water District Rules and Regulations for New Construction

The SGCWD rules and regulations for new development indicate that a "Water Availability" will be issued by SGCWD upon request. It requires the preparation of a fire flow report and a WSA, if needed in accordance with SB 610. The Project Applicant is required to coordinate with SGCWD to ensure adequate water infrastructure is provided to the Project Site to ensure sufficient fire flows. As stated within the SGCWD rules and regulations for new developments, a WSA may be required depending on the size of the development pursuant to SB 610. As previously mentioned, the Project would include 251 dwelling units (less than 500 units) and 76,046 square feet of commercial space (less than 250,000 square feet), and therefore a WSA is not required per the requirements of SB 610.Local Level.

City of San Gabriel, Comprehensive General Plan

The General Plan, adopted in 2004 (City of San Gabriel, 2004), provides a long-range policy guide to address changes to the City and a roadmap for future development. The General Plan outlines goals and actions that are applicable to water supply and the proposed Project as follows:

Chapter 7: Open Space

Goal 7.5: Create commercial and residential streetscapes that are sustainable.

Target 7.5.1: Use drought-tolerant species on public and private developments to reduce water consumption.

Chapter 8: Environmental Resources

Goal 8.4: Encourage the conservation and protection of water quality within San Gabriel.

Target 8.4.4: Where feasible, direct runoff from rooftops and other areas to water tanks.

Target 8.4.6: Require new buildings and the construction of additions to include water conserving toilets and fixtures; expand existing provisions in the City's building and plumbing code.

Wastewater

State Level

Porter-Cologne Water Quality Control Act

In California, State Water Resources Control Board (SWRCB) is responsible for ensuring the highest reasonable quality of waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The 1969 Porter-Cologne Water Quality Control Act, codified in the CWC, authorizes the SWRCB to implement programs to control polluted discharges into State waters. This law essentially implements the requirements of the Clean Water Act. Pursuant to this law, the local Regional Water Quality Control Board (RWQCB) is required to establish the wastewater concentrations of a number of specific hazardous substances in treated wastewater discharge. The Los Angeles RWQCB (LARWQCB) regulates wastewater discharges and water quality in the southern/coastal portions of Los Angeles County, including the Project Site.

On May 2, 2006, the SWRCB adopted Statewide General Waste Discharge Requirements (WDRs) and a Monitoring and Reporting Program for sanitary sewer systems. The regulations were in response to growing public concern about the water quality impacts of sanitary sewer overflows, particularly those that cause beach closures, adversely affect other bodies of water, or pose serious health and safety or nuisance problems.

California Plumbing Code

The California Plumbing Code is codified in Title 24, California Code of Regulations, Part 5. The Plumbing Code contains regulations including, but not limited to, plumbing materials, fixtures, water heaters, water supply and distribution, ventilation, and drainage. More specifically, Part 5, Chapter 4, contains provisions requiring the installation of low flow fixtures and toilets. Existing development will also be required to reduce its wastewater generation by retrofitting existing structures with water efficient fixtures. (Senate Bill 407 [2009] Civil Code Sections 1101.1 et seq.).

Local Level

City of San Gabriel Sewer Master Plan

The City's Sewer Master Plan (SMP) provides a comprehensive long-term plan for implementation of necessary repairs and improvements to bring the existing sewer system to a condition where it can provide the standard level of sewer service recommended by the LACSD. The objectives of the SMP are to analyze the capacity of major segments of the existing sewer system; determine the physical conditions of the existing pipes and manholes; address the flow, infiltration, fats, oils, and grease control requirements; develop a Capital Improvement Program; and address options to finance the improvement, maintenance, and management costs (Winzler & Kelly, 2009). The peak wastewater flows were compared to the hydraulic capacities of the sewer pipes to determine pipe deficiencies. The SMP determined that approximately 58 percent of the system was over capacity and that they would need to be upgraded to provide sufficient capacity for the implementation of the 2004 General Plan. In accordance with the requirements of the CWA, the City was required to prepare a Sewer System Management Plan (SSMP), which is included as part of the SMP.

City of San Gabriel Sewer System Management Plan

The State of California requires all publicly owned sanitary sewer systems to have a written SSMP. The City has updated their previous 2009 SSMP with a June 2014 update (City of San Gabriel, 2018). The goals of the SSMP are to employ best practices to manage, operate, and maintain all parts of the wastewater collection system; provide adequate capacity to convey peak flows; reduce and prevent sanitary sewer overflows; and to comply with all applicable state and federal regulations. The SSMPs further establish design and performance standards for the City's sewer system.

City of San Gabriel, Comprehensive General Plan

The Comprehensive General Plan of the City of San Gabriel (General Plan), adopted in 2004 (City of San Gabriel, 2004), provides a long-range policy guide to address changes to the City and a roadmap for future development. The General Plan outlines goals and actions that are applicable to wastewater and the proposed Project as follows:

Chapter 8: Environmental Resources

Goal 8.4: Encourage the conservation and protection of water quality within San Gabriel.

Target 8.4.3: Reduce the amount of storm water runoff by updating the City's Best Management Practices.

Target 8.4.4: Where feasible, direct runoff from rooftops and other areas to water tanks.

Target 8.4.5: Encourage property owners to use paving surfaces that reduce the amount of urban storm water runoff.

Target 8.4.6: Require new buildings and the construction of additions to include water conserving toilets and fixtures; expand existing provisions in the City's building and plumbing code.

Stormwater Drainage

Federal Level

Clean Water Act

The CWA was first introduced in 1948 as the Water Pollution Control Act. The CWA authorizes Federal, state, and local entities to cooperatively create comprehensive programs for eliminating or reducing the pollution of state waters and tributaries. The primary goals of the CWA are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. As such, the CWA forms the basic national framework for the management of water quality and the control of pollutant discharges. The CWA also sets forth a number of objectives in order to achieve the above-mentioned goals. These objectives include regulating pollutant and toxic pollutant discharges; providing for water quality that protects and fosters the propagation of fish, shellfish and wildlife; developing waste treatment management plans; and developing and implementing programs for the control of non-point sources of pollution.

Since its introduction, major amendments to the CWA have been enacted (e.g., 1961, 1966, 1970, 1972, 1977, and 1987). Amendments enacted in 1970 created the U.S. Environmental Protection Agency (USEPA), while amendments enacted in 1972 deemed the discharge of pollutants into waters of the United States from any point source unlawful unless authorized by a USEPA National Pollutant Discharge Elimination System (NPDES) permit. Amendments enacted in 1977 mandated development of a "Best Management Practices" Program at the state level and provided the Water Pollution Control Act with the common name of "Clean Water Act," which is universally used today. Amendments enacted in 1987 required the USEPA to create specific requirements for discharges.

In response to the 1987 amendments to the CWA and as part of Phase I of its NPDES permit program, the USEPA began requiring NPDES permits for: (1) municipal separate storm sewer systems (MS4) generally serving, or located in, incorporated cities with 100,000 or more people (referred to as municipal permits); (2) 11 specific categories of industrial activity (including landfills); and (3) construction activity that disturbs 5 acres or more of land. Phase II of the USEPA's NPDES permit program, which went into effect in early 2003, extended the requirements for NPDES permits to: (1) numerous small municipal separate storm sewer systems, (2) construction sites of 1 to 5 acres, and (3) industrial facilities owned or operated by small municipal separate storm sewer systems. The NPDES permit program is typically administered by individual authorized states.

In 2008, the USEPA published draft Effluent Limitation Guidelines for the construction and development industry. On June 27, 2016, the USEPA finalized its 2016 Effluent Guidelines Program Plan.

In California, the NPDES stormwater permitting program is administered by the SWRCB. The SWRCB was created by the Legislature in 1967. The joint authority of water distribution and water quality protection allows the Board to provide protection for the State's waters, through its nine RWQCBs. The RWQCBs develop and enforce water quality objectives and implement plans that will best protect California's waters, acknowledging areas of different climate, topography,

geology, and hydrology. The RWQCBs develop "basin plans" for their hydrologic areas, issue waste discharge requirements, enforce action against stormwater discharge violators, and monitor water quality.

Regional Level

NPDES Permit Program

The NPDES permit program was first established in 1972 under authority of the federal government through the CWA to control the discharge of pollutants from any point source into the waters of the United States (SWRCB, 2019). As indicated above, in California, the NPDES stormwater permitting program is administered by the SWRCB through the LARWQCB. For all water quality related objectives for CWA purposes, including the NPDES, the state must achieve water quality standards in effect at the state level as well as the regional level (USEPA, 2017). At the regional level, the effective plan is the LARWQCB's Basin Plan.

NPDES Construction General Permit

Construction associated with the proposed Project would disturb more than 1 acre of land surface affecting the quality of stormwater discharges into waters of the U.S. The proposed Project would, therefore, be subject to the *NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). The Construction General Permit regulates discharges of pollutants in stormwater associated with construction activity to waters of the U.S. from construction sites that disturb 1 acre or more of land surface, or that are part of a common plan of development or sale that disturbs more than 1 acre of land surface. The permit regulates stormwater discharges associated with construction or demolition activities, such as clearing and excavation; construction of buildings; and linear underground projects, including installation of water pipelines and other utility lines.

The Construction General Permit requires that construction sites be assigned a Risk Level of 1 (low), 2 (medium), or 3 (high), based both on the sediment transport risk within the site and the receiving waters risk during periods of soil exposure (e.g., grading and site stabilization). The sediment risk level reflects the relative amount of sediment that could potentially be discharged to receiving water bodies and is based on the nature of the construction activities and the location of the site relative to receiving water bodies. The receiving waters risk level reflects the risk to the receiving waters from the sediment discharge. Depending on the risk level, the construction projects could be subject to the following requirements:

- Effluent standards;
- Good site management "housekeeping;"
- Non-stormwater management;
- Erosion and sediment controls;
- Run-on and runoff controls;
- Inspection, maintenance, and repair; or
- Monitoring and reporting requirements.

The Construction General Permit requires the development and implementation of a SWPPP that includes specific best management practices (BMPs) designed to prevent sediment and pollutants from contacting stormwater and moving off site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area. Each category contains specific BMPs to achieve the goals of the overarching category. Specific BMPs may include the following:

- Soil stabilizing BMPs: Use of straw mulch, erosion control blankets or geotextiles, and/or wood mulching;
- Sedimentation control BMPs: Use of storm drain inlet protection, sediment traps, gravel bag berms, and fiber rolls
- Waste management BMPs: Stockpile management, solid waste management, and concrete waste management; and
- Good Housekeeping BMPs: Vehicle and equipment cleaning, implementing water conservation practices, and implementing rules for fueling construction vehicles and equipment.

Routine inspection of all BMPs is required under the provisions of the Construction General Permit. In addition, the SWPPP is required to contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

The SWPPP must be prepared before the construction begins. The SWPPP must contain a site map(s) that delineates the construction work area, existing and proposed buildings, parcel boundaries, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project area. The SWPPP must list BMPs and the placement of those BMPs that the applicant would use to protect stormwater runoff. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, vehicle and equipment washing and fueling. The Construction General Permit also sets post-construction standards (i.e., implementation of BMPs to reduce pollutants in stormwater discharges from the site following construction).

The Construction General Permit is implemented and enforced by the LARWQCB, which administers the stormwater permitting program. Dischargers are required to electronically submit a notice of intent (NOI) and permit registration documents (PRDs) in order to obtain coverage under this Construction General Permit. Dischargers are responsible for notifying the LARWQCB of violations or incidents of non-compliance, as well as for submitting annual reports identifying deficiencies of the BMPs and how the deficiencies were corrected. The risk assessment and SWPPP

must be prepared by a State Qualified SWPPP Developer and implementation of the SWPPP must be overseen by a State Qualified SWPPP Practitioner. A Legally Responsible Person, who is legally authorized to sign and certify PRDs, is responsible for obtaining coverage under the permit.

NPDES Municipal Stormwater Permit (MS4) and Stormwater Quality Management Program (SQMP)

In 1987, amendments to the CWA expanded the NPDES stormwater permitting program to regulate discharges from storm drains owned and operated by municipalities. In November 1990, USEPA published regulations that established application requirements for stormwater permits for municipal stormwater discharges. In California, the NPDES stormwater permitting program is administered and enforced by the SWRCB through the nine RWQCBs by issuing Waste Discharge Requirements and NPDES permits. These permits are reissued approximately every five years and also include applicable provisions of the state Porter-Cologne Act, which is the principal legislation for controlling stormwater pollutants in California. The permit establishes regulations covering discharge prohibitions, receiving water limitations, municipal operations (such as the proposed Project), new development, construction site controls (construction site runoff), and other regulations to regulate surface water quality.

The discharge prohibitions prohibit the discharge of non-stormwater (materials other than stormwater) into, storm drain systems and watercourses. The municipal operations regulations include a number of requirements to control and reduce non-stormwater discharges and polluted stormwater to storm drains and watercourses during operation, inspection, and routine repair and maintenance activities of municipal facilities and infrastructure, such as the proposed Project. The requirements include source control, site design, and stormwater treatment requirements, such as minimizing disturbance of natural infiltration areas and the addition of impervious surfaces, controlling and directing runoff, and the use of infiltration and bioretention measures, among other measures.

The County of Los Angeles and 84 incorporated cities (Co-Permittees) implemented a stormwater quality management program (SQMP) to comply with LARWQCB Order No. R4-2012-0175-A01 Amending Order No. R4-2012-0175 as Amended by State Water Board Order WW 2015-0075, NPDES Permit No. CAS004001, Waste Discharge Requirements For Municipal Separate Storm Sewer System (MS4), Discharges Within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach MS4, dated September 8, 2016. The SQMP has the goal of accomplishing the requirements of the MS4 Permit and reducing the amount of pollutants in stormwater runoff. The requirements include source control, site design, and stormwater treatment requirements, such as minimizing disturbance of natural infiltration areas and the addition of impervious surfaces, controlling and directing runoff, and the use of infiltration and bioretention measures, among other measures.

The SWMP requires the Co-Permitees to:

- Implement a public information and participation program to conduct outreach on storm water pollution;
- Control discharges at commercial/industrial facilities through tracking, inspecting, and ensuring compliance at facilities that are critical sources of pollutants;

- Implement a development planning program for specified development projects;
- Implement a program to control construction runoff from construction activity at all construction sites within the relevant jurisdictions;
- Implement a public agency activities program to minimize storm water pollution impacts from public agency activities; and
- Implement a program to document, track, and report illicit connections and discharges to the storm drain system.

The MS4 Permit contains the following provisions for implementation of the SQMP by the Co-Permittees:

1. General Requirements:
   - Each permittee is required to implement the SQMP in order to comply with applicable stormwater program requirements.
   - The SQMP shall be implemented and each permittee shall implement additional controls so that discharge of pollutants is reduced.
2. Best Management Practice Implementation:
   - Permittees are required to implement the most effective combination of BMPs for stormwater/urban runoff pollution control. This should result in the reduction of stormwater runoff.
3. Revision of the SQMP:
   - Permittees are required to revise the SQMP in order to comply with requirements of the RWQCB while complying with regional watershed requirements and/or waste load allocations for implementation of Total Maximum Daily Load (TMDLs) for impaired waterbodies.
4. Designation and Responsibilities of the Principal Permittee:

   The Los Angeles County Flood Control District is designated as the Principal Permittee who is responsible for:
   - Coordinating activities that comply with requirements outlined in the NPDES permit;
   - Coordinating activities among Permittees;
   - Providing personnel and fiscal resources for necessary updates to the SQMP;
   - Providing technical support for committees required to implement the SQMP; and
   - Implementing the Countywide Monitoring Program required under this Order and assessing the results of the monitoring program.
5. Responsibilities of Co-Permittee:
   - Each co-permittee is required to comply with the requirements of the SQMP as applicable to the discharges within its geographical boundaries. These requirements include:
     - Coordinating among internal departments to facilitate the implementation of the SQMP requirements in an efficient way;

- Participating in coordination with other internal agencies as necessary to successfully implement the requirements of the SQMP; and
- Preparing an annual Budget Summary of expenditures for the stormwater management program by providing an estimated breakdown of expenditures for different areas of concern, including budget projections for the following year.

6. Watershed Management Committees (WMCs):
   – Each WMC shall be comprised of a voting representative from each Permittee in the Watershed Management Area (WMA).
   – Each WMC is required to facilitate exchange of information between co-permittees, establish goals and deadlines for WMAs, prioritize pollution control measures, develop and update applicable information, and recommend appropriate revisions to the SQMP.
7. Legal Authority:
   – Co-permittees are granted the legal authority to prohibit non-stormwater discharges to the storm drain system including discharge to the MS4 from various development types.

Standard Urban Stormwater Mitigation Plan

A Municipal NPDES Permit was issued in December 2001 to Los Angeles County and 84 incorporated permittee cities within the County (Permittee). The permit defines the minimum required BMPs that must be adopted by the Permittee municipalities and included by developers within plans for facility operations. To obtain coverage under this permit, a developer must obtain approval of a project-specific Standard Urban Stormwater Mitigation Plan (SUSMP) from the appropriate Permittee.

A SUSMP addresses the discharge of pollutants within stormwater generated following new construction or redevelopment. Under recent regulations adopted by the LARWQCB, projects are required to implement a SUSMP during the operational life of a project to ensure that stormwater quantity and quality are addressed by incorporating BMPs into project design. This plan defines water quality design standards to ensure that stormwater runoff is managed for water quality concerns and to ensure that pollutants carried by stormwater are confined and not delivered to receiving waters. Applicants are required to abide by source control and treatment control BMPs from the list approved by the LARWQCB and included in the SUSMP. These measures include infiltration of stormwater into the ground, as well as filtering runoff before it leaves a site. This can be accomplished through various means, including the use of infiltration pits, flow-through planter boxes, hydrodynamic separators, and catch basin filters.

Typical BMPs to be implemented as part of the SUSMP for a project to manage post-construction stormwater runoff could include, but would not be limited to, the following:

- Peak Storm Water Runoff Discharge Rate: Post-development peak stormwater runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak storm water discharge rate will result in increased potential for downstream erosion;
- Provide storm drain system Stenciling and Signage (only applicable if a catch basin is built on-site);

- Properly design outdoor material storage areas to provide secondary containment to prevent spills;
- Properly design trash storage areas to prevent off-site transport of trash;
- Provide proof of ongoing BMP Maintenance of any structural BMPs installed;
- Design Standards for Structural or Treatment control BMPs:
- Conserve natural and landscaped areas;
- Provide planter boxes and/or landscaped areas in yard/courtyard spaces;
- Post-construction treatment control BMPs are required to incorporate, at minimum, either a volumetric or flow-based treatment control design or both, to mitigate (infiltrate, filter or treat) storm water runoff.

In addition, project applicants subject to the SUSMP requirements must select source control and, in most cases, treatment control BMPs from the list approved by the RWQCB. The BMPs must control peak flow discharge to provide stream channel and over bank flood protection, based on flow design criteria selected by the local agency. Further, the source and treatment control BMPs must be sufficiently designed and constructed to collectively treat, infiltrate, or filter stormwater runoff from one of the following:

- The 85th percentile 24-hour runoff event determined as the maximized capture stormwater volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998);
- The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook—Industrial/ Commercial, (1993);
- The volume of runoff produced from a 0.75-inch storm event, prior to its discharge to a stormwater conveyance system; or
- The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for "treatment" (0.75-inch average for the Los Angeles County area) that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event.

Electric Power and Natural Gas

State Level

Title 24, Building Standards Code and California Green Building Standards (CALGreen) Code

The California Energy Commission first adopted the Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the State. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The California Building Standards Commission (CBSC) adopted Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through

the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality." The CALGreen Code establishes mandatory measures for new residential and non-residential buildings, which include requirements for energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential as well as nonresidential uses. The new measures took effect on January 1, 2020. Buildings constructed under the proposed Project would be required to comply with the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance.

Solid Waste

State Level

Assembly Bill 939

The California Integrated Waste Management Act of 1989 redefined solid waste management in terms of both objectives and planning responsibilities for local jurisdictions and the state. AB 939 was adopted in an effort to reduce the volume and toxicity of solid waste that is landfilled and incinerated by requiring local governments to prepare and implement plans to improve the management of waste resources. AB 939 requires each of the cities and unincorporated portions of counties throughout the state to divert a minimum of 25 percent of the solid waste sent to landfills by 1995 and 50 percent diverted by the year 2000. To attain these goals for reductions in disposal, AB 939 established a planning hierarchy utilizing new integrated solid waste management practices. These practices include source reduction, recycling and composting, and environmentally safe landfill disposal and transformation.

Assembly Bill 1327

Signed into law in 1991, AB 1327 added Chapter 18 to Part 3 of Division 30 of the Public Resources Code. Chapter 18 required the California Integrated Waste Management Board (CIWMB) to develop a model ordinance for adoption of recyclable materials in development projects. Local agencies were then required to adopt the model, or ordinances of their own, in order to govern adequate areas for collection and loading of recyclable materials in development projects by September 1, 1993. If a local agency had not adopted a model ordinance by that date, the CIWMB model would be adopted and enforced by the local agency.

Senate Bill 1016

As previously identified, AB 939 requires each jurisdiction to divert 50 percent of its solid waste from being disposed in landfills. The new per capita disposal measurement system (SB 1016, Wiggins, Chapter 343, Statutes of 2008) became effective January 1, 2009. It builds on AB 939 compliance requirements by implementing a simplified measure of local jurisdictions' performance. SB 1016 accomplishes this by changing to a disposal-based indicator: the per capita disposal rate, which uses only two factors: a jurisdiction's population and its disposal as reported by disposal facilities. SB 1016 changes how each jurisdiction's progress is measured to reach the 50 percent goal for diverting waste from landfills. This measurement is no longer determinative of compliance. In order for the CIWMB and jurisdictions to more properly focus on successful

program implementation, SB 1016 shifts from the historical emphasis on using calculated generation and estimated diversion to using annual disposal as a factor when evaluating jurisdictions' program implementation.

Assembly Bill 341

Governor Brown signed AB 341 on October 6 of 2011, establishing a state policy goal that no less than 75 percent of solid waste generated be source reduces, recycled, or composted by 2020, and requiring CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. The bill also mandated local jurisdictions to implement commercial recycling by July 1, 2012.

California Building Standards Code (Title 24)

California Code of Regulations Title 24, Part 6

Enacted in 1978, this part of the California Code established energy efficiency standards for residential and nonresidential buildings in response to a legislative mandate to reduce California's energy consumption. These standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The most recent standards were adopted and went into effect January 1, 2010. Such standards include the provision of cool roofs, demand control ventilation, skylights for day-lighting in buildings, thermal breaks for metal building roofs, and lighting power limits. These standards are expected to reduce the growth in electricity use of residential and non-residential buildings. Continual updates to Title 24 along with the State's implementation of AB 1493 and SB 1368 will have a major impact on the State's attainment of the AB 32 goals.

California Code of Regulations Title 24, Part 11

This part of the California Code is known as the California Green Building Standards Code (CALGreen Code) and was enacted to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts with positive environmental impacts and through encouragement of sustainable construction practices. The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). This update to Part 11 of Title 24 of the California Code of Regulations was effective January 1, 2011.

Regional Level

Countywide Integrated Waste Management Plan

Pursuant to AB 939, each County is required to prepare and administer a ColWMP, including preparation of an Annual Report. The ColWMP comprises the counties' and cities' SRRE, an Integrated Waste Management Summary Plan, and a Countywide Siting Element. The Integrated Waste Management Summary Plan describes the steps to be taken by local agencies, acting independently and in concert, to achieve the mandated state diversion rate by integrating strategies aimed toward reducing, reusing, recycling, diverting, and marketing solid waste generated within Los Angeles County (County). The County's Department of Public Works is responsible for preparing and administering the Integrated Waste Management Summary Plan and the Countywide

Siting Element. The County continually evaluates landfill disposal needs and capacity as part of the preparation of the CoIWMP Annual Report. Within each annual report, future landfill disposal needs over the next 15-year planning horizon are addressed in part by determining the available landfill capacity.

Local Level

City of San Gabriel, Comprehensive General Plan

The General Plan, adopted in 2004 (City of San Gabriel, 2004), provides a long-range policy guide to address changes to the City and a roadmap for future development. The General Plan outlines goals and actions that are applicable to solid waste and the proposed Project as follows:

Chapter 7: Open Space

> **Target 5.7.3:** Reduce the generation of solid wastes, including hazardous waste and recycle those materials that are used, to slow the filling of local and regional landfills, in accord with the California Integrated Waste Management Act of 1989.
>
> > **Action 5.7.3.2:** Encourage builders to incorporate interior and exterior storage areas at new or remodeled public and private development projects to make recycling activities more convenient.

3.16.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in a significant adverse impact related to utilities and service systems if it would:

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;

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;

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;

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; or

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

3.16.4 Methodology

The potential for adverse impacts on utilities and service systems has been evaluated based on the information concerning current service levels and the ability of the service providers to accommodate the increased demand created by the proposed Project. The water supply analysis is based on the SGCWD 2015 UWMP Update and the WDA prepared for the Project by Todd Groundwater. As described in the WDA, water demand value was calculated using sewage generation factors, which is based on the volume of wastewater generated per unit by residential

and commercial facilities, from the LACSD to calculate estimated wastewater generation and to compute water demand with a factor of 110 percent to account for any potential losses due to leaks or evaporation. The wastewater capacity analysis is based on analyzing the receiving facility's capacity to receive wastewater from the proposed Project and the volume of wastewater generated per unit by residential and commercial facilities. The solid waste analysis is based on an estimated waste stream analysis from demolition, construction, and operation of the proposed Project, adherence to applicable regulations, and the remaining capacity at solid waste receiving facilities.

3.16.5 Environmental Impact Analysis

Impact UTL-1: The proposed Project would not 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 Supply

The Project Site is within the service limits of the SGCWD, which owns, operates, and maintains the water system within the limits of the City. SGCWD has 9,115 metered service connections in 2015. During construction activities associated with the future development within the Project Site, there would be a temporary, intermittent demand for water for such activities as soil watering for site preparation, fugitive dust control, concrete preparation, painting, cleanup, and other short-term activities. Construction-related water usage is not expected to have an adverse impact on available water supplies or the existing water distribution system, and impacts would be less than significant.

In order to accommodate the proposed Project's water demand, the proposed Project would develop new connections and distribution lines needed to connect the Project Site to existing water lines in the area to meet potable, irrigation, and fire flow demands. The design and installation of the new service connections would be required to meet applicable City standards. Consistent with the SGCWD, the Applicant would be required to prepare a fire flow report letter to ensure sufficient infrastructure to meet required fire flow volumes. It is anticipated that extensive off-site infrastructure improvements would not be needed to serve the Project Site. Construction impacts associated with the required connections would primarily involve trenching in order to place the water distribution lines below the surface and would be limited to on-site water distribution and minor off-site work associated with connections from the new building on the Project Site to the public mains. Prior to ground disturbance, Project contractors would coordinate with SGCWD to identify the locations and depth of all lines, SGCWD would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service.

Therefore, while proposed Project operation would require new connections from existing facilities, with coordination with SGCWD, Project operation would not result in the relocation or construction of new or expanded water facilities, the construction or relocation of which would cause significant environmental effects. Operational impacts on water infrastructure would be less than significant. **Impacts would be less than significant.**

Wastewater

There are existing sewer facilities surrounding the Project Site. However, as the site was cleared and is currently vacant, new water and sewer conveyance infrastructure would be necessary to serve the Project. Water service for the proposed Project would be connected to the existing lines in E. El Monte Street and S. Gladys Avenue, which would all drain to the sewer main in S. San Gabriel Boulevard.

During construction of the Project, a negligible amount of wastewater would be generated by construction workers. It is anticipated and customary that portable toilets would be provided by a licensed private vendor that would dispose of the construction-generated wastewater off-site. Such wastewater generation is therefore anticipated to result in either no or negligible discharges to the City's wastewater treatment conveyance systems and treatment facilities, and would not be discharged through any service connections at or near the Project Site. No such service connections would be established during Project construction to handle the wastewater generated by construction workers. The minimal wastewater generation during construction would not require the construction of new facilities or expansion of existing facilities, and, given their small amount and is not anticipated to exceed the capacity of existing wastewater conveyance and treatment systems.

It is anticipated that extensive off-site infrastructure improvements would not be needed to serve the long-term uses on the Project Site. Construction of the Project would include all necessary on- and off-site sewer pipe improvements and connections to adequately connect to the City's existing sewer system. Construction relative to the wastewater system for the Project would occur within the Project Site and immediate vicinity. Such activities would include trenching to place the connections below the ground's surface and would be temporary in nature. The design of these connections would be developed by a registered engineer and approved by the City's Department of Public Works. If, during construction, existing sewer lines are found to be substandard or in deteriorated condition, the Project Applicant would be required to make necessary improvements to achieve adequate service under the Department of Public Works' requirements. All necessary wastewater system improvements would be verified through the permit approval process for obtaining a sewer connection permit from the City.

Therefore, as the Project would be required to meet City standards, the proposed Project would not require or result in the relocation or construction of new or expanded wastewater facilities, the construction of relocation of which could cause significant environmental effects. **Impacts would be less than significant.**

Stormwater Drainage

As analyzed in Section 3.8, *Hydrology and Water Quality*, during construction, water would be used during the temporary construction phases of the proposed Project (e.g., for dust suppression). However, this water would be mechanically and precisely applied and would, in general, infiltrate or evaporate. As such, water used during construction would not exceed the capacity of existing stormwater drainage systems surrounding the Project Site. In accordance with the requirements of the NPDES General Permit, the proposed Project would implement a SWPPP that specifies BMPs

to be implemented during construction to manage runoff flow volumes and water quality and would ensure that they do not exceed the capacity of existing stormwater drainage systems.

With regard to operation, while impervious surfaces would be added to the Project Site, the stormwater treatment design included as part of the proposed Project accounts for this increase in flow. In addition, all on-site drainage would be collected through infiltration dry wells distributed throughout the Project Site. Infiltration dry wells would allow for more rapid infiltration of stormwater and would not impact the existing stormwater drainage systems. Environmental impacts associated with development of the proposed Project, including stormwater drainage facilities, have been evaluated throughout this document. As evaluated throughout this EIR, all potentially significant impacts associated with development of the Project, including on-site stormwater drainage facilities, would be less than significant. Therefore, based on the above, the Project would not require or result in the relocation or construction of new or expanded stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects. **Impacts would be less than significant.**

Electric Power and Natural Gas

As analyzed in Section 3.4, *Energy*, the Project Site is located in a developed and urbanized area in the City that would be served by existing electrical power and natural gas services. Electricity would be provided by SCE. In addition, natural gas would be supplied by SoCalGas. As part of the proposed Project, buildings developed on the Project Site would incorporate green building design features consistent with the energy efficiency standards in the 2019 Title 24 Building Standards Code and CALGreen Code (see Section 3.6, *Greenhouse Gas Emissions*, for additional details) that would reduce Project electricity consumption and the Project would have no impact on SCE's electricity generation. In addition, the proposed Project would incorporate energy-efficient HVAC that meet the 2019 California Title 24 Building Energy Efficiency Standards which would reduce the net energy drawn from SoCalGas. As discussed in Section 3.4, *Energy*, SCE and SoCalGas both would have sufficient capacity to serve the Project's operational electricity and natural gas demand. Existing off-site electricity and natural gas infrastructure would not have to be expanded and new infrastructure would not be required to provide electrical or natural gas service to the Project during construction or operation of the Project.

With regard to existing electrical distribution lines, the Project could include undergrounding the overhead utilities along S. San Gabriel Boulevard, S. Gladys Avenue, and E. El Monte Street. As discussed within Chapter 2, *Project Description*, of this Draft EIR, it is assumed that the power lines and power poles could be removed and relocated underground. The Project would be required to coordinate electrical infrastructure removals or relocations with SCE and comply with site-specific requirements set forth by SCE, which would ensure that service disruptions and potential impacts associated with grading, construction, and development within SCE easements would be minimized.

Project construction would include installation of new natural gas connections to serve the Project Site. Since the Project Site is located in an area already served by existing natural gas infrastructure, it is anticipated that extensive off-site infrastructure improvements would not be needed to serve the Project Site. Construction impacts associated with the installation of natural gas connections

are expected to be limited to shallow grading/trenching activities in order to place the lines below surface. In addition, prior to ground disturbance, the Applicant would be required to notify and coordinate with SoCalGas to identify the locations and depth of all existing gas lines and avoid disruption of gas service to other properties.

Therefore, based on the above, the Project would not require or result in the relocation or construction of new or expanded electric power or natural gas facilities, the construction or relocation of which could cause significant environmental effects. **Impacts would be less than significant.**

Telecommunications

The Project Site is located in a developed and urbanized area in the City that is served by existing telecommunication services. The Project would require installation of new underground telecommunication lines (e.g., internet, telephone, and other services) to serve the new uses and building on site. Construction impacts associated with the installation of new telecommunication infrastructure would primarily involve trenching in order to place the lines below ground surface. When considering impacts resulting from the installation of any required telecommunications infrastructure, all impacts are of a relatively short duration and would cease to occur when installation is complete. Installation of new telecommunications infrastructure would be limited to on-site telecommunications distribution and minor off-site work associated with connections to the public system. As telecommunication providers already deliver their services to a large number of homes in in the vicinity of the Project Site, it is anticipated that existing telecommunications facilities would be sufficient to support the Project's needs for telecommunication services. As such, no upgrades to off-site telecommunications facilities are anticipated. Therefore, the proposed Project would not require or result in the relocation or construction of new or expanded telecommunication facilities, the construction or relocation of which could cause significant environmental effects. **Impacts would be less than significant.**

Impact UTL-2: The Project would 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.)

This analysis identifies the proposed Project's impacts on water supply. The purpose of the analysis is to determine if sufficient regional and local water supplies are available to serve the project and the existing and other planned development within the SGCWD. The Project does not meet the SB 610 requirements for a WSA; therefore, a WDA was prepared (Todd Groundwater, 2020). As stated above, this analysis is based on the 2015 UWMP Update. The WDA presents water supply and demand data specific to the proposed Project and provides information and analysis regarding water supply availability.

As calculated in the WDA, an estimated average daily demand of 83,612 gallons per day (gpd) or 93.7 acre-feet per year (afy) of water was calculated for the proposed Project, as shown in **Table 3.16-4**. An estimated peak water demand, which is estimated as 2.5 times the average daily demand, of 209,301 gpd or 234.3 afy was calculated and provided to account for firefighting purposes. However, only the average demand is provided as it is more representative of the total annual water

use. Outdoor water demand estimates for landscaped areas were also calculated based on the estimated total water use per year (ETWU) equation from the California State Water Budget Calculator for the publicly accessible outdoor spaces on the Project Site. As calculated in the WDA, total outdoor water demand is estimated at 4.1 afy. As such, the average annual water demand on the Project Site, accounting for both indoor and outdoor water demand, would total 97.8 afy, as shown in **Table 3.16-4**, below.

TABLE 3.16-4
PROJECT WATER DEMAND

Land Use	Size	Average Daily Sewage Generation (gpd/unit)[a]	Average Daily Water Demand (gpd)[b]	Peak Daily Demand (gpd)[c]	Average Annual Demand (afy)[d]
1 Bedroom Residential	40 du	156 gpd/du	6,864	17,160	7.6
2 Bedroom Residential	151 du	156 gpd/du	25,912	64,779	29.0
3 Bedroom Residential	48 du	156 gpd/du	8,237	20,592	9.2
4 Bedroom Residential	4 du	156 gpd/du	686	1,716	0.8
Live/Work Units	8 du	156 gpd/du	1,373	3,432	1.6
Live/Work Commercial Component	6,766 sf	0.2 gpd/sf	1,489	3,721	1.6
Fitness	25,233 sf	0.6 gpd/sf	16,654	41,634	18.7
Sit-Down Restaurant	5,000 sf	1 gpd/sf	5,500	13,751	6.2
Fast Casual Restaurant	6,060 sf	1 gpd/sf	6,666	16,665	7.5
Bakery	2,500 sf	1 gpd/sf	2,750	6,875	3.1
Retail	7,115 sf	0.1 gpd/sf	783	1,957	0.9
Café	3,041 sf	1 gpd/sf	3,345	8,363	3.7
Market	20,330 sf	0.15 gpd/sf	3,355	8,386	3.8
Indoor Water Usage Subtotal	-	-	*83,612*	*209,031*	*93.7*
Outdoor Water[e]	-	-	-	-	*4.1*
Total Water Generation					**97.8**

du = dwelling units; afy = acre-feet per year; sf = square feet; gpd = gallons per day

[a] Sewage generation factors are based on the Los Angeles County Sanitation District sewage generation factors.

[b] Calculated sewer generation based on Los Angeles County Sanitation District sewage generation factors with application of 1.1 ratio to estimate potable supply.

[c] Peak water demand is the average daily demand multiplied by 2.5, which reflects the range in water demand used over the course of a day.

[d] Totals may not add up due to rounding.

[e] Outdoor water calculations provided in Table 2 of the WDA, provided in Appendix K of this Draft EIR. It is assumed that half of the landscaping would have a medium water usage, and the other half would have high water usage.

SOURCE: ESA, 2020; Todd Groundwater, 2020; and Los Angeles County Sanitation District, n.d.

Tables 3.16-1 through 3.16-3, above, summarizes the projected water demands for the entire service area for 2020-2040. The 2015 UWMP Update projects that the San Gabriel population will increase by 1,015 people and the water demand will increase by 161 AFY during 2020-2025. The proposed Project would comprise 79 percent of the 5-year population growth projection from 2020-2025, and the estimated water demand of the proposed Project is 60.7 percent of the projected 5-year water demand increase. As such, the estimated water demand generated by the Project is within the

SGCWD's projected demand, and there are adequate resources to meet the water demands for its planned growing population.

Tables 3.16-1 through 3.16-3, provided above under Subsection 3.16.1, *Existing Conditions*, illustrate the City's water supply and demand comparisons for normal year, single dry year, and multiple dry year conditions through 2040 (San Gabriel County Water District, 2016). Water supply estimates for future single dry years and multiple dry year periods were derived by calculating the ratios of water supply during dry years to a normal year and adjusting for increasing populations and developments. The ratios of single dry year and multiple dry year supplies to normal year supplies were calculated by comparing water supplies during 2013-2014 and 2011-2015, respectively, to water supplies during 2009-2010, a normal year. A 2 percent increase in water demand is expected during single dry year periods and a slight increase and then decrease is expected during four-year dry periods.

As such the SGCWD has adequate resources to meet the water demands for its growing population. The proposed Project would also be required to adhere to measures to reduce its per capita water use. As previously discussed, water conservation is supported through year-round mandates and practices. The proposed Project would comply with these requirements of the SGCWD. As such, there are enough water resources for the proposed Project for normal, single dry, and multiple dry years during the 20-year projection.

Based on the above, the Project would have sufficient water supplies available to serve the proposed Project and reasonably foreseeable future development during normal, dry and multiple dry years. **Impacts would be less than significant.**

Impact UTL-3: The Project would 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 thanSignificant Impact.)

Wastewater generated by the proposed Project would be treated at the JWPCP located at 24501 South Figueroa Street in the City of Carson, which has a total permitted capacity of 400 mgd. The JWPCP currently processes an average flow of 260 mgd. As shown in **Table 3.16-5**, the Project would conservatively generate 76,012 gpd or 0.076 mgd of wastewater, or approximately 0.02 percent of JWPCP's capacity of 400 mgd.

TABLE 3.16-5
PROJECT WASTEWATER GENERATION

Land Use	Size	Generation Factor (gpd/unit)[a]	Estimated Wastewater Generation (gpd)
1 Bedroom Residential	40 du	156 gpd/du	6,240
2 Bedroom Residential	151 du	156 gpd/du	23,556
3 Bedroom Residential	48 du	156 gpd/du	7,448
4 Bedroom Residential	4 du	156 gpd/du	624
Live/Work Units	8 du	156 gpd/du	1,248
Live/Work Commercial Component	6,766 sf	0.2 gpd/sf	1,353
Fitness	25,233 sf	0.6 gpd/sf	15,140
Sit-Down Restaurant	5,000 sf	1 gpd/sf	5,000
Fast Casual Restaurant	6,060 sf	1 gpd/sf	6,060
Bakery	2,500 sf	1 gpd/sf	2,500
Retail	7,115 sf	0.1 gpd/sf	712
Café	3,041 sf	1 gpd/sf	3,041
Market	20,330 sf	0.15 gpd/sf	3,050
Total Wastewater Generation			**76,012 gpd**

du = dwelling units; gpd = gallons per day; sf = square feet

[a] Sewage generation factors are based on the Los Angeles County Sanitation District sewage generation factors.

SOURCE: ESA, 2020, and Todd Groundwater, 2020.

As the JWPCP's daily capacities, listed above and under Subsection 3.16.1, *Existing Conditions*, are well above the sum of the current daily treatment levels and the proposed Project's projected wastewater generation, these facilities currently have the capacity to accommodate the additional wastewater generated by the proposed Project. Therefore, JWPCP currently has the capacity to accommodate the additional wastewater generated by the proposed Project.

Therefore, the Project would 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. **Impacts would be less than significant.**

Impact UTL-4: The Project would/would not 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 proposed Project would generate solid waste primarily during operation. Currently, the Project Site consists of only graded land with no present structures; thus, significant waste from construction and demolition is not anticipated. The Project's estimated operational waste is shown in **Table 3.16-6**, below.

TABLE 3.16-6
ESTIMATED OPERATIONAL SOLID WASTE GENERATION

Land Use	Quantity	Daily Generation Factora	Solid Waste Generation (lbs/day)	Solid Waste Generation (tons/year)
Proposed New Uses				
Commercial	76,046 sf	13 lbs/1,000 sf/day[a]	988.60	180.42
Multifamily Residential	251 units	8.6 lbs/unit/day[a]	2,158.60	393.94
Proposed Total[b]		**--**	**3,147**	**574**
Net Increase (post-diversion)[c]	**--**	**--**	**787**	**144**

lb = pounds; sf = square feet

[a] Generation factors provided by CalRecycle, 2018. The restaurant, retail, café, and a market were treated as 'Commercial' uses and the residential condominium units were treated as a 'Multifamily Residential' use.

[b] Totals may not add up due to rounding.

[c] Based on an anticipated diversion rate of 75 percent by 2020 pursuant to AB 341.

SOURCE: CalRecycle, 2018; ESA, 2020.

Operation of the proposed Project's developed land uses would generate approximately 574 tons of solid waste per year. This would account for 0.012 percent of the remaining capacity of 4.9 million tons at the Calabasas Landfill and 0.013 percent of the remaining capacity of 4.3 million tons at the Scholl Canyon Landfill. However, as part of implementing AB 341, the California Legislature set an ambitious goal of 75 percent recycling, composting, or source reduction of solid waste by 2020. Therefore, taking into consideration the 75 percent diversion rate by 2020, the proposed Project is expected to contribute approximately 143.6 tons per year to landfills serving the City, which would account for 0.003 percent of the total remaining capacity at Scholl Canyon Landfill and 0.003 percent of the Calabasas Landfill.

In addition to the commercial and residential components of the Project, the Project also proposes to include community events, such as a weekly market or annual "Summer in San Gabriel" events within the central park/plaza space. As these events are temporary and would only occur once a week in the evenings, it is likely that the solid waste generated during these events would not be more than the current remaining capacities at the Calabasas or Scholl Canyon Landfills. Therefore, the additional solid waste generated by the Project's temporary events would be less than what is generated by the Project's commercial and residential components. **Therefore, the proposed Project would be served by a landfill with sufficient space to accommodate the project's waste disposal needs and impacts would be less than significant.**

Impact UTL-5: The Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste (Less than Significant Impact.)

The proposed Project is not expected to result in significant impacts related to solid waste regulations. The proposed Project would generate solid waste during operation of the proposed Project and would require the consideration of waste reduction and recycling measures. AB 939 requires the County to attain specific waste diversion goals. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development

projects to incorporate storage areas for recycling bins into the design of the proposed Project. The City shall ensure that compliance with the California Integrated Waste Management Act of 1989 and the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, is maintained with construction and operation of the proposed Project. Implementation of the measures shall comply with federal, state, and local statutes and regulations to reduce the amount of solid waste. The overall site construction and operational waste stream would not exceed the available permitted capacity and permitted daily throughput to relevant landfills. **Therefore, the Project would comply with all federal, state, and local statues related to solid waste disposal, and impacts would be less than significant.**

3.16.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the proposed Project in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. The geographic areas for cumulative analysis for the discussion of utilities and service systems are the respective service areas for water, wastewater, stormwater drainage, electric power, natural gas, telecommunications, and solid waste. Cumulative projects that are located outside of these service areas do not constitute the geographic area for this analysis. As shown in Table 3.0-1, of Chapter 3, *Environmental Analysis*, of this Draft EIR, there are 37 cumulative projects identified in the vicinity of the Project. Each respective geographic area is described within each subsection below.

Utilities Infrastructure

Since the Project Site and the sites of the cumulative projects are located in areas already served by existing infrastructure (for water supply, wastewater, stormwater drainage, electric power and natural gas, and telecommunications), it is anticipated that extensive off-site infrastructure improvements would not be needed to serve the sites of the cumulative projects. Construction impacts associated with the installation of any utilities connections for cumulative projects, as with the proposed Project, would be directed by the City's Public Works Department and are expected to be limited to either shallow grading/trenching activities. Prior to ground disturbance, applicants for each of the respective cumulative projects would be required to notify and coordinate with the service providers and with the City to identify the locations and depth of all existing lines and avoid disruption of service to other properties.

Utilities Demand

Water Supply

The geographic area for water supply is limited to cumulative projects within the SGWCD, which would encompass all of the cumulative projects. The proposed Project would involve an increase in demand for water supplies. Past, present and reasonably foreseeable future projects also could result in additional water demand, and incrementally increase the long-term demand for water supply, similar to the proposed Project. However, under the provisions of SB 610, all past, present, and future projects in the surrounding area would be required to prepare a comprehensive WSA as applicable. The WSAs for the projects that would require a WSA, in conformance with the 2015 UWMP Update, would evaluate the quality and reliability of existing and projected water supplies,

as well as alternative sources of water supply and measures to secure alternative sources if needed, on a project-by-project basis. Any new water facilities would undergo separate environmental review and require compliance with all applicable water supply and conservation ordinances, laws and regulations. **Therefore, cumulative impacts associated with adequate water supplies would be less than significant.**

Wastewater

The geographic area for wastewater is limited to cumulative projects that would be serviced by LACSD, which would encompass all of the cumulative projects. Other cumulative projects with the LACSD service area could result in a cumulative increase in demand for wastewater service facilities. All new facilities proposed or necessitated by cumulative projects would be subject to applicable CEQA review, and projects would be required to comply with the other applicable laws and regulations protecting environmental resources. Adherence to the above laws and regulations would ensure that neither the proposed Project nor other cumulative projects would result in demand for wastewater treatment services that exceeds the existing entitlements and resources for wastewater services. **Therefore, cumulative impacts associated with wastewater treatment services would be less than significant.**

Stormwater Drainage

The geographic area for stormwater drainage is limited to cumulative projects that would drain to the same catch basins as the Project, and therefore would encompass only cumulative projects in the nearby vicinity. Cumulative projects are located within an urbanized area and include mostly hard-surface development sites. As with the proposed Project, cumulative projects would comply with the requirements of the NPDES General Permit which would require implementation of a SWPPP that specifies BMPs to be implemented during construction to manage runoff flow volumes and water quality and would ensure that they do not exceed the capacity of existing stormwater drainage systems. In addition, many cumulative redevelopment projects on older development sites would likely have reductions in off-site drainage flows as compared to current conditions through implementation of newer drainage control requirements. Moreover, as discussed above, and further in Section 3.8, *Hydrology and Water Quality*, the proposed Project would not significantly alter or increase stormwater flows from the Project Site. **Therefore, cumulative impacts related to stormwater drainage facilities would be less than significant.**

Electric Power, Natural Gas, and Telecommunications Facilities

The geographic areas for electric power, natural gas, and telecommunications are limited to cumulative projects that are also serviced by SCE, SoCalGas, and Charter, and therefore encompasses all cumulative projects. As with the proposed Project, as it relates to electricity, natural gas, and telecommunications facilities, cumulative projects would coordinate with the appropriate service provider for any infrastructure tie-ins, removals, or relocations, and would comply with all requirements set forth by the service provider (e.g., SCE, SoCalGas, and internet and telephone providers). It is anticipated that existing electricity, natural gas, and telecommunications facilities would be sufficient to support the needs from the proposed Project in combination with cumulative projects. **Therefore, cumulative impacts on electric power, natural gas, and telecommunication facilities would be less than significant.**

Solid Waste

The geographic area for solid waste is limited to cumulative projects that would have their solid waste disposed in the County landfills, and therefore would encompass all cumulative projects. Although the proposed Project and cumulative projects would result in an increase in the amount of solid waste sent to landfills, compliance with state and local waste diversion requirements would contribute to the longevity of existing and proposed landfills that would serve the projects and ensure that cumulative impacts to solid waste are less than significant. As stated above, AB 341 sets a goal of 75 percent of solid waste generated statewide to be source reduced, recycled, or composted by 2020. This would require all cumulative projects to meet a 75 percent diversion rate by 2020. Therefore, through compliance with the applicable regulations, the cumulative projects would significantly reduce the amount of solid waste that would be generated and distributed to landfills. **Therefore, cumulative impacts associated with adequate solid waste capacity in landfills would be less than significant.**

3.16.7 References

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CHAPTER 4
Alternatives

4.1 Introduction

This chapter presents the alternatives analysis as required by CEQA for the proposed Project, which is described in Chapter 2, *Project Description*, and analyzed in Chapter 3, *Environmental Analysis*, of this Draft EIR. The purpose of this chapter is to describe and analyze a reasonable range of alternatives that could feasibly attain most of the basic objectives of the proposed Project while avoiding or substantially lessening any significant effects of the proposed Project. This chapter restates the proposed Project's objectives, summarizes the significant impacts associated with the proposed Project, and provides information pertaining to the development of feasible alternatives. It then evaluates the respective environmental impacts for each alternative and compares the potential impacts of each alternative with those of the proposed Project. Based on this analysis, this chapter also identifies the environmentally superior alternative. Finally, it describes other alternatives that were considered but eliminated from detailed consideration and the reasons for their elimination.

4.2 CEQA Requirements for Alternatives Analysis

CEQA does not prescribe fixed rules governing the type of alternatives to a project that should be analyzed in an EIR; the nature of alternatives varies depending on the context of the project being analyzed. As expressed by the California Supreme Court: "CEQA establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR. Each case must be evaluated on its facts, which in turn must be reviewed in light of the statutory purpose." (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564).

Section 15126.6(a) of the CEQA Guidelines provides that:

> [a]n EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

Under these principles, an EIR needs to describe and evaluate only those alternatives necessary to permit a reasonable choice and "to foster meaningful public participation and informed decision making" (CEQA Guidelines Section 15126.6[f]). Consideration of alternatives focuses on those that can either eliminate significant adverse environmental impacts or substantially reduce them; alternatives considered in this context may include those that are more costly and those that could impede to some degree the attainment of the project objectives (CEQA Guidelines Section 15126.6[b]). CEQA does not require the alternatives to be evaluated at the same level of detail as the proposed project. Rather, the discussion of alternatives must include sufficient information about each alternative to allow "meaningful evaluation, analysis, and comparison with the proposed project" (CEQA Guidelines Section 15126.6[d]).

The range of alternatives required in an EIR is therefore governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice (CEQA Guidelines Section 15126.6[f]). An EIR need not consider every conceivable alternative to a project. Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the basic project objectives, are not feasible, or do not avoid or substantially lessen any significant environmental effects (CEQA Guidelines Section 15126.6[c]). Moreover, under CEQA, a lead agency may structure its alternatives analysis around a reasonable definition of a fundamental underlying purpose, and need not study alternatives that cannot achieve that basic goal (*In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* [2008] 43 Cal.4th 1143, 1165).

CEQA also requires that alternatives evaluated in an EIR be potentially feasible. Feasible is defined in CEQA as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (PRC Section 21061.1). The CEQA Guidelines elaborate that factors that may be taken into account when addressing the feasibility of alternatives include site suitability, economic viability, availability of infrastructure, other plans or regulatory limitations, and jurisdictional boundaries and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (CEQA Guidelines Section 15126.6[f]). Finally, alternatives should also avoid or substantially lessen one or more significant environmental impacts that would occur under the proposed project.

In addition to the requirements described above, CEQA requires evaluation of the "No Project Alternative," which analyzes the environmental effects that would occur if the project were not to proceed (CEQA Guidelines Section 15126.6[e]). The purpose of describing and analyzing the No Project Alternative is to compare the impacts of approving the proposed Project with the impacts of not approving the proposed Project. An EIR is also required to identify the environmentally superior alternative. "If the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives" (CEQA Guidelines Section 15126.6[e]).

4.3 Project Summary

As described in Chapter 2, *Project Description*, of this Draft EIR, the Project would develop approximately 495,544 square feet (sf) of residential and commercial uses across the approximately

5.85-acre (255,000 sf) Project Site located at 700-800 South San Gabriel Boulevard within the City of San Gabriel (City). The Project Site was previously occupied by San Gabriel Nursery & Florist, which continues to operate just north of the Project Site as a 2-acre retail garden and florist shop. The Project Site is vacant, and all previously existing greenhouses and associated structures were removed after an act of arson on February 14, 2018.

The proposed Project would construct a six-story (five occupied stories plus one story of mezzanine parking) mixed-use development with retail commercial on the ground level and residential uses above. The 700 Plaza would contain 102 residential units, 4 live/work units, and 36,352 square feet of ground floor commercial space including a restaurant, retail, commercial live-work space, and fitness center. The 800 Plaza would contain 141 residential units, 4 live/work units, and 39,694 square feet of ground floor commercial space including restaurant, retail, café, commercial live-work space, and a market. In total, there would be 243 residential units (413,238 square feet), 8 live/work units (13,026 square feet), and 76,046 square feet of commercial uses. In between the two buildings would be a 33,543 square foot central open space area (23,218 square foot central park and 10,325 square foot central plaza) with expansive landscaping and outdoor seating areas. This central open space is designed to allow people to circulate between the north and south portions of the development. This area could also be a location for community events and individual family use. The area would include a pavilion located in the middle of the central park/plaza area. The pavilion structure is designed as a public art element creating a focal point for the central park area for passive and programmed use.

Community events in the central park/plaza space could include a weekly market. Activities at the market could include live or pre-recorded amplified music, food trucks, and other off-site food vendors. Raised planters, a water feature, and amphitheater-style seating would be located around the pavilion. A 24,280 square foot secondary plaza with landscaped and hardscape areas would surround the perimeter of the entire Project Site.

A total of 983 vehicular parking spaces would be provided by two three-level concrete parking garages. The parking garages would include one subterranean basement level (with a maximum depth of 12 feet below grade), one level at grade (ground floor), and one level at mezzanine (with a maximum height of 21.5 feet above grade). The 700 Plaza would provide 418 parking spaces. The 800 Plaza would provide 565 parking spaces. At the ground level, parking and access for the 700 and 800 Plazas are inter-connected and allow for internal circulation between the two plazas. Residential parking is provided in the subterranean basement level and is segregated from the commercial parking levels on the ground and mezzanine levels with no interconnectivity. Two driveways on S. Gladys Avenue provide access to the residential parking in the 700 Plaza and 800 Plaza, with no interconnectivity at the basement level between the 700 Plaza and 800 Plaza.

There are a number of existing overhead utility lines (electrical, Southern California Edison) around the perimeter of the Project Site. Six power poles are situated in the public right-of-way (sidewalk) along S. San Gabriel Boulevard, three along E. Grand Avenue, six along S. Gladys Avenue, and two within E. El Monte Street. The Project would include undergrounding the overhead utilities along S. San Gabriel Boulevard, E. Gladys Avenue, and E. El Monte Street.

Construction of the 700 Plaza would commence in May 2021, with construction of the 800 Plaza commencing shortly after in August 2021. Construction of 700 Plaza would be completed in September 2023. 800 Plaza would be completed in December 2023. Occupancy would occur following the completion of construction at each phase; therefore, the 700 Plaza would be operational after September 2023 and the 800 Plaza would be operational after December 2023.

4.4 Project Objectives

CEQA Guidelines Section 15124(b) states that a project description shall contain "a statement of the objectives sought by the proposed project." In addition, CEQA Guidelines Section 15124(b) further states that "the statement of objectives should include the underlying purpose of the project."

As set forth by the CEQA Guidelines, the objectives that the Project seeks to achieve are as follows:

- Develop new infill housing with a mix of residential dwelling types to serve a range of household sizes in proximity to major thoroughfares.
- Redevelop a vacant site with an economically viable and attractive mixed-use development that combines residential uses with community-serving retail, grocery, restaurant, and fitness center uses.
- Provide sufficient square footage and visibility for high-quality, main stream retail and restaurant uses that cater to community needs.
- Create a high-quality landscape design and publicly accessible open space area to improve the visual character of the Project Site while creating connections and integrating with the surrounding neighborhood and to provide public art and entertainment options in the public plaza.
- Encourage pedestrian activity by providing residents, employees, and visitors with commercial uses within proximity of residential neighborhoods and public transit, publicly accessible open space with landscaped seating areas and event space, and streetscape improvements to ensure pedestrian safety.
- Support multi-modal transit opportunities at and near the Project Site, including bus transit with links to Metro Rail, designated ridesharing pickup and drop-off areas, and on-site bicycle facilities, in order to reduce the use of, and dependency on, private passenger vehicles in accordance with state and local laws and policies supporting the reduction of greenhouse gas emissions.
- Create a multi-purpose hub of activity surrounded by ground-floor retail and a variety of restaurant uses, public art, and a publicly accessible central park and plaza to enhance the quality of the pedestrian environment for the residents and to provide additional publicly accessible open space for the City's residents.

4.5 Summary of Project Alternatives

This chapter considers seven alternatives to the Project, three of which were considered but were not selected for further analysis for not meeting the basic objectives of the Project or being

otherwise infeasible, and the remaining four of which, including the "no project" alternative and three other "build" alternatives, are evaluated below.

Under the No Project Alternative, the proposed Project would not be developed and the Project Site would remain vacant as under current conditions. Three additional alternatives were selected, with the goal of identifying ways to reduce or avoid impacts that would result from implementation of the proposed Project. No significant and unavoidable impacts were identified. Therefore, based on the objectives established for the Project (set forth above), the following alternatives are evaluated:

1. No Project Alternative
2. Code-Compliant Alternative
3. Reduced Density Alternative
4. Reduced Commercial Alternative

These four alternatives consider varying levels of development on the Project Site in order to accomplish a reduction in identified significant operational noise impacts, and are described in more detail below.

4.6 Alternatives Considered and Rejected

The CEQA Guidelines Section 15126.6(c) provides that an EIR should identify alternatives that were considered for analysis but rejected and briefly explain the reasons for their rejection. According to the CEQA Guidelines, the following factors may be used to eliminate alternatives from detailed consideration: the alternative's failure to meet most of the basic Project objectives, the alternative's infeasibility, or the alternative's inability to avoid significant environmental impacts.

As summarized above under Section 4.2, *CEQA Requirements for Alternatives Analysis,* CEQA requires that alternatives evaluated in an EIR be potentially feasible. Feasibility is defined in CEQA as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (PRC Section 21061.1). CEQA Guidelines Section 15126.6[f]) specifies factors that may be taken into account when addressing the feasibility of alternatives; these factors include site suitability, economic viability, availability of infrastructure, other plans or regulatory limitations, and jurisdictional boundaries and whether the proponent can reasonably acquire, control, or otherwise have access to an alternative site.

Finally, alternatives that would neither avoid nor substantially lessen any of the significant unavoidable environmental effects of the project need not be evaluated in an EIR. See, e.g., *City of Maywood v. Los Angeles Unified School District* (2012) 208 Cal.App. 4th 362,419. Such alternatives can therefore be considered infeasible.

With the above factors in mind, three alternatives that have been considered and rejected as infeasible are discussed below.

4.6.1 Alternative Off-Site Location

This alternative considers the potential for the proposed Project to be located on a different site altogether. According to the guidance provided by CEQA Guidelines Section 15126.6(f)(2), one or more alternative location(s) for a proposed project should be considered if placing the proposed project in the alternative location would avoid or substantially lessen any of the significant effects of the project to be avoided or substantially lessened; if the EIR concludes that no feasible alternative locations exist, the EIR must disclose the reasons for this conclusion.

The Project's operational noise impacts are due to the Project's proposed outdoor event uses being located in an urban area in proximity to sensitive residential receptors. Therefore, moving the Project to a different location within an urban area would likely create similar impacts at a different location and, as such, moving the location of the proposed Project to another site would likely not reduce the nature and extent of such impacts. In addition to considering whether an alternative site would avoid or substantially lessen impacts, various factors may be considered when addressing the feasibility of an alternative site. According to CEQA Guidelines Sections 15126.6(f)(1) and (f)(2), factors considered may include general suitability, economic viability, availability of infrastructure, general plan consistency, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site. As this Project Site is one of the largest remaining undeveloped sites in the City, it is not anticipated that the Applicant would be able to find an equivalent-sized development site that is not already developed or currently underutilized, or another site that would be large enough to accommodate the variety of commercial and residential uses as proposed under the Project. Additionally, the Applicant cannot reasonably acquire an alternative site of similar size. Therefore, the flexibility to develop a similar project on the same or similar scale in another location is not feasible.

For the reasons stated above, an off-site location alternative would not meaningfully change the impacts of the proposed Project and a feasible alternate location for the proposed Project has not been identified. Accordingly, an off-site alternative has not been carried forward for further analysis.

4.6.2 Commercial Uses Only Alternative

This alternative considers the potential for only commercial uses to be developed on the Project Site. Under this alternative, the Project Site would be developed with 116,935 square feet of office uses and 10,565 square feet of restaurants. This alternative would be limited to five stories or 70 feet, whichever is lower, and would have a maximum floor to area ratio (FAR) of 0.5:1.[1] As determined by the San Gabriel Municipal Code (SGMC), commercial uses are not required to provide a ratio of publicly accessible open space based on square footage. Therefore, in this alternative no publicly accessible open space would be developed and therefore no public events would occur. Furthermore, this alternative would develop no housing on the Project Site, which would not meet the Project objectives regarding developing infill housing; developing an attractive mixed-use development with community-serving retail, grocery, and fitness center uses; creating a

[1] Based on the Project Site's 255,000 square feet and a maximum FAR of 0.5:1, the maximum allowable development on the Project Site would be 127,500 sf.

high-quality landscape design and publicly accessible open space area; encouraging pedestrian activity within proximity of residential neighborhoods; creating a multi-purpose hub of activity surrounded by retail and publicly accessible open space.

For all of the reasons stated above, a commercial-only alternative would reduce the operational noise impact of the Project, but would not meet the Project objectives. Accordingly, a commercial-only alternative has not been carried forward for further analysis.

4.7 Alternatives to the Proposed Project

In accordance with CEQA Guidelines Section 15126.6(d), those viable alternatives to the proposed Project are evaluated in sufficient detail to determine whether the overall environmental impacts would be less than, similar to, or greater than the corresponding impacts of the proposed Project. Furthermore, each alternative is evaluated to determine whether most of the proposed Project's basic objectives, identified in Chapter 2, *Project Description*, would be feasibly attained by the alternative. The evaluation of each of the alternatives follows the format described below:

- A description of the alternative.
- The environmental impacts of the alternative for each environmental issue area analyzed in the EIR are described. Where applicable, the evaluation is divided between temporary impacts that would occur during the proposed Project's construction phase, and long-term impacts that would occur during the proposed Project's operational phase.
- Environmental impacts of the alternative and the proposed Project are compared for each environmental issue area evaluated in Chapter 3 the Draft EIR. Where the impact of the alternative would be clearly substantially less adverse than the impact of the proposed Project, the comparative impact is said to be "less." Where the alternative's net impact would clearly be more adverse than the proposed Project, the comparative impact is said to be "greater." Where the impacts of the alternative and proposed Project would be roughly equivalent, the comparative impact is said to be "similar." The evaluation also documents whether compared to the proposed Project, an impact would be entirely avoided, whether a significant impact under the proposed Project could be reduced to a less than significant level in the alternative, or whether a significant unavoidable impact under the alternative would be feasible to be mitigated to a less than significant level.

The comparative impacts of the proposed Project and the alternatives are summarized in **Table 4-4**, below.

4.7.1 Alternative 1: No Project Alternative

Description of the Alternative

The No Project Alternative consists of the circumstance under which the Project would not proceed, pursuant to Section 15126.6(e)(3)(B) of the CEQA Guidelines. The No Project Alternative assumes that no new development would occur within the Project Site. As mentioned in Chapter 2, *Project Description*, of this Draft EIR, the Project Site is currently composed entirely of vacant land that formerly operated as the San Gabriel Nursery. Existing physical conditions would remain

unchanged within the Project Site under the No Project Alternative, and no lot assembly would occur. The vacant site would not be redeveloped with a mixed-use project.

Overview of Comparative Impacts

Aesthetics

Under the No Project Alternative, no construction activities would occur, and the proposed Project would not be implemented; therefore, the visual characteristics of the Project Site would remain in their current condition (a vacant site surrounded by fencing). Impacts to aesthetics under the No Project Alternative would be similar to or reduced as compared to the proposed Project. Similar to the proposed Project, the No Project Alternative would result in no impact to scenic vistas and scenic resources within a State scenic highway. The No Project Alternative would not degrade the existing visual character or quality of the site or its surroundings and would not create a new source of substantial light or glare. As such, those impacts would be less than those of the proposed Project, and there would be no impacts under the No Project Alternative.

Air Quality

Under the No Project Alternative, air quality impacts would be less than the proposed Project (avoided entirely) as there would be no construction-related emissions or changes to the operational characteristics of the Project Site that would result in emissions of criteria pollutants. The No Project Alternative would not conflict with the applicable air quality plan, violate air quality standards or contribute to an existing or Project air quality violation, result in a cumulatively considerable net increase of any criteria pollutant, expose sensitive receptors to substantial pollutant concentrations, or create or introduce objectionable odors affecting a substantial number of people. As such, there would be no impacts. No mitigation measures that would be implemented under the Project would be required. Less than significant impacts related to a Project's conflict with the applicable Southern California Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP), cumulatively considerable net increase of criteria pollutants, generation of substantial pollutant concentrations, or generation of other emissions that would adversely affect a substantial number of people, would be avoided under the No Project Alternative.

Cultural Resources

Under the No Project Alternative, potential impacts to cultural resources would be less than the proposed Project (avoided entirely), as no ground disturbing construction activities would occur. No mitigation measures that would be implemented under the Project would be required. All impacts to potential historical resources, archeological resources, or human remains would be avoided under the No Project Alternative.

Energy

Under the No Project Alternative, energy impacts would be less than the proposed Project (avoided entirely) as there would be no construction-related energy demands or changes to the operational characteristics of the Project Site that would result in increased energy consumption. As such, these impacts would be less than those of the proposed Project, and there would be no impacts under the No Project Alternative.

Geology and Soils

Under the No Project Alternative, geology and soils impacts would be less than the proposed Project (avoided entirely) as no ground disturbing construction activities would occur, and no construction-related or operational-related activities would occur on the Project Site. As such, the No Project Alternative would not directly or indirectly cause potential substantial adverse effects involving rupture of a known earthquake fault or strong seismic ground shaking; result in substantial soil erosion or loss of topsoil; or directly or indirectly destroy a unique paleontological resource or unique geologic feature. No mitigation measures that would be implemented under the Project would be required. As such, these impacts would be less than those of the proposed Project, and there would be no impacts under the No Project Alternative.

Greenhouse Gas Emissions

Under the No Project Alternative, greenhouse gas (GHG) emissions impacts would be less than the proposed Project (avoided entirely) as there would be no construction-related GHG emissions or changes to the operational characteristics of the Project Site that result in GHG emissions. The No Project Alternative would not generate GHG emissions, either directly or indirectly, and would not conflict with any applicable plan, policy, regulation, or recommendation of an agency adopted for the purpose of reducing the emissions of GHGs. As such, these impacts would be less than those of the proposed Project, and there would be no impacts under the No Project Alternative.

Hazards and Hazardous Materials

Under the No Project Alternative, no construction activities would occur and construction impacts related to release or exposure to hazards and hazardous materials would be less than the proposed Project; there would be no impact under the No Project Alternative. Under the No Project Alternative, hazards and hazardous materials impacts would be similar to or less than those of the Project. The Project Site is currently vacant and would not pose a continued environmental hazard and threat to public health and safety. The No Project Alternative would not emit hazardous emissions or handle hazardous or acutely hazardous materials within one-quarter mile of an existing or proposed school. There would be no impact, which is less than that of the proposed Project. As with the proposed Project, the No Project Alternative would not be located within two miles of a public airport or private airstrip and would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Similar to the proposed Project, there would be no impact. Unlike the proposed Project, the No Project Alternative would not impair or interfere with an adopted emergency response plan or emergency evacuation plan. No mitigation measures that would be implemented under the Project would be required. As such, these impacts would be less than that of the proposed Project, and there would be no impacts under the No Project Alternative.

Hydrology and Water Quality

Under the No Project Alternative, no construction activities or development would occur, there would be no construction-related or operational impacts to hydrology and water quality. Therefore, overall impacts to hydrology and water quality would be similar to or less than those of the proposed Project. Under the No Project Alternative, impacts related to water quality standards and waste discharge requirements, groundwater supplies and recharge, drainage patterns changes resulting in siltation and/or flooding, creation of runoff and stormwater drainage systems, water

quality, exposure of people or structures to significant risk, and inundation by seiche, tsunami, or mudflow would be less than the impacts of the proposed Project. There would be no impact to these thresholds under the No Project Alternative, and therefore, impacts under the No Project Alternative would be less than those of the Project. Similar to the proposed Project, there would be no impacts related to placing housing and structures in a flood hazard area.

Land Use and Planning

Under the No Project Alternative, there would be no development or change of land use on the Project Site from its current vacant condition. Overall impacts related to land use under the No Project Alternative would be similar or less than those of the proposed Project. Under the No Project Alternative, there would be no changes to land uses on the Project Site, an established community would not be physically divided or altered, and there would be no potential conflicts with the applicable land use plans, policies, and regulations. Overall, land use impacts would be less than those of the proposed Project. Similar to the proposed Project, the No Project Alternative would not conflict with any applicable habitat conservation plan or natural community conservation plan, and there would be no impact.

Noise

Under the No Project Alternative, there would be no construction-related or operational changes on the Project Site that would generate noise. The Project Site would remain vacant of uses, and noise conditions would not change. Overall, noise impacts under the No Project Alternative would be less than under the proposed Project (avoided entirely). Because there would be no development, the No Project Alternative would not cause exposure of persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The No Project Alternative would not result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. The No Project Alternative would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above existing conditions. The No Project Alternative would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above existing conditions. Similar to the proposed Project, the No Project Alternative would not be located within an airport land use plan, within two miles of a public airport or public use airport, and would not expose people residing or working in the project area to excessive noise levels. Also similar to the proposed Project, the No Project Alternative would not be located within the vicinity of a private airstrip and would not expose people residing or working in the project area to excessive noise levels. No mitigation measures that would be implemented under the Project would be required. As such, these impacts would be less than those of the proposed Project, and there would be no impacts under the No Project Alternative.

Population and Housing

Under the No Project Alternative, there would be no development of residential and commercial uses that would result in direct or indirect population growth. Unlike the proposed Project, the No Project Alternative would not require construction workers and would not develop any new operational uses. Therefore, the No Project Alternative would result in no impact to direct or indirect population growth, and impacts would be less than the proposed Project.

Similar to the proposed Project, the No Project Alternative would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere due to the existing setting of the Project Site. Additionally, like the proposed Project, the No Project Alternative would not displace a substantial number of people necessitating the construction of replacement housing elsewhere. Similar to the proposed Project, there would be no impacts on the displacement of existing people or housing under the No Project Alternative.

Public Services

Under the No Project Alternative, there would be no development on the Project Site that would place additional demand on public service providers including fire protection, police protection, schools, and parks. Therefore, no impacts to public services would occur from the No Project Alternative. Under the No Project Alternative, there would be no impacts associated with the provision of new or physically altered governmental facilities, 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. Therefore, impacts would be less than those of the proposed Project.

Recreation

Under the No Project Alternative, no population would be introduced on the Project Site that could place demand on recreational facilities, and no new recreational facilities would be developed. Similar to the proposed Project, there would be no significant increased demand on 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. The benefit associated with the development of new recreational facilities that are proposed under the Project would not occur. Therefore, while the No Project Alternative would not increase demand on recreational facilities, it would also not provide a new space for residents to gather as the Project would. Impacts would be less than significant, but greater than compared to the Project.

Transportation

Under the No Project Alternative, transportation impacts would be less than the proposed Project (avoided entirely) as there would be no construction-related trips or development on the Project Site that would generate vehicle miles traveled (VMT). The No Project Alternative would not result in impacts related to alternative transportation, VMT, hazardous conditions due to a geometric design feature or incompatible land use, and emergency access. Furthermore, the No Project Alternative would not result in any impacts to intersection and neighborhood street segment operations. No mitigation measures would be required. As such, these impacts would be less than that of the proposed Project, and there would be no impacts under the No Project Alternative.

Tribal Cultural Resources

Under the No Project Alternative, impacts to tribal cultural resources would be similar to the proposed Project, as no ground disturbing construction activities would occur, and no impact to tribal cultural resources would occur during construction. Furthermore, under the No Project Alternative, the Project proponent would not be required to engage in AB 52 consultation with Native American tribes in order to identify any tribal cultural resources that could potentially be

impacted by the related project and to address potentially significant impacts. As such, these impacts would be less than that of the proposed Project and there would be no impact under the No Project Alternative.

Utilities and Service Systems

Under the No Project Alternative, utilities and service systems impacts would be less than the proposed Project (avoided entirely) as there would be no construction-related need for utilities and service systems or changes in the operational demand for utilities and service systems within the Project Site. The No Project Alternative would not exceed wastewater treatment requirements, require or result in the construction of new water or wastewater treatment facilities, result in the construction of new storm water drainage facilities, require new or expanded water entitlements, result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project, be served by a landfill with insufficient capacity, and oppose federal, state, or local solid waste statutes and regulations. As such, these impacts would be less than those of the proposed Project, and there would be no impacts under the No Project Alternative.

Relationship of the No Project Alternative to Project Objectives

The No Project Alternative would not provide any development within the Project Site and represents a continuation of the existing conditions. This alternative would not meet any of the Project Objectives and would not provide any of the benefits associated with the proposed Project.

4.7.2 Alternative 2: Code-Compliant Alternative

Description of the Alternative

The Code-Compliant Alternative consists of the circumstance under which the multi-family residential uses that are included as part of the proposed Project would only be permitted on the second and third floors above ground floor commercial or office uses, consistent with Section 153.164 of the SGMC. This Alternative would have a maximum height of three stories or 45 feet and a maximum FAR of 1:1, as compared with the proposed Project, which would have a height of six stories (65 feet) and a FAR of 1.95:1. The Code-Compliant Alternative would develop 124,950 square feet of residential uses, including 22 one-bedroom units, 70 two-unit units, 20 three-bedroom units, and 130,050 square feet of commercial uses, including a 20,330 square foot market, a 25,233 square foot fitness center, and 84,487 square feet of restaurant, retail, or office uses in two plazas, similar to the Project (700 and 800 plazas). There would be no central park included as part of this alternative, including the pavilion. Alternative 2 would include a minimum of 100 square feet of adjoining open space area (publicly accessible open space) for each residential unit, for a total of 11,200 square feet of open space, that would comprise either a pedestrian plaza, a community garden, or other open space area, sufficient to meet SGMC requirements. The Code-Compliant Alternative would be required to provide 1,262 vehicle parking spaces pursuant to SGMC Section 153.164. As the Code-Compliant Alternative can only have a maximum of three stories, the parking for the Alternative will be provided in two subterranean levels, as compared to the one subterranean level under the proposed Project.

TABLE 4-1
PROPOSED DEVELOPMENT AND CODE-COMPLIANT ALTERNATIVE DEVELOPMENT COMPARISON

	Proposed Project	Code-Compliant Alternative
Residential Component		
One-Bedroom	40 du	22 du
Two-Bedroom	151 du	70 du
Three-Bedroom	48 du	20 du
Four-Bedroom	4 du	0 du
Subtotal Residential Only Component	*243 du (413,238 sf)*	*112 du (124,950 sf)*
Live/Work Component		
Live/Work One-Bedroom	6 du	0 du
Live/Work Two-Bedroom	2 du	0 du
Subtotal Live/Work "Live"	*6,260 sf*	*0 sf*
Total Residential	**251 du (419,498 sf)**	**112 du (124,950 sf)**
Commercial Component		
Subtotal Commercial	*69,280 sf*	*130,050 sf*
Subtotal Live/Work "Work"	*6,766 sf*	*0 sf*
Total Commercial	*76,046 sf*	*130,050 sf*
Parking		
Required	918 spaces	1,262 spaces[a]
Provided	983 spaces	1,262 spaces
Open Space		
Central Park / Central Plaza (Publicly Accessible)	33,543 sf	
Secondary Plaza/Landscape (Publicly Accessible)	24,280 sf	--
Subtotal Publicly Accessible Open Space	*57,823*	*11,200 sf*[b]

[a] The number of parking spaces required for the alternative is based on the required spaces/unit ratios provided in SGMC Section 153.164:
4 BR = 2 spaces/unit; 3 BR – 2 spaces/unit; 2 BR = 2 spaces/unit; 1 BR = 1 space/unit; Guest Parking = # of units / 3; Commercial = square feet / 100

[b] Provided open space assumes that each residential unit shall have a minimum 100 square feet of adjacent outdoor space pursuant to SGMC Section 153.164(c)(12)(a).

Overview of Comparative Impacts

Aesthetics

The Code-Compliant Alternative would have a maximum height of three stories or 45 feet, which could create potential for visual impacts. However, the Code-Compliant Alternative would have reduced massing when compared to the proposed Project due to the reduction in building height (three stories compared to six stories under the Project), as well as the overall reduced development intensity. The Code-Compliant Alternative would result in no central park and would not provide as large of a visual scenic corridor through the Project Site as under the proposed Project. However,

the Code-Compliant Alternative would still include 11,200 square feet of open space that would comprise either a pedestrian plaza, community garden, or other open space area, which could provide a break in the Code-Compliant Alternative's massing. Although the Code-Compliant Alternative would have reduced massing and development intensity when compared to the proposed Project, the comparative reduction in visual impacts under this Alternative would be offset by the increased impact resulting from the removal of the view corridor. Therefore, impacts under the Code-Compliant Alternative would be similar to the proposed Project, and the Code-Compliant Alternative would result in less than significant impacts on scenic vistas.

Similar to the proposed Project, the Code-Compliant Alternative would result in no impact to scenic resources within a State scenic highway. Furthermore, like the proposed Project, the Code-Compliant Alternative would not conflict with applicable zoning and other regulations governing scenic quality. However, the Code-Compliant Alternative would not require a Zone Map Amendment and therefore, impacts related to conflicts with the applicable zoning and other regulations governing scenic quality would be reduced as compared to the Project. The Code-Compliant Alternative, as with the proposed Project, would comply with the SGMC as it relates to lighting requirements and therefore, the Code-Compliant Alternative would not create a substantial new source of substantial light or glare. Impacts would be less than that of the proposed Project due to the reduction in Project development.

Air Quality

Under the Code-Compliant Alternative, construction activities would occur, and the Project Site would be developed with 124,950 square feet of residential uses and 130,050 square feet of commercial uses. Due to the increase in provided subterranean vehicle parking, the Code-Compliant Alternative would require deeper depth of excavation as compared to the proposed Project. This comparative decrease in development intensity and uses (see **Table 4-1**), even with the increased level of subterranean parking, would result in fewer construction and operational emissions under the Code-Compliant Alternative. Additionally, operational impacts to air quality under the Code-Compliant Alternative would be reduced as compared to the proposed Project, due to the reduction in Project development intensity and corresponding vehicle emissions.

Similar to the proposed Project, the Code-Compliant Alternative would involve construction and operational activities resulting in air emissions; however, emissions would be reduced when compared to the proposed Project, due to the decrease in development intensity and uses. The Code-Compliant Alternative would maintain consistency with the applicable SCAQMD AQMP and would implement Mitigation Measure MM-AQ-1 during construction, ensuring that emissions are below the SCAQMD thresholds of significant for criteria and precursor pollutants. Therefore, impacts would be less than significant with implementation of the mitigation measure, and impacts would be less than those of the proposed Project.

Regarding cumulatively considerable net increase of criteria pollutants for which the Project Site region is non-attainment, like the proposed Project, the Code-Compliant Alternative would implement Mitigation Measure MM-AQ-1, which would avoid exceedance of applicable emissions thresholds for pollutants in federal/state non-attainment for the Project's Air Basin (i.e. O_3, PM10, and PM2.5) during construction. Furthermore, similar to the proposed Project, the Code-Compliant

Alternative would not exceed any applicable regional or local impact thresholds during operations. Therefore, while the Alternative would, similar to the proposed Project, be less than significant, impacts under the Code-Compliant Alternative would be reduced as compared to those of the proposed Project.

Regarding health risks resulting from implementation of the Code-Compliant Alternative, like the proposed Project, this Alternative would also have the potential to result in cancer risk from diesel particulate matter (DPM) emissions during construction. Similar to the proposed Project, implementation of Mitigation Measures MM-AQ-1 and MM-AQ-2 would be required to reduce this potential impact under this Alternative. With the implementation of these mitigation measures, health risk from the Code-Compliant Alternative's construction activities would be less than significant and would be reduced as compared to the proposed Project. Additionally, operational emissions of pollutants that may impact health risk would be less than significant, like under the proposed Project, and would be reduced as compared to the proposed Project.

Lastly, development of the Code-Compliant Alternative would not result in any other emissions, including odors, that would adversely affect a substantial number of people, as with the proposed Project. Impacts from odors would be similar to those under the proposed Project.

Cultural Resources

Under the Code-Compliant Alternative, ground-disturbing construction activities would occur, which could potentially impact subsurface cultural resources. The Code-Compliant Alternative would provide 1,262 vehicle parking spaces compared to the proposed Project's 983 spaces. Due to the increase in provided subterranean vehicle parking, the Code-Compliant Alternative would require deeper depth of excavation as compared to the proposed Project.

There are no known historical resources on the Project Site. Therefore, the Code-Compliant Alternative, similar to the proposed Project, would not result in an impact to known historical resources during construction. Furthermore, like the proposed Project, operation of the Code-Compliant Alternative would not result in any additional ground disturbing activities such as grading or excavation; or impact the built environment outside of the Project Site, and therefore, there would be no potential to encounter, alter, or disturb historical resources. Therefore, the Code-Compliant Alternative would result in similar impacts to historical resources as the proposed Project.

The Code-Compliant Alternative, like the proposed Project, would require excavation during construction. As previously stated, the Code-Compliant Alternative would result in increased depth of excavation as compared to the proposed Project. During these ground disturbing activities, previously buried prehistoric and/or historic-period archaeological resources could be disturbed. To reduce this potential impact, the Code-Compliant Alternative would implement Mitigation Measures MM-CUL-1 through MM-CUL-5, similar to those under the proposed Project, which would provide for resource sensitivity training of construction workers and procedures to follow in the event of a discovery. With implementation of these mitigation measures, impacts to archaeological resources during construction under the Code-Compliant Alternative would be less than significant but increased compared to the proposed Project. Furthermore, operation of the

Code-Compliant Alternative would not result in any additional ground disturbing activities such as grading or excavation; and therefore, there would be no potential to encounter, alter, or disturb archaeological resources.

Regarding the Code-Compliant Alternative's potential to disturb human remains, like with the proposed Project, this Alternative would involve excavation activities, during which construction workers may encounter unanticipated human remains. Similar to the proposed Project, the Code-Compliant Alternative would implement Mitigation Measure MM-CUL-6, which would ensure that the remains are treated in accordance with relevant state laws, and that impacts would be reduced to a less-than-significant level.

Impacts to historical resources would be similar under the Code-Compliant Alternative when compared to the proposed Project. Impacts to archaeological resources and disturbance of human remains during construction of the Code-Compliant Alternative would be increased compared to the Project. Impacts to archaeological resources and disturbance of human remains during operation of the Code-Compliant Alternative would be similar under the Code-Compliant Alternative when compared to the proposed Project.

Energy

Under the Code-Compliant Alternative, construction activities would occur, and the Project Site would be developed with mixed uses with an overall reduced development intensity than the proposed Project (see **Table 4-1**). This would result in decreased construction and operational energy demand under the Code-Compliant Alternative. Therefore, impacts to energy under the Code-Compliant Alternative would be reduced as compared to the proposed Project.

Similar to the proposed Project, the Code-Compliant Alternative would result in less than significant impacts on the wasteful, inefficient, or unnecessary consumption of energy resources during construction and operation, due to the reduction in development intensity and uses when compared with the proposed Project. Furthermore, the Code-Compliant Alternative would also not conflict or construct a state or local plan for renewable energy or energy efficiency and would result in less than significant impacts. Therefore, all impacts to energy would be reduced under the Code-Compliant Alternative when compared to the proposed Project.

Geology and Soils

Under the Code-Compliant Alternative, construction activities would occur, and the Project Site would be developed with mixed uses and 1,262 vehicle parking spaces, which would require more subterranean parking area when compared to the proposed Project, thus resulting in an increased depth of excavation for the provided parking spaces.

Similar to the proposed Project, the Code-Compliant Alternative would not be located within a designated Alquist-Priolo Earthquake Fault Zone, and no active faults are mapped projecting through the Site. The Project Site is located more than 500 feet outside the Fault Rupture Study Area, and therefore, impacts under the Code-Compliant Alternative due to ground rupture from earthquake fault rupture would be less than significant, like the proposed Project. Regarding impacts due to strong seismic shaking, design and construction would be required to be in

accordance with the current California Building Code (CBC) requirements, which are proven to adequately address potential impacts related to ground shaking. Therefore, similar to the proposed Project, impacts related to strong seismic shaking would be less than significant under this Alternative. Furthermore, as the Code-Compliant Alternative would be located within the same geographic setting as the proposed Project, development would result in less-than-significant impacts on risks to seismic-related ground failure, liquefaction, or landslides, and impacts would be similar to those under the proposed Project.

Regarding the potential for the Code-Compliant Alternative to result in substantial soil erosion or the loss of topsoil, like with the proposed Project, this Alternative would conduct activities in accordance with an approved Stormwater Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs), to prevent erosion and stormwater runoff. During operations, the Code-Compliant Alternative would include Low Impact Development (LID) BMPs to treat stormwater runoff, thereby reducing the potential for erosion. Therefore, the Code-Compliant Alternative would result in less than significant impacts on soil erosion or loss of topsoil, and impacts would be similar to those under the proposed Project.

Given the Code-Compliant Alternative would be located within the same geographic setting and would comply with all applicable guidelines, regulations, and recommendations, as the proposed Project, development would result in less-than-significant impacts on risks related to unstable or expansive soils, or soils incapable of adequately supporting the use of septic tanks or other waste water disposal systems. Impacts would be similar to those under the proposed Project.

Regarding the Code-Compliant Alternative's potential to impact paleontological resources or a unique site, similar to the proposed Project, this Alternative would implement mitigation measures MM-GEO-1, 2, 3, and 4, which would require retention of a qualified paleontologist to oversee implementation of paleontological resources mitigation, construction worker paleontological resources sensitivity training, paleontological resources monitoring, and procedures to follow in the event of paleontological resources discoveries. As the Code-Compliance Alternative would excavate deeper than under the proposed Project, with implementation of these mitigation measures, impacts to paleontological resources during construction would be less than significant but increased compared to the Project. Operation of the Code-Compliant Alternative would not result in any further ground disturbing activities such as grading or excavation; and therefore, there would be no potential to encounter, alter, or disturb paleontological resources. Therefore, there would be no operational impacts on paleontological resources under this Alternative, and impacts would be similar to the proposed Project.

Greenhouse Gas Emissions

Under the Code-Compliant Alternative, construction activities would occur, and the Project Site would be developed with mixed uses at a lower development intensity than the proposed Project (see **Table 4-1**). Given that the Code-Compliant Alternative would have a reduced development intensity, construction and operational activities would result in fewer GHG emissions when compared to the proposed Project. Therefore, the Code-Compliant Alternative would not generate GHG emissions that would have a significant impact on the environment, and would not conflict with any applicable plan, policy, regulation, or recommendation of an agency adopted for the

purpose of reducing the emissions of GHG. Therefore, impacts related to GHG emissions would be less than significant under the Code-Compliant Alternative and would be less than those under the proposed Project.

Hazards and Hazardous Materials

Under the Code-Compliant Alternative, construction activities would occur, and the Project Site would be developed with mixed uses as described above. Like with the proposed Project, during the construction phase, construction equipment and materials may include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures. The use of these hazardous materials could result in inadvertent release, adversely affecting individuals nearby. Similar to the proposed Project, the Code-Compliant Alternative would be required to prepare a SWPPP for construction activities in compliance with the NPDES General Construction Permit requirements. The SWPPP would list the hazardous materials (including petroleum products) proposed for use during construction; describe spill prevention measures, equipment inspections, equipment and fuel storage; protocols for responding immediately to spills; and describe BMPs for controlling site runoff.

Furthermore, the previous uses on the Project Site included underground storage tanks (USTs) for fuel (gasoline and diesel) storage. Other hazardous materials commonly associated with nurseries include fertilizers, herbicides, and pesticides. Like the proposed Project, the Code-Compliant Alternative would implement Mitigation Measures MM-HAZ-1 through MM-HAZ-3, which would ensure removal of contaminated soils and ensure that workers are provided appropriate training in the recognition and response to encountering hazardous materials, and that a plan is in place that provides procedures for the testing, handling, and disposal of hazardous materials. With implementation of these mitigation measures, construction and operation of the Code-Compliant Alternative would result in similar, less than significant impacts, to hazards and hazardous materials as under the proposed Project.

The Code-Compliant Alternative would result in similar less-than-significant impacts to the emissions or handling of hazardous materials within one-quarter mile of an existing or proposed school, interference with an adopted emergency response plan, and wildland fire risks. There would be no impacts related to airport land use plans or public airports or private airstrips. Therefore, impacts would be similar to those under the proposed Project.

Hydrology and Water Quality

Under the Code-Compliant Alternative, construction activities would occur, and the Project Site would be developed with mixed uses at a lower development intensity than the proposed Project (see **Table 4-1**). The Code-Compliant Alternative would result in no central park, including the pavilion/art piece, community gatherings, etc. However, the Code-Compliant Alternative would include a total of 11,200 square feet of publicly accessible open space, that would comprise either a pedestrian plaza, a community garden, or other open space area.

As with the proposed Project, water would be used during the temporary construction phases of the Code-Compliant Alternative (e.g., for dust suppression). However, this water would be mechanically and precisely applied and would, in general, infiltrate or evaporate. As such, water

used during construction would not exceed the capacity of existing stormwater drainage systems surrounding the Project Site. In accordance with the requirements of the NPDES General Permit, this Alternative would also implement a SWPPP that specifies BMPs to be implemented during construction to manage runoff flow volumes and water quality and would ensure that they do not exceed the capacity of existing stormwater drainage systems. With regard to operation, impervious surfaces would be added to the Project Site, similar to the proposed Project, but the reduction in provided open space under the Code-Compliant Alternative, as compared to the Project, would result in increased impervious surfaces. However, the stormwater treatment design included as part of the Code-Compliant Alternative would account for this increase in flow. In addition, all on-site drainage would be collected through infiltration dry wells distributed throughout the Project Site. Therefore, the Code-Compliant Alternative would not violate any water quality standards, waste discharge requirements, substantially degrade water quality, decrease groundwater supplies, interfere with groundwater recharge, increase the amount of surface runoff resulting in flooding, create runoff water in exceedance of the capacity of stormwater drainage systems, or provide substantial additional sources of polluted runoff, and impacts would be less than significant, but slightly greater than under the proposed Project.

The proposed Project, as well as the Code-Compliant Alternative, would increase the impervious area on the Project Site compared to existing conditions through the introduction of buildings, parking areas, walkways, and other hardscape elements. While impervious surfaces would be added to the Project Site, the stormwater treatment design included as part of the proposed Project, and that would also be required under the Code-Compliant Alternative, accounts for this increase in flow. Development of the Code-Compliant Alternative would also result in a change to the existing on-site drainage pattern. Under existing conditions, the water would flow westerly towards S. San Gabriel Boulevard and E. Grand Avenue. However, under the Code-Compliant Alternative, as with the proposed Project, water would also flow easterly towards Gladys Avenue as well as S. San Gabriel Boulevard and E. Grand Avenue. Therefore, similar to the proposed Project, new parkway drains would be installed as part of the Code-Compliant Alternative development layout, which would ensure stormwater runoff is routed properly. All on-site drainage would be collected in a proposed private storm drain system and treated before discharging to the public street. The stormwater treatment design and new parkway drains that would be implemented as part of the Code-Compliant Alternative would minimize the potential for both on- and off-site erosion and siltation during operation of the Code-Compliant Alternative.

Regarding flood flows and risks, the Project Site is mapped by the Federal Emergency Management Agency (FEMA) as lying within a Zone X area, which is an "Area of Minimal Flood Hazard" and is not located within a Special Flood Hazard Area. The Project Site is also not located within a potential inundation area, as the Rio Wash is located 800 feet east of the Project Site. Therefore, similar to the proposed Project, the Code-Compliant Alternative would not impede or redirect flood flows, risk release of pollutants due to project inundation within flood hazard, tsunami, or seiche zones, and impacts would be less than significant.

The Project Site falls within the jurisdiction of water quality plans with related regulations and permitting requirements that assure that development projects are in compliance with clean water policies. Most notably, the Project Site is under the jurisdiction of the Los Angeles Regional Water

Quality Control Board (LARWQB) (Region 4) Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties and the Rio Hondo/San Gabriel River Watershed Enhanced Watershed Management Program (EWMP); and the LARWQCB is also given authority to issue waste discharge requirements, enforce actions against stormwater discharge violators, and monitor water quality. Similar to the proposed Project, the Code-Compliant Alternative would implement the necessary BMPs to support the applicable plans; and the Code-Compliant Alternative would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be similar to the proposed Project and would be less than significant.

Land Use and Planning

The Code-Compliant Alternative would be developed such that it would meet the maximum requirements permitted under the Retail Commercial (C-1) Zone. The Code-Compliant Alternative would have a maximum height of three stories and a maximum FAR of 1:1. Therefore, under the Code-Compliant Alternative, no PD or Zone Map Amendment would be required, and the Alternative would be consistent with the goals and policies of SCAG's RTP/SCS, the City's General Plan, and the SGMC. Impacts would be less than significant and similar to the impacts under the proposed Project.

Furthermore, as under the proposed Project, the Code-Compliant Alternative would be situated mid-block between the 700 Plaza and the 800 Plaza, and would facilitate movement internally within the Project Site and from the larger community to the east and west. The Alternative would be designed to be well-integrated into the larger established community and would not present a barrier to physical access. Therefore, the Code-Compliant Alternative would not divide an established community. Impacts would be similar to the proposed Project and would be less than significant.

Noise

Under the Code-Compliant Alternative, construction activities would occur, and the Project Site would be developed with 124,950 square feet of residential uses and 130,050 square feet of commercial uses. The Code-Compliant Alternative would result in no central park, including the pavilion/art piece, community gatherings, etc. Due to the increase in provided subterranean vehicle parking, the Code-Compliant Alternative would require deeper depth of excavation as compared to the proposed Project. This comparative decrease in development intensity and uses (see **Table 4-1**), even with the increased level of subterranean parking, would result in fewer construction and operational noise impacts under the Code-Compliant Alternative. Additionally, operational noise impacts under the Code-Compliant Alternative would be reduced as compared to the proposed Project, due to the reduction in Project development intensity and lack of a central park for event programming.

Like the proposed Project, construction of the Code-Compliant Alternative would be conducted on two sites (the 700 and 800 plazas). Due to the reduced development intensity proposed under this Alternative, the construction time required would be reduced as well. During Alternative construction activities, the highest noise levels would be generated when multiple pieces of construction equipment are being operated concurrently (including the overlapping of construction

at the 700 and 800 Plazas) at the Project Site boundary nearest noise sensitive receptors. Due to the proximity of off-site noise sensitive uses to the Site, the Code-Compliant Alternative's construction activities would temporarily expose these sensitive receptors to increased exterior noise levels, similar to the proposed Project. To reduce this impact, the Code-Compliant Alternative would implement Mitigation Measure MM-NOISE-1, which would require noise-attenuation techniques to be employed to ensure that noise remains as low as possible during construction at the nearby sensitive receptors. Due to the reduction in development intensity under the Code-Compliant Alternative, this Code-Compliant Alternative would result in a reduction in construction noise levels when compared with the proposed Project, and impacts would be less than significant with mitigation.

Operation of the Code-Compliant Alternative would be largely similar to the proposed Project, but at a smaller scale and without the provision of outdoor events, thereby reducing operational noise impacts under this Alternative in comparison with the proposed Project. Operational noise impacts under the Code-Compliant Alternative would be less than significant. No mitigation measures that would be implemented under the proposed Project would be required.

Similar to the Code-Compliant Alternative's noise impact reduction during construction and operation when compared with the proposed Project, this Code-Compliant Alternative would also reduce groundborne vibration impacts due to the decrease in development intensity and day-to-day activity during construction and operation. Given that the proposed Project would result in less than significant impacts due to the generation of groundborne vibrations, the Code-Compliant Alternative would similarly result in a less than significant impact.

Population and Housing

Under the Code-Compliant Alternative, construction activities would occur, and the Project Site would be developed with 124,950 square feet of residential uses, including 22 one-bedroom units, 70 two-unit units, 20 three-bedroom units, and 130,050 square feet of commercial uses, including a market, a fitness center, and restaurant, retail, or office uses.

Construction of the Code-Compliant Alternative, as with the proposed Project, would require construction workers who would be hired from a large, highly mobile regional construction work force already living and working within the Los Angeles metropolitan region that moves from project to project. Given the short duration of the work for each job, and the large size and mobility of the construction labor pool that can be drawn upon in the region, construction employees would not be expected to relocate their residences within this region or move from other regions into this region in response to the short-term Project-related construction employment opportunities.

As discussed above, the Code-Compliant Alternative would reduce development intensity when compared to the proposed Project, and therefore, would comprise a smaller percentage of SCAG's forecasted growth projections. With this reduction in intensity, the Code-Compliant Alternative would result in less than significant impacts on population and housing, and would be reduced in comparison with the proposed Project.

Public Services

Under the Code-Compliant Alternative, construction activities would occur, and the Project Site would be developed with 124,950 square feet of residential uses and 130,050 square feet of commercial uses. Due to the increase in provided subterranean vehicle parking, the Code-Compliant Alternative would require deeper depth of excavation as compared to the proposed Project. This comparative decrease in development intensity and uses (see **Table 4-1**), even with the increased level of subterranean parking, would result in fewer construction and operational public services impacts under the Code-Compliant Alternative.

Given that the Code-Compliant Alternative would reduce development intensity of the Project Site, thereby reducing the construction and operational populations on Site, demand for police and fire protection resources, as well as school resources, would also be reduced in comparison with the proposed Project. Impacts on public services under the Code-Compliant Alternative would be less than significant, and would be reduced as compared to the proposed Project.

Recreation

Under the Code-Compliant Alternative, construction activities would occur, and the Project Site would be developed with 124,950 square feet of residential uses and 130,050 square feet of commercial uses. Due to the increase in provided subterranean vehicle parking, the Code-Compliant Alternative would require deeper depth of excavation as compared to the proposed Project. The Code-Compliant Alternative would result in no central park, including the pavilion/art piece, community gatherings, etc. This comparative decrease in development intensity and uses (see **Table 4-1**), even with the increased level of subterranean parking, would result in fewer construction and operational recreation impacts under the Code-Compliant Alternative.

Regarding the Code-Compliant Alternative's potential to result in increased use of existing neighborhood and regional parks such that physical deterioration would occur, given the reduction in construction workforce and operational populations under this Code-Compliant Alternative, impacts on existing parks would be reduced as well, when compared with the proposed Project.

Under the Code-Compliant Alternative, no central park would be constructed. However, the Code-Compliant Alternative would include a total of 11,200 square feet of open space, that would comprise either a pedestrian plaza, a community garden, or other open space area. If the provided open space under this Code-Compliant Alternative would not provide sufficient area to meet the City's General Plan goal of four acres of parkland per thousand residents, the payment of a City-designated in-lieu fee would be required, as authorized by Quimby Act. Payment of these fees would offset parkland impacts by providing funding for new and/or renovated parks equipment and facilities. Therefore, the Code-Compliant Alternative would comply with the Open Space and Recreation Impact Fee and would satisfy the Quimby Act. With a combination of the provided open space and the payment of Open Space and Recreation Impact Fee, impacts would be less than significant, but would be greater than under the proposed Project.

Transportation

Under the Code-Compliant Alternative, construction activities would occur, and the Project Site would be developed with 124,950 square feet of residential uses and 130,050 square feet of

commercial uses. The Code-Compliant Alternative would result in no central park, including the pavilion/art piece, community gatherings, etc. This comparative decrease in development intensity and uses (see **Table 4-1**) would result in fewer construction and operational transportation impacts under the Code-Compliant Alternative.

For impacts related to conflicting with a program, ordinance, or policy, similar to the proposed Project, construction of the Code-Compliant Alternative would similarly require the incorporation of Mitigation Measure MM-TRA-1, a Construction Traffic Management Plan, to ensure that short-term construction-related traffic impacts would be reduced to less-than-significant levels. During operation, the Code-Compliant Alternative would, similar to the proposed Project, be consistent with the City's Circulation Element of the General Plan, SCAG 2016-2040 RTP/SCS, and Caltrans facilities. For impacts related to transit facilities, similar to conditions under the proposed Project, the Montebello Bus Lines bus service (Line 20 San Gabriel) on northbound San Gabriel Boulevard was recently suspended. Similar to the proposed Project, the Code-Compliant Alternative would implement Mitigation Measure MM-TRA-2 to reduce impacts to transit operations to less-than-significant levels. For impacts related to alternative transportation and hazardous conditions due to a geometric design feature or incompatible land use, impacts would be similar to the proposed Project and less than significant. Regarding emergency access, similar to the proposed Project, the Code-Compliant Alternative would be required to implement Mitigation Measure MM-TRA-1 to reduce impacts on construction to less than significant levels. Operation of the Code-Compliant Alternative related to emergency access would be less than significant, similar to the proposed Project.

Like with the proposed Project, the Code-Compliant Alternative would be of a mixed-use nature, and therefore, VMT would be measured using the VMT per service population metric, which combines residents and employees in its methodology. Furthermore, the Code-Compliant Alternative and proposed Project would both be on the same Project Site, which is located in a low VMT area. Therefore, the Code-Compliant Alternative is also exempt from further VMT analysis. Therefore, the Code-Compliant Alternative would result in reduced impacts to transportation compared with the proposed Project, and impacts would be less than significant.

Tribal Cultural Resources

The Code-Compliant Alternative would include increased excavation than the proposed Project due to the need for additional parking. During these ground disturbing activities, previously buried tribal cultural resources could be disturbed. The Code-Compliant Alternative would implement Mitigation Measures MM-CUL-1 through MM-CUL-5, similar to those under the proposed Project, which would provide for resource sensitivity training of construction workers and procedures to follow in the event of a discovery. With implementation of these mitigation measures, impacts to tribal cultural resources during construction under the Code-Compliant Alternative would be less than significant but increased compared to the proposed Project.

Operation of the Code-Compliant Alternative would not result in any further ground disturbing activities such as grading or excavation; and therefore, there would be no potential to encounter, alter, or disturb tribal cultural resources. Therefore, operational impacts to tribal cultural resources under the Code-Compliant Alternative would be similar to the proposed Project.

Utilities and Service Systems

Under the Code-Compliant Alternative, construction activities would occur, and the Project Site would be developed with 124,950 square feet of residential uses and 130,050 square feet of commercial uses. Impacts to utilities and service systems under the Code-Compliant Alternative would be similar to or reduced as compared to the proposed Project, due to the reduction in Project development intensity.

Water Supply

During construction activities associated with the future development within the Project Site, there would be a temporary, intermittent demand for water for such activities as soil watering for site preparation, fugitive dust control, concrete preparation, painting, cleanup, and other short-term activities. Similar to the proposed Project, construction-related water usage for this Code-Compliant Alternative is not expected to have an adverse impact on available water supplies or the existing water distribution system, and impacts would be less than significant and reduced compared to the proposed Project.

Furthermore, as under the proposed Project, operation of the Code-Compliant Alternative would require new connections from existing facilities, with coordination with SGCWD, operation of this Code-Compliant Alternative would not result in the relocation or construction of new or expanded water facilities, the construction or relocation of which would cause significant environmental effects. As the Code-Compliant Alternative would develop fewer uses at a lesser density on the Project Site as compared to the proposed Project, the Code-Compliant Alternative would require less water demand as compared to the Project. As the SGCWD has adequate resources to meet the water demands for the proposed Project, there would be adequate resources to meet the water demands for the Code-Compliant Alternative. Operational impacts on water infrastructure would be less than significant under the Code-Compliant Alternative and would be reduced as compared to the proposed Project.

Wastewater

There are existing water and sewer facilities surrounding the Site. However, as the Project Site is currently vacant, new water and sewer conveyance infrastructure would be necessary to serve the Code-Compliant Alternative. Similar to the proposed Project, all lines would be connected to the City's water lines to provide a public combined water system. As with the proposed Project, the JWPCP currently has the capacity to accommodate the wastewater from this Code-Compliant Alternative. Final design criteria and specifications for all wastewater facilities would comply with all applicable requirements and policies. Therefore, the Code-Compliant Alternative would not require or result in the relocation or construction of new or expanded wastewater treatment facilities, and impacts would be less than significant and would be reduced as compared to the proposed Project.

Stormwater Drainage

During construction, water would be used during the temporary construction phases of the Code-Compliant Alternative, similar to the proposed Project (e.g., for dust suppression). However, this water would be mechanically and precisely applied and would, in general, infiltrate or evaporate. As such, water used during construction would not exceed the capacity of existing stormwater

drainage systems surrounding the Site. In accordance with the requirements of the NPDES General Permit, this Code-Compliant Alternative would also implement a SWPPP that specifies BMPs to be implemented during construction to manage runoff flow volumes and water quality and would ensure that they do not exceed the capacity of existing stormwater drainage systems. With regard to operation, while impervious surfaces would be added to the Site, similar to the proposed Project, the stormwater treatment design included as part of the Code-Compliant Alternative would account for this increase in flow. In addition, all on-site drainage would be collected through infiltration dry wells distributed throughout the Site. Therefore, the Code-Compliant Alternative would not require or result in the relocation or construction of new or expanded stormwater drainage systems, and impacts would be less than significant.

Electric Power and Natural Gas

Regarding electric power and natural gas, the Project Site is located in a developed and urbanized area in the City that would be served by existing electrical power and natural gas services. As with the proposed Project, the Code-Compliant Alternative would be required to coordinate electrical infrastructure removals or relocations with SCE and comply with site-specific requirements set forth by SCE. Furthermore, this Code-Compliant Alternative would include installation of new natural gas connections to serve the Project Site in coordination with SoCalGas. Therefore, based on the above, the Code-Compliant Alternative would not require or result in the relocation or construction of new or expanded electric power or natural gas facilities, and impacts would be less than significant and would be reduced as compared to the proposed Project.

Telecommunications

Telecommunications for the Code-Compliant Alternative would be implemented in the same way as under the proposed Project. The Code-Compliant Alternative would require installation of new underground telecommunication lines (e.g., internet, telephone, and other services) to serve the new uses and building on site. Installation of new telecommunications infrastructure would be limited to on-site telecommunications distribution and minor off-site work associated with connections to the public system. As telecommunication providers already deliver their services to a large number of homes in in the vicinity of the Project Site, it is anticipated that existing telecommunications facilities would be sufficient to support the Alternative's needs for telecommunication services. As such, no upgrades to off-site telecommunications facilities are anticipated, and impacts would be less than significant and would be reduced as compared to the proposed Project.

Solid Waste

Regarding the Code-Compliant Alternative's impact on solid waste, similar to the proposed Project, this Code-Compliant Alternative would not generate significant waste from construction activities. Operation of the Code-Compliant Alternative would result in a reduced rate of solid waste generation, due to the decreased development intensity of the Code-Compliant Alternative in comparison to the proposed Project. Given that the proposed Project would be served by a landfill with sufficient capacity to accommodate waste disposal needs, the decreased amount of solid waste generated under the Code-Compliant Alternative would result in a less than significant impact. Furthermore, as under the proposed Project, the Code-Compliant Alternative would comply with federal, state, and local management and reduction statutes and regulations related to solid waste,

resulting in a less than significant impact. Therefore, solid waste impacts under the Code-Compliant Alternative would be reduced as compared to the proposed Project.

Relationship of the Code-Compliant Alternative to Project Objectives

The Code-Compliant Alternative consists of the circumstance under which the Code-Compliant Alternative would only be developed as permitted under Section 153.164 of the SGMC. The Code-Compliant Alternative would not meet all of the identified Project Objectives. The Code-Compliant Alternative would meet the objective to develop new, infill housing with a mix of residential dwelling types to serve a range of household sizes in proximity to major thoroughfares. The Code-Compliant Alternative would also meet the objectives to redevelop a vacant site with an economically viable and attractive mixed-use development that combines residential uses with community-serving retail, grocery, restaurant, and fitness center uses, as well as to provide sufficient square footage and visibility for high-quality main stream retail and restaurant uses, encourage pedestrian activity. Furthermore, the Code-Compliant Alternative would meet the objective to support multi-modal transit opportunities at or near the Project Site, including bus transit with links to Metro Rail, designated ridesharing pickup, and drop-off areas, and on-site bicycle facilities.

Because the Code-Compliant Alternative would not provide the same size central plaza and programmable events as under the proposed Project, the Code-Compliant Alternative would not meet the objectives related to creating a publicly accessible open space area and public art and entertainment options to the same extent as the proposed Project. While the Code-Compliant Alternative would still provide an open space area, it would not produce as accessible and multi-purpose of a central plaza and entertainment area as the proposed Project. Therefore, the Code-Compliant Alternative would not meet as many objectives as the proposed Project.

4.7.3 Alternative 3: Reduced Density Alternative

Description of the Alternative

The Reduced Density Alternative would reduce all residential and commercial uses on the Project Site by 50 percent. This Alternative would develop a total of 121 residential units, 4 live/work units, and 38,023 square feet of commercial uses, including restaurant uses, fitness uses, bakery uses, café uses, and market uses in two plazas, similar to the Project (700 and 800 plazas). The Reduced Density Alternative would have a maximum height of three stories or 45 feet (two stories of residential units atop the ground floor commercial uses). Under this Alternative, the central plaza would be developed, as well as additional open space areas subject to CUP approval, but the central park would not. Accordingly, the pavilion/art piece or community gathering/event space would not be developed. The central plaza would include a minimum of 100 square feet of adjoining open space area for each residential unit, for a total of 12,500 sf, sufficient to meet SGMC requirements. The Reduced Density Alternative would be required to provide 614 vehicle parking spaces pursuant to SGMC Section 153.164. One subterranean level for parking would be required for the Alternative, similar to under the proposed Project.

TABLE 4-2
PROPOSED DEVELOPMENT AND REDUCED DENSITY ALTERNATIVE DEVELOPMENT COMPARISON

	Proposed Project	Code-Compliant Alternative
Residential Component		
One-Bedroom	40 du	20 du
Two-Bedroom	151 du	75 du
Three-Bedroom	48 du	24 du
Four-Bedroom	4 du	2 du
Subtotal Residential Only Component	*243 du (413,238 sf)*	*121 du (206,619 sf)*
Live/Work Component		
Live/Work One-Bedroom	6 du	3 du
Live/Work Two-Bedroom	2 du	1 du
Subtotal Live/Work "Live"	*6,260 sf*	*3,130 sf*
Total Residential	**251 du (419,498 sf)**	**121 du (209,749 sf)**
Commercial Component		
Subtotal Commercial	*69,280 sf*	*34,640 sf*
Subtotal Live/Work "Work"	*6,766 sf*	*3,383 sf*
Total Commercial	*76,046 sf*	*38,023 sf*
Parking		
Required	918 spaces	614 spaces[a]
Provided	983 spaces	614 spaces
Open Space		
Central Park / Central Plaza (Publicly Accessible)	33,543 sf	
Secondary Plaza/Landscape (Publicly Accessible)	24,280 sf	--
Subtotal Publicly Accessible Open Space	*57,823 sf*	*12,500 sf*[b]

[a] The number of parking spaces required for the alternative is based on the required spaces/unit ratios provided in SGMC Section 153.164:
4 BR = 2 spaces/unit; 3 BR – 2 spaces/unit; 2 BR = 2 spaces/unit; 1 BR = 1 space/unit; Guest Parking = # of units / 3; Commercial = square feet / 100

[b] Provided open space assumes that each residential unit shall have a minimum 100 square feet of adjacent outdoor space pursuant to SGMC Section 153.164(c)(12)(a).

Overview of Comparative Impacts

Aesthetics

The Reduced Density Alternative would have reduced massing when compared to the proposed Project due to the reduction in building height (three stories compared to six stories under the Project), as well as the overall reduced development intensity. The Reduced Density Alternative would result in no central park and would not provide as large of a visual scenic corridor through the Project Site as under the proposed Project. However, the Reduced Density Alternative would still include 12,500 square feet of open space that would comprise either a pedestrian plaza,

community garden, or other open space area, which could provide a break in the Reduced Density Alternative's massing. Although the Reduced Density Alternative would have reduced massing and development intensity when compared to the proposed Project, the comparative reduction in visual impacts under this Alternative would be offset by the increased impact resulting from the removal of the view corridor. Therefore, impacts under the Reduced Density Alternative would be similar to the proposed Project, and the Reduced Density Alternative would result in less than significant impacts on scenic vistas.

Similar to the proposed Project, the Reduced Density Alternative would result in no impact to scenic resources within a State scenic highway. Furthermore, like the proposed Project, the Reduced Density Alternative would not conflict with applicable zoning and other regulations governing scenic quality as the Reduced Density Alternative would still be consistent with the General Plan. The Reduced Density Alternative, as with the proposed Project, would comply with the SGMC as it relates to lighting requirements and therefore, the Reduced Density Alternative would not create a substantial new source of substantial light or glare. Impacts would be less than that of the proposed Project due to the reduction in Project development.

Air Quality

Under the Reduced Density Alternative, construction activities would occur, and the Project Site would be developed with 209,749 square feet of residential uses and 38,023 square feet of commercial uses. This comparative decrease in development intensity and uses (see **Table 4-2**), would result in fewer construction and operational emissions under the Reduced Density Alternative. Additionally, operational impacts to air quality under the Reduced Density Alternative would be reduced as compared to the proposed Project, due to the reduction in Project development intensity and corresponding vehicle emissions.

Similar to the proposed Project, the Reduced Density Alternative would involve construction and operational activities resulting in air emissions; however, emissions would be reduced when compared to the proposed Project, due to the decrease in development intensity and uses. The Reduced Density Alternative would maintain consistency with the applicable SCAQMD AQMP and would implement Mitigation Measure MM-AQ-1 during construction, ensuring that emissions are below the SCAQMD thresholds of significant for criteria and precursor pollutants. Therefore, impacts would be less than significant with implementation of the mitigation measure, and impacts would be less than those of the proposed Project.

Regarding cumulatively considerable net increase of criteria pollutants for which the Project Site region is non-attainment, like the proposed Project, the Reduced Density Alternative would implement Mitigation Measure MM-AQ-1, which would avoid exceedance of applicable emissions thresholds for pollutants in federal/state non-attainment for the Project's Air Basin (i.e. O_3, PM10, and PM2.5) during construction. Furthermore, similar to the proposed Project, the Reduced Density Alternative would not exceed any applicable regional or local impact thresholds during operations. Therefore, while the Reduced Density Alternative would, similar to the proposed Project, be less than significant, impacts under the Reduced Density Alternative would be reduced as compared to those of the proposed Project.

Regarding health risks resulting from implementation of the Reduced Density Alternative, like the proposed Project, this Alternative would also have the potential to result in cancer risk from DPM emissions during construction. Similar to the proposed Project, implementation of Mitigation Measures MM-AQ-1 and MM-AQ-2 would be required to reduce this potential impact under this Reduced Density Alternative. With the implementation of these mitigation measures, health risk from the Reduced Density Alternative's construction activities would be less than significant and would be reduced as compared to the proposed Project. Additionally, operational emissions of pollutants that may impact health risk would be less than significant, like under the proposed Project, and would be reduced as compared to the proposed Project.

Lastly, development of the Reduced Density Alternative would not result in any other emissions, including odors, that would adversely affect a substantial number of people, as with the proposed Project. All impacts to air quality would be reduced under the Reduced Density Alternative when compared to the proposed Project.

Cultural Resources

Under the Reduced Density Alternative, ground-disturbing construction activities would occur, which could potentially impact subsurface cultural resources. The Reduced Density Alternative would provide 614 vehicle parking spaces compared to the proposed Project's 983 spaces. The Reduced Density Alternative would provide parking to the same level of subterranean as under the proposed Project.

There are no known historical resources on the Project Site. Therefore, the Reduced Density Alternative, similar to the proposed Project, would not result in an impact to known historical resources during construction. Furthermore, like the proposed Project, operation of the Reduced Density Alternative would not result in any additional ground disturbing activities such as grading or excavation; or impact the built environment outside of the Project Site, and therefore, there would be no potential to encounter, alter, or disturb historical resources. Therefore, the Reduced Density Alternative would result in similar impacts to historical resources as the proposed Project.

The Reduced Density Alternative, like the proposed Project, would require excavation during construction. As previously stated, the Reduced Density Alternative would result in similar depth of excavation as compared to the proposed Project. During these ground disturbing activities, previously buried prehistoric and/or historic-period archaeological resources could be disturbed. To reduce this potential impact, the Reduced Density Alternative would implement Mitigation Measures MM-CUL-1 through MM-CUL-5, similar to those under the proposed Project, which would provide for resource sensitivity training of construction workers and procedures to follow in the event of a discovery. With implementation of these mitigation measures, impacts to archaeological resources during construction under the Reduced Density Alternative would be less than significant and similar to the proposed Project. Furthermore, operation of the Reduced Density Alternative would not result in any additional ground disturbing activities such as grading or excavation; and therefore, there would be no potential to encounter, alter, or disturb archaeological resources.

Regarding the Reduced Density Alternative's potential to disturb human remains, like with the proposed Project, this Alternative would involve excavation activities, during which construction workers may encounter unanticipated human remains. Similar to the proposed Project, the Reduced Density Alternative would implement Mitigation Measure MM-CUL-6, which would ensure that the remains are treated in accordance with relevant state laws, and that impacts would be reduced to a less-than-significant level.

Impacts to historical resources would be similar under the Reduced Density Alternative when compared to the proposed Project. Impacts to archaeological resources and disturbance of human remains during construction of the Reduced Density Alternative would be similar compared to the proposed Project. Impacts to archaeological resources and disturbance of human remains during operation of the Reduced Density Alternative would be similar under the Reduced Density Alternative when compared to the proposed Project.

Energy

Under the Reduced Density Alternative, construction activities would occur, and the Project Site would be developed with mixed uses with an overall reduced development intensity than the proposed Project (see **Table 4-2**). This would result in decreased construction and operational energy demand under the Reduced Density Alternative. Therefore, impacts to energy under the Reduced Density Alternative would be reduced as compared to the proposed Project.

Similar to the proposed Project, the Reduced Density Alternative would result in less than significant impacts on the wasteful, inefficient, or unnecessary consumption of energy resources during construction and operation, due to the reduction in development intensity and uses when compared with the proposed Project. Furthermore, the Reduced Density Alternative would also not conflict or construct a state or local plan for renewable energy or energy efficiency and would result in less than significant impacts. Therefore, all impacts to energy would be reduced under the Reduced Density Alternative when compared to the proposed Project.

Geology and Soils

Under the Reduced Density Alternative, construction activities would occur, and the Project Site would be developed with mixed uses and 614 vehicle parking spaces, which would be the same one level of subterranean parking as compared to the Project.

Similar to the proposed Project, the Reduced Density Alternative would not be located within a designated Alquist-Priolo Earthquake Fault Zone, and no active faults are mapped projecting through the Site. The Project Site is located more than 500 feet outside the Fault Rupture Study Area, and therefore, impacts under the Reduced Density Alternative due to ground rupture from earthquake fault rupture would be less than significant, like the proposed Project. Regarding impacts due to strong seismic shaking, design and construction would be required to be in accordance with the current CBC requirements, which are proven to adequately address potential impacts related to ground shaking. Therefore, similar to the proposed Project, impacts related to strong seismic shaking would be less than significant under this Reduced Density Alternative. Furthermore, as the Reduced Density Alternative would be located within the same geographic setting as the proposed Project, development would result in less-than-significant impacts on risks

to seismic-related ground failure, liquefaction, or landslides, and impacts would be similar to those under the proposed Project.

Regarding the potential for the Reduced Density Alternative to result in substantial soil erosion or the loss of topsoil, like with the proposed Project, this Alternative would conduct activities in accordance with an approved SWPPP and BMPs, to prevent erosion and stormwater runoff. During operations, the Reduced Density Alternative would include LID BMPs to treat stormwater runoff, thereby reducing the potential for erosion. Therefore, the Reduced Density Alternative would result in less than significant impacts on soil erosion or loss of topsoil, and impacts would be similar to those under the proposed Project.

Given the Reduced Density Alternative would be located within the same geographic setting and would comply with all applicable guidelines, regulations, and recommendations, as the proposed Project, development would result in less-than-significant impacts on risks related to unstable or expansive soils, or soils incapable of adequately supporting the use of septic tanks or other waste water disposal systems. Impacts would be similar to those under the proposed Project.

Regarding the Reduced Density Alternative's potential to impact paleontological resources or a unique site, similar to the proposed Project, this Reduced Density Alternative would implement Mitigation Measures MM-GEO-1, 2, 3, and 4, which would require retention of a qualified paleontologist to oversee implementation of paleontological resources mitigation, construction worker paleontological resources sensitivity training, paleontological resources monitoring, and procedures to follow in the event of paleontological resources discoveries. As the Reduced Density Alternative would excavate to a similar extent as under the proposed Project, with implementation of these mitigation measures, impacts to paleontological resources during construction would be less than significant and decreased compared to the proposed Project. Operation of the Reduced Density Alternative would not result in any further ground disturbing activities such as grading or excavation; and therefore, there would be no potential to encounter, alter, or disturb paleontological resources. Therefore, operational impacts on paleontological resources under this Reduced Density Alternative would be similar to the proposed Project and less than significant.

Greenhouse Gas Emissions

Under the Reduced Density Alternative, construction activities would occur, and the Project Site would be developed with mixed uses at a lower development intensity than the proposed Project (see **Table 4-2**). Given that the Reduced Density Alternative would have a reduced development intensity, construction and operational activities would result in fewer GHG emissions when compared to the proposed Project. Therefore, the Reduced Density Alternative would not generate GHG emissions that would have a significant impact on the environment, and would not conflict with any applicable plan, policy, regulation, or recommendation of an agency adopted for the purpose of reducing the emissions of GHG. Therefore, impacts related to GHG emissions would be less than significant under the Reduced Density Alternative and would be less than those under the proposed Project.

Hazards and Hazardous Materials

Under the Reduced Density Alternative, construction activities would occur, and the Project Site would be developed with mixed uses as described above. Like with the proposed Project, during the construction phase, construction equipment and materials may include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, under the Reduced Density Alternative. The use of these hazardous materials could result in inadvertent release, adversely affecting individuals nearby. Similar to the proposed Project, the Reduced Density Alternative would be required to prepare a SWPPP for construction activities in compliance with the NPDES General Construction Permit requirements. The SWPPP would list the hazardous materials (including petroleum products) proposed for use during construction; describe spill prevention measures, equipment inspections, equipment and fuel storage; protocols for responding immediately to spills; and describe BMPs for controlling site runoff.

Furthermore, the previous uses on the Project Site included USTs for fuel (gasoline and diesel) storage. Other hazardous materials commonly associated with nurseries include fertilizers, herbicides, and pesticides. Like the proposed Project, the Reduced Density Alternative would implement Mitigation Measures MM-HAZ-1 through MM-HAZ-3, which would ensure removal of contaminated soils and ensure that workers are provided appropriate training in the recognition and response to encountering hazardous materials, and that a plan is in place that provides procedures for the testing, handling, and disposal of hazardous materials. With implementation of these mitigation measures, construction and operation of the Reduced Density Alternative would result in similar, less than significant impacts, to hazards and hazardous materials as under the proposed Project.

The Reduced Density Alternative would result in similar less-than-significant impacts to the emissions or handling of hazardous materials within one-quarter mile of an existing or proposed school, interference with an adopted emergency response plan, and wildland fire risks. There would be no impacts related to airport land use plans or public airports or private airstrips. Therefore, impacts would be similar to those under the proposed Project.

Hydrology and Water Quality

Under the Reduced Density Alternative, construction activities would occur, and the Project Site would be developed with mixed uses at a lower development intensity than the proposed Project (see **Table 4-2**). The Reduced Density Alternative would result in no central park, including the pavilion/art piece, community gatherings, etc. However, the Reduced Density Alternative would include a total of 12,500 square feet of publicly accessible open space, that would comprise either a pedestrian plaza, a community garden, or other open space area.

As with the proposed Project, water would be used during the temporary construction phases of the Reduced Density Alternative (e.g., for dust suppression). However, this water would be mechanically and precisely applied and would, in general, infiltrate or evaporate. As such, water used during construction would not exceed the capacity of existing stormwater drainage systems surrounding the Project Site. In accordance with the requirements of the NPDES General Permit, this Alternative would also implement a SWPPP that specifies BMPs to be implemented during

construction to manage runoff flow volumes and water quality and would ensure that they do not exceed the capacity of existing stormwater drainage systems. With regard to operation, impervious surfaces would be added to the Project Site, similar to the proposed Project, but the reduction in provided open space under the Reduced Density Alternative, as compared to the Project, would result in increased impervious surfaces. However, the stormwater treatment design included as part of the Reduced Density Alternative would account for this increase in flow. In addition, all on-site drainage would be collected through infiltration dry wells distributed throughout the Project Site. Therefore, the Reduced Density Alternative would not violate any water quality standards, waste discharge requirements, substantially degrade water quality, decrease groundwater supplies, interfere with groundwater recharge, increase the amount of surface runoff resulting in flooding, create runoff water in exceedance of the capacity of stormwater drainage systems, or provide substantial additional sources of polluted runoff, and impacts would be less than significant, but slightly greater than under the proposed Project.

The proposed Project, as well as the Reduced Density Alternative, would increase the impervious area on the Project Site compared to existing conditions through the introduction of buildings, parking areas, walkways, and other hardscape elements. While impervious surfaces would be added to the Project Site, the stormwater treatment design included as part of the proposed Project, and that would also be required under the Reduced Density Alternative, accounts for this increase in flow. Development of the Reduced Density Alternative would also result in a change to the existing on-site drainage pattern. Under existing conditions, the water would flow westerly towards S. San Gabriel Boulevard and E. Grand Avenue. However, under the Reduced Density Alternative, as with the proposed Project, water would also flow easterly towards Gladys Avenue as well as S. San Gabriel Boulevard and E. Grand Avenue. Therefore, similar to the proposed Project, new parkway drains would be installed as part of the Alternative development layout, which would ensure stormwater runoff is routed properly. All on-site drainage would be collected in a proposed private storm drain system and treated before discharging to the public street. The stormwater treatment design and new parkway drains that would be implemented as part of the Reduced Density Alternative would minimize the potential for both on- and off-site erosion and siltation during operation of the Reduced Density Alternative.

Regarding flood flows and risks, the Project Site is mapped by the Federal Emergency Management Agency (FEMA) as lying within a Zone X area, which is an "Area of Minimal Flood Hazard" and is not located within a Special Flood Hazard Area. The Project Site is also not located within a potential inundation area, as the Rio Wash is located 800 feet east of the Project Site. Therefore, similar to the proposed Project, the Reduced Density Alternative would not impede or redirect flood flows, risk release of pollutants due to project inundation within flood hazard, tsunami, or seiche zones, and impacts would be less than significant.

The Project Site falls within the jurisdiction of water quality plans with related regulations and permitting requirements that assure that development projects are in compliance with clean water policies. Most notably, the Project Site is under the jurisdiction of LARWQB (Region 4) Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties and the Rio Hondo/San Gabriel River Watershed EWMP; and the LARWQCB is also given authority to issue waste discharge requirements, enforce actions against stormwater discharge violators, and monitor water

quality. Similar to the proposed Project, the Reduced Density Alternative would implement the necessary BMPs to support the applicable plans; and the Alternative would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be similar to the proposed Project and would be less than significant.

Land Use and Planning

Like with the proposed Project, the Reduced Density Alternative would be consistent with the goals and policies of SCAG's RTP/SCS, the City's General Plan, and the SGMC. With implementation of the PD and Zone Map Amendment that is part of the Project approvals being sought, the Reduced Density Alternative would be consistent with the City's General Plan and SGMC. Therefore, as the Reduced Density Alternative would not conflict with regional plans, policies, or regulations that have been adopted for the purpose of avoiding or mitigating an environmental impact, a less than significant impact would occur, similar to the proposed Project.

Furthermore, as under the proposed Project, the Reduced Density Alternative would be situated mid-block between the 700 Plaza and the 800 plazas, and would facilitate movement internally within the Project Site and from the larger community to the east and west. The Alternative would be designed to be well-integrated into the larger established community and would not present a barrier to physical access. Therefore, the Reduced Density Alternative would not divide an established community. Impacts would be similar to the proposed Project and would be less than significant.

Noise

Under the Reduced Density Alternative, construction activities would occur, and the Project Site would be developed with 209,749 square feet of residential uses and 38,023 square feet of commercial uses. The Reduced Density Alternative would result in no central park, including the pavilion/art piece, community gatherings, etc. Despite the decrease in provided vehicle parking, the Reduced Density Alternative would require a similar depth of excavation as compared to the proposed Project. The overall comparative decrease in development intensity and uses (see **Table 4-2**) would result in fewer construction and operational noise impacts under the Reduced Density Alternative. Additionally, operational noise impacts under the Reduced Density Alternative would be reduced as compared to the proposed Project, due to the reduction in Project development intensity and lack of a central park for event programming.

Like with the proposed Project, construction of the Reduced Density Alternative would be conducted on two sites (the 700 and 800 plazas). Due to the reduced development intensity proposed under this Reduced Density Alternative, the construction time required would be reduced as well. During this Reduced Density Alternative construction activities, the highest noise levels would be generated when multiple pieces of construction equipment are being operated concurrently (including the overlapping of construction at the 700 and 800 plazas) at the Project Site boundary nearest noise sensitive receptors. Due to the proximity of off-site noise sensitive uses to the Site, the Reduced Density Alternative's construction activities would temporarily expose these sensitive receptors to increased exterior noise levels, similar to the proposed Project. To reduce this impact, the Reduced Density Alternative would implement Mitigation Measure MM-NOISE-1, which would require noise-attenuation techniques to be employed to ensure that noise

remains as low as possible during construction at the nearby sensitive receptors. Due to the reduction in development intensity, this Reduced Density Alternative would result in a reduction in construction noise levels when compared with the proposed Project, and impacts would be less than significant with mitigation.

Operation of the Reduced Density Alternative would be less than those under the proposed Project due to the smaller scale and without the provision of outdoor events, thereby reducing operational noise impacts under this Alternative in comparison with the proposed Project. Operational noise impacts under the Reduced Density Alternative would be less than significant. No mitigation measures that would be implemented under the proposed Project would be required.

Similar to the Reduced Density Alternative's noise impact reduction during construction and operation when compared with the proposed Project, this Reduced Density Alternative would also reduce groundborne vibration impacts due to the decrease in development intensity and day-to-day activity during construction and operation. The Reduced Density Alternative would also result in a less than significant impact from groundborne vibration.

Population and Housing

Under the Reduced Density Alternative, construction activities would occur, and the Project Site would be developed with 209,749 square feet of residential uses, including 20 one-bedroom units, 75 two-bedroom units, 24 three-bedroom units, 2 four-bedroom units, 4 live/work units, and 38,023 square feet of commercial uses, including a market, a fitness center, and restaurant, retail, or office uses.

Construction of the Reduced Density Alternative, as with the proposed Project, would require construction workers who would be hired from a large, highly mobile regional construction work force already living and working within the Los Angeles metropolitan region that moves from project to project. Given the short duration of the work for each job, and the large size and mobility of the construction labor pool that can be drawn upon in the region, construction employees would not be expected to relocate their residences within this region or move from other regions into this region in response to the short-term Project-related construction employment opportunities.

As discussed above, the Reduced Density Alternative would reduce development intensity when compared to the proposed Project, and therefore, would comprise a smaller percentage of SCAG's forecasted growth projections. With this reduction in intensity, the Reduced Density Alternative would result in less than significant impacts on population and housing, and would be reduced in comparison with the proposed Project.

Public Services

Under the Reduced Density Alternative, construction activities would occur, and the Project Site would be developed with 209,749 square feet of residential uses and 38,023 square feet of commercial uses. This comparative decrease in development intensity and uses (see **Table 4-2**) would result in fewer construction and operational public services impacts under the Reduced Density Alternative.

Given that the Reduced Density Alternative would reduce development intensity of the Project Site, thereby reducing the construction and operational populations on Site, demand for police and fire protection resources, as well as school resources, would also be reduced in comparison with the proposed Project. Impacts on public services under the Reduced Density Alternative would be less than significant, and would be reduced as compared to the proposed Project.

Recreation

Under the Reduced Density Alternative, construction activities would occur, and the Project Site would be developed with 209,749 square feet of residential uses and 38,023 square feet of commercial uses. The Reduced Density Alternative would result in no central park, including the pavilion/art piece, community gatherings, etc. This comparative decrease in development intensity and uses (see **Table 4-2**) would result in fewer construction and operational recreation impacts under the Reduced Density Alternative.

Regarding the Reduced Density Alternative's potential to result in increased use of existing neighborhood and regional parks such that physical deterioration would occur, given the reduction in construction workforce and operational populations under this Reduced Density Alternative, impacts on existing parks would be reduced as well, when compared with the proposed Project.

Under the Reduced Density Alternative, no central park would be constructed. However, the Reduced Density Alternative would include a total of 12,500 square feet of open space, that would comprise either a pedestrian plaza, a community garden, or other open space area. If the provided open space under this Reduced Density Alternative would not provide sufficient area to meet the City's General Plan goal of four acres of parkland per thousand residents, the payment of a City-designated in-lieu fee would be required, as authorized by Quimby Act. Payment of these fees would offset parkland impacts by providing funding for new and/or renovated parks equipment and facilities. Therefore, the Reduced Density Alternative would comply with the Open Space and Recreation Impact Fee and would satisfy the Quimby Act. With a combination of the provided open space and the payment of Open Space and Recreation Impact Fee, impacts would be less than significant, but would be greater than under the proposed Project.

Transportation

Under the Reduced Density Alternative, construction activities would occur, and the Project Site would be developed with 209,749 square feet of residential uses and 38,023 square feet of commercial uses. The Reduced Density Alternative would result in no central park, including the pavilion/art piece, community gatherings, etc. This comparative decrease in development intensity and uses (see **Table 4-2**) would result in fewer construction and operational transportation impacts under the Reduced Density Alternative.

For impacts related to conflicting with a program, ordinance, or policy, similar to the proposed Project, construction of the Reduced Density Alternative would similarly require the incorporation of Mitigation Measure MM-TRA-1, a Construction Traffic Management Plan, to ensure that short-term construction-related traffic impacts would be reduced to less-than-significant levels. During operation, the Reduced Density Alternative would, similar to the proposed Project, be consistent with the City's Circulation Element of the General Plan, SCAG 2016-2040 RTP/SCS, and Caltrans

facilities. For impacts related to transit facilities, similar to conditions under the proposed Project, the Montebello Bus Lines bus service (Line 20 San Gabriel) on northbound San Gabriel Boulevard was recently suspended. Similar to the proposed Project, the Reduced Density Alternative would implement Mitigation Measure MM-TRA-2 to reduce impacts to transit operations to less-than-significant levels. For impacts related to alternative transportation and hazardous conditions due to a geometric design feature or incompatible land use, impacts would be similar to the proposed Project and less than significant. Regarding emergency access, similar to the Project, the Reduced Density Alternative would be required to implement Mitigation Measure MM-TRA-1 to reduce impacts on construction to less than significant levels. Operation of the Alternative related to emergency access would be less than significant and similar to the proposed Project.

Like with the proposed Project, the Reduced Density Alternative would be of a mixed-use nature, and therefore, VMT would be measured using the VMT per service population metric, which combines residents and employees in its methodology. Furthermore, the Reduced Density Alternative and Project would both be on the same Project Site, which is located in a low VMT area. Therefore, the Alternative is also exempt from further VMT analysis. The Reduced Density Alternative would result in reduced impacts to transportation compared with the proposed Project, and impacts would be less than significant.

Tribal Cultural Resources

The Reduced Density Alternative would include similar excavation as the proposed Project despite the need for reduced parking. During these ground disturbing activities, previously buried tribal cultural resources could be disturbed. The Reduced Density Alternative would implement Mitigation Measures MM-CUL-1 through MM-CUL-5, similar to those under the Project, which would provide for resource sensitivity training of construction workers and procedures to follow in the event of a discovery. With implementation of these mitigation measures, impacts to tribal cultural resources during construction under the Reduced Density Alternative would be less than significant and similar compared to the proposed Project.

Operation of the Reduced Density Alternative would not result in any further ground disturbing activities such as grading or excavation; and therefore, there would be no potential to encounter, alter, or disturb tribal cultural resources. Therefore, operational impacts to tribal cultural resources under the Reduced Density Alternative would be similar to the proposed Project.

Utilities and Service Systems

Under the Reduced Density Alternative, construction activities would occur, and the Project Site would be developed with 209,749 square feet of residential uses and 38,023 square feet of commercial uses. Impacts to utilities and service systems under the Reduced Density Alternative would be similar to or reduced as compared to the proposed Project, due to the reduction in Project development intensity.

Water Supply

During construction activities associated with the future development within the Project Site, there would be a temporary, intermittent demand for water for such activities as soil watering for site preparation, fugitive dust control, concrete preparation, painting, cleanup, and other short-term

activities. Similar to the proposed Project, construction-related water usage for this Alternative is not expected to have an adverse impact on available water supplies or the existing water distribution system, and impacts would be less than significant and reduced compared to the proposed Project.

Furthermore, as under the proposed Project, operation of the Reduced Density Alternative would require new connections from existing facilities, with coordination with SGCWD, operation of this Reduced Density Alternative would not result in the relocation or construction of new or expanded water facilities, the construction or relocation of which would cause significant environmental effects. As the Reduced Density Alternative would develop fewer uses at a lesser density on the Project Site as compared to the Project, the Reduced Density Alternative would require less water demand as compared to the Project. As the SGCWD has adequate resources to meet the water demands for the Project, there would be adequate resources to meet the water demands for the Reduced Density Alternative. Operational impacts on water infrastructure would be less than significant under the Reduced Density Alternative and would be reduced as compared to the proposed Project.

Wastewater

There are existing water and sewer facilities surrounding the Site. However, as the Project Site is currently vacant, new water and sewer conveyance infrastructure would be necessary to serve the Reduced Density Alternative. Similar to the Project, all lines would be connected to the City's water lines to provide a public combined water system. As with the proposed Project, the JWPCP currently has the capacity to accommodate the wastewater from this Alternative. Final design criteria and specifications for all wastewater facilities would comply with all applicable requirements and policies. Therefore, the Reduced Density Alternative would not require or result in the relocation or construction of new or expanded wastewater treatment facilities, and impacts would be less than significant and would be reduced as compared to the proposed Project.

Stormwater Drainage

During construction, water would be used during the temporary construction phases of the Reduced Density Alternative, similar to the proposed Project (e.g., for dust suppression). However, this water would be mechanically and precisely applied and would, in general, infiltrate or evaporate. As such, water used during construction would not exceed the capacity of existing stormwater drainage systems surrounding the Site. In accordance with the requirements of the NPDES General Permit, this Alternative would also implement a SWPPP that specifies BMPs to be implemented during construction to manage runoff flow volumes and water quality and would ensure that they do not exceed the capacity of existing stormwater drainage systems. With regard to operation, while impervious surfaces would be added to the Site, similar to the proposed Project, the stormwater treatment design included as part of the Reduced Density Alternative would account for this increase in flow. In addition, all on-site drainage would be collected through infiltration dry wells distributed throughout the Site. Therefore, the Reduced Density Alternative would not require or result in the relocation or construction of new or expanded stormwater drainage systems, and impacts would be less than significant.

Electric Power and Natural Gas

Regarding electric power and natural gas, the Project Site is located in a developed and urbanized area in the City that would be served by existing electrical power and natural gas services. As with the proposed Project, the Reduced Density Alternative would be required to coordinate electrical infrastructure removals or relocations with SCE and comply with site-specific requirements set forth by SCE. Furthermore, this Alternative would include installation of new natural gas connections to serve the Project Site in coordination with SoCalGas. Therefore, based on the above, the Reduced Density Alternative would not require or result in the relocation or construction of new or expanded electric power or natural gas facilities, and impacts would be less than significant and would be reduced as compared to the proposed Project.

Telecommunications

Telecommunications for the Reduced Density Alternative would be implemented in the same way as under the proposed Project. The Reduced Density Alternative would require installation of new underground telecommunication lines (e.g., internet, telephone, and other services) to serve the new uses and building on site. Installation of new telecommunications infrastructure would be limited to on-site telecommunications distribution and minor off-site work associated with connections to the public system. As telecommunication providers already deliver their services to a large number of homes in in the vicinity of the Project Site, it is anticipated that existing telecommunications facilities would be sufficient to support the Alternative's needs for telecommunication services. As such, no upgrades to off-site telecommunications facilities are anticipated, and impacts would be less than significant and would be reduced as compared to the proposed Project.

Solid Waste

Regarding the Reduced Density Alternative's impact on solid waste, similar to the proposed Project, this Reduced Density Alternative would not generate significant waste from construction activities. Operation of the Reduced Density Alternative would result in a reduced rate of solid waste generation, due to the decreased development intensity of the Reduced Density Alternative in comparison to the proposed Project. Given that the proposed Project would be served by a landfill with sufficient capacity to accommodate waste disposal needs, the decreased amount of solid waste generated under the Reduced Density Alternative would result in a less than significant impact. Furthermore, as under the proposed Project, the Reduced Density Alternative would comply with federal, state, and local management and reduction statutes and regulations related to solid waste, resulting in a less than significant impact. Therefore, solid waste impacts under the Reduced Density Alternative would be reduced as compared to the proposed Project.

Relationship of the Reduced Density Alternative to Project Objectives

The Reduced Density Alternative would reduce all residential and commercial uses on the Project Site by 50 percent. The Reduced Density Alternative would not meet all of the identified Project Objectives. The Reduced Density Alternative would meet the objectives to redevelop a vacant site with an economically viable and attractive mixed-use development that combines residential uses with community-serving retail, grocery, restaurant, and fitness center uses, as well as to provide sufficient square footage and visibility for high-quality main stream retail and restaurant uses,

encourage pedestrian activity. Furthermore, the Reduced Density Alternative would meet the objective to support multi-modal transit opportunities at or near the Project Site, including bus transit with links to Metro Rail, designated ridesharing pickup, and drop-off areas, and on-site bicycle facilities.

Due to the reduction in residential and commercial uses on the Project Site, the Reduced Density Alternative would not meet the objective to develop new, infill housing with a mix of residential dwelling types to serve a range of household sizes in proximity to major thoroughfares to the same extent as under the proposed Project. Because the Reduced Density Alternative would not provide the same size central plaza and programmable events as under the proposed Project, the Reduced Density Alternative would not meet the objectives related to creating a publicly accessible open space area and public art and entertainment options to the same extent as the proposed Project. While the Reduced Density Alternative would still provide an open space area, it would not produce as accessible and multi-purpose of a central plaza and entertainment area as the proposed Project. Therefore, the Reduced Density Alternative would not meet as many objectives as the proposed Project.

4.7.4 Alternative 4: Reduced Commercial Alternative

Description of the Alternative

The Reduced Commercial Alternative would develop the same amount of residential uses as under the proposed Project, but would remove the bakery and café from the Project Site. The Reduced Commercial Alternative would still develop 243 residential units, 8 live/work units, and 63,243 square feet of commercial uses in two plazas, similar to the Project (700 and 800 plazas). As there would only be a reduction in the commercial uses, the Reduced Commercial Alternative be the same height as the proposed Project. The Reduced Commercial Alternative would still develop the same central park area and plaza between the two buildings as under the proposed Project. With the removal of the bakery and café, the Alternative would be required to provide 857 vehicle parking spaces. Based on the amount of spaces required for the bakery and café pursuant to SGMC Section 153.164, the Alternative would provide 922 spaces and would therefore still require the one subterranean level of parking, similar to the proposed Project.

TABLE 4-3
PROPOSED DEVELOPMENT AND REDUCED COMMERCIAL ALTERNATIVE DEVELOPMENT COMPARISON

	Proposed Project	Reduced Commercial Alternative
Residential Component		
One-Bedroom	40 du	40 du
Two-Bedroom	151 du	151 du
Three-Bedroom	48 du	48 du
Four-Bedroom	4 du	4 du
Subtotal Residential Only Component	*243 du (413,238 sf)*	*243 du (413,238 sf)*

	Proposed Project	Reduced Commercial Alternative
Live/Work Component		
Live/Work One-Bedroom	6 du	6 du
Live/Work Two-Bedroom	2 du	2 du
Subtotal Live/Work "Live"	*6,260 sf*	*6,260 sf*
Total Residential	**251 du (419,498 sf)**	**251 du (419,498 sf)**
Commercial Component		
Subtotal Commercial	*69,280 sf*	*63,243 sf*
Subtotal Live/Work "Work"	*6,766 sf*	*6,766 sf*
Total Commercial	*76,046 sf*	*70,009 sf*
Parking		
Required	918 spaces	857 spaces[a]
Provided	983 spaces	922 spaces
Open Space		
Central Park / Central Plaza (Publicly Accessible)	33,543 sf	33,543 sf
Secondary Plaza/Landscape (Publicly Accessible)	24,280 sf	24,280 sf
Subtotal Publicly Accessible Open Space	*57,823 sf*	*57,823 sf*

[a] The number of parking spaces required and provided for the alternative is based on the required spaces/unit ratios provided in SGMC Section 153.164 for the bakery and café, subtracted from the proposed Project's totals:
4 BR = 2 spaces/unit; 3 BR – 2 spaces/unit; 2 BR = 2 spaces/unit; 1 BR = 1 space/unit; Guest Parking = # of units / 3; Commercial = square feet / 100

Overview of Comparative Impacts

Aesthetics

The Reduced Commercial Alternative would have reduced massing when compared to the proposed Project due to the overall reduced development intensity. The Reduced Commercial Alternative would result in a central park and would provide as large of a visual scenic corridor through the Project Site as under the proposed Project. Therefore, impacts under the Reduced Commercial Alternative would be similar to the proposed Project, and the Reduced Commercial Alternative would result in less than significant impacts on scenic vistas.

Similar to the proposed Project, the Reduced Commercial Alternative would result in no impact to scenic resources within a State scenic highway. Furthermore, like the proposed Project, the Reduced Commercial Alternative would not conflict with applicable zoning and other regulations governing scenic quality as the Reduced Commercial Alternative would still be consistent with the General Plan. Therefore, impacts related to conflicts with the applicable zoning and other regulations governing scenic quality would be reduced as compared to the Project. The Reduced Commercial Alternative, as with the proposed Project, would comply with the SGMC as it relates to lighting requirements and therefore, the Reduced Commercial Alternative would not create a

substantial new source of substantial light or glare. Impacts would be less than that of the proposed Project due to the reduction in Project development.

Air Quality

Under the Reduced Commercial Alternative, construction activities would occur, and the Project Site would be developed with 419,498 square feet of residential uses and 70,009 square feet of commercial uses. This comparative decrease in development intensity and uses (see **Table 4-3**) would result in reduced construction and operational emissions under the Reduced Commercial Alternative. Additionally, operational impacts to air quality under the Reduced Commercial Alternative would be reduced as compared to the proposed Project, due to the reduction in Project development intensity and corresponding vehicle emissions.

Similar to the proposed Project, the Reduced Commercial Alternative would involve construction and operational activities resulting in air emissions; however, emissions would be reduced when compared to the proposed Project, due to the decrease in development intensity and uses. The Reduced Commercial Alternative would maintain consistency with the applicable SCAQMD AQMP and would implement Mitigation Measure MM-AQ-1 during construction, ensuring that emissions are below the SCAQMD thresholds of significant for criteria and precursor pollutants. Therefore, impacts would be less than significant with implementation of the mitigation measure, and impacts would be less than those of the proposed Project.

Regarding cumulatively considerable net increase of criteria pollutants for which the Project Site region is non-attainment, like the proposed Project, the Reduced Commercial Alternative would implement Mitigation Measure MM-AQ-1, which would avoid exceedance of applicable emissions thresholds for pollutants in federal/state non-attainment for the Project's Air Basin (i.e. O_3, PM10, and PM2.5) during construction. Furthermore, similar to the proposed Project, the Reduced Commercial Alternative would not exceed any applicable regional or local impact thresholds during operations. Therefore, while the Alternative would, similar to the proposed Project, be less than significant, impacts under the Reduced Commercial Alternative would be reduced as compared to those of the proposed Project.

Regarding health risks resulting from implementation of the Reduced Commercial Alternative, like the proposed Project, this Alternative would also have the potential to result in cancer risk from DPM emissions during construction. Similar to the Project, implementation of Mitigation Measures MM-AQ-1 and MM-AQ-2 would be required to reduce this potential impact under this Reduced Commercial Alternative. With the implementation of these mitigation measures, health risk from the Reduced Commercial Alternative's construction activities would be less than significant and would be reduced as compared to the proposed Project. Additionally, operational emissions of pollutants that may impact health risk would be less than significant, like under the proposed Project, and would be reduced as compared to the proposed Project.

Lastly, development of the Reduced Commercial Alternative would not result in any other emissions, including odors, that would adversely affect a substantial number of people, as with the proposed Project. All impacts to air quality would be reduced under the Reduced Commercial Alternative when compared to the proposed Project.

Cultural Resources

Under the Reduced Commercial Alternative, ground-disturbing construction activities would occur, which could potentially impact subsurface cultural resources. The Reduced Commercial Alternative would provide 922 vehicle parking spaces compared to the proposed Project's 983 spaces. The Reduced Commercial Alternative would provide parking to the same level of subterranean excavation as needed as under the proposed Project.

There are no known historical resources on the Project Site. Therefore, the Reduced Commercial Alternative, similar to the proposed Project, would not result in an impact to known historical resources during construction. Furthermore, like the proposed Project, operation of the Reduced Commercial Alternative would not result in any additional ground disturbing activities such as grading or excavation; or impact the built environment outside of the Project Site, and therefore, there would be no potential to encounter, alter, or disturb historical resources. Therefore, the Reduced Commercial Alternative would result in similar impacts to historical resources as the proposed Project.

The Reduced Commercial Alternative, like the proposed Project, would require excavation during construction. As previously stated, the Reduced Commercial Alternative would result in similar depth of excavation as compared to the proposed Project. During these ground disturbing activities, previously buried prehistoric and/or historic-period archaeological resources could be disturbed. To reduce this potential impact, the Reduced Commercial Alternative would implement Mitigation Measures MM-CUL-1 through MM-CUL-5, similar to those under the proposed Project, which would provide for resource sensitivity training of construction workers and procedures to follow in the event of a discovery. With implementation of these mitigation measures, impacts to archaeological resources during construction under the Reduced Commercial Alternative would be less than significant and similar compared to the proposed Project. Furthermore, operation of the Reduced Commercial Alternative would not result in any additional ground disturbing activities such as grading or excavation; and therefore, there would be no potential to encounter, alter, or disturb archaeological resources.

Regarding the Reduced Commercial Alternative's potential to disturb human remains, like with the proposed Project, this Alternative would involve excavation activities, during which construction workers may encounter unanticipated human remains. Similar to the proposed Project, the Reduced Commercial Alternative would implement Mitigation Measure MM-CUL-6, which would ensure that the remains are treated in accordance with relevant state laws, and that impacts would be reduced to a less-than-significant level.

Impacts to historical resources would be similar under the Reduced Commercial Alternative when compared to the proposed Project. Impacts to archaeological resources and disturbance of human remains during construction of the Reduced Commercial Alternative would be similar compared to the proposed Project. Impacts to archaeological resources and disturbance of human remains during operation of the Reduced Commercial Alternative would be similar under the Reduced Commercial Alternative when compared to the proposed Project.

Energy

Under the Reduced Commercial Alternative, construction activities would occur, and the Project Site would be developed with mixed uses with an overall reduced development intensity than the proposed Project (see **Table 4-3**). This would result in decreased construction and operational energy demand under the Reduced Commercial Alternative. Therefore, impacts to energy under the Reduced Commercial Alternative would be reduced as compared to the proposed Project.

Similar to the proposed Project, the Reduced Commercial Alternative would result in less than significant impacts on the wasteful, inefficient, or unnecessary consumption of energy resources during construction and operation, due to the reduction in development intensity and uses when compared with the proposed Project. Furthermore, the Reduced Commercial Alternative would also not conflict or construct a state or local plan for renewable energy or energy efficiency and would result in less than significant impacts. Therefore, all impacts to energy would be reduced under the Reduced Commercial Alternative when compared to the proposed Project.

Geology and Soils

Under the Reduced Commercial Alternative, construction activities would occur, and the Project Site would be developed with mixed uses and 922 vehicle parking spaces, which would be the same one level of subterranean parking as compared to the Project.

Similar to the proposed Project, the Reduced Commercial Alternative would not be located within a designated Alquist-Priolo Earthquake Fault Zone, and no active faults are mapped projecting through the Site. The Project Site is located more than 500 feet outside the Fault Rupture Study Area, and therefore, impacts under the Reduced Commercial Alternative due to ground rupture from earthquake fault rupture would be less than significant, like the proposed Project. Regarding impacts due to strong seismic shaking, design and construction would be required to be in accordance with the current CBC requirements, which are proven to adequately address potential impacts related to ground shaking. Therefore, similar to the proposed Project, impacts related to strong seismic shaking would be less than significant under this Reduced Commercial Alternative. Furthermore, as the Reduced Commercial Alternative would be located within the same geographic setting as the proposed Project, development would result in less-than-significant impacts on risks to seismic-related ground failure, liquefaction, or landslides, and impacts would be similar to those under the proposed Project.

Regarding the potential for the Reduced Commercial Alternative to result in substantial soil erosion or the loss of topsoil, like with the proposed Project, this Alternative would conduct activities in accordance with an approved SWPPP and BMPs, to prevent erosion and stormwater runoff. During operations, the Reduced Commercial Alternative would include LID BMPs to treat stormwater runoff, thereby reducing the potential for erosion. Therefore, the Reduced Commercial Alternative would result in less than significant impacts on soil erosion or loss of topsoil, and impacts would be similar to those under the proposed Project.

Given the Reduced Commercial Alternative would be located within the same geographic setting and would comply with all applicable guidelines, regulations, and recommendations, as the proposed Project, development would result in less-than-significant impacts on risks related to

unstable or expansive soils, or soils incapable of adequately supporting the use of septic tanks or other waste water disposal systems. Impacts would be similar to those under the proposed Project.

Regarding the Reduced Commercial Alternative's potential to impact paleontological resources or a unique site, similar to the proposed Project, this Alternative would implement Mitigation Measures MM-GEO-1, 2, 3, and 4, which would require retention of a qualified paleontologist to oversee implementation of paleontological resources mitigation, construction worker paleontological resources sensitivity training, paleontological resources monitoring, and procedures to follow in the event of paleontological resources discoveries. As the Reduced Commercial Alternative would excavate to a similar depth as under the proposed Project, with implementation of these mitigation measures, impacts to paleontological resources during construction would be less than significant and similar compared to the Project. Operation of the Reduced Commercial Alternative would not result in any further ground disturbing activities such as grading or excavation; and therefore, there would be no potential to encounter, alter, or disturb paleontological resources. Therefore, operational impacts on paleontological resources under this Reduced Commercial Alternative would be similar to the proposed Project and less than significant.

Greenhouse Gas Emissions

Under the Reduced Commercial Alternative, construction activities would occur, and the Project Site would be developed with mixed uses at a lower development intensity than the proposed Project (see **Table 4-3**). Given that the Reduced Commercial Alternative would have a reduced development intensity, construction and operational activities would result in fewer GHG emissions when compared to the proposed Project. Therefore, the Reduced Commercial Alternative would not generate GHG emissions that would have a significant impact on the environment, and would not conflict with any applicable plan, policy, regulation, or recommendation of an agency adopted for the purpose of reducing the emissions of GHG. Therefore, impacts related to GHG emissions would be less than significant under the Reduced Commercial Alternative and would be less than those under the proposed Project.

Hazards and Hazardous Materials

Under the Reduced Commercial Alternative, construction activities would occur, and the Project Site would be developed with mixed uses as described above. Like with the proposed Project, during the construction phase, construction equipment and materials may include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, under the Reduced Commercial Alternative. The use of these hazardous materials could result in inadvertent release, adversely affecting individuals nearby. Similar to the proposed Project, the Reduced Commercial Alternative would be required to prepare a SWPPP for construction activities in compliance with the NPDES General Construction Permit requirements. The SWPPP would list the hazardous materials (including petroleum products) proposed for use during construction; describe spill prevention measures, equipment inspections, equipment and fuel storage; protocols for responding immediately to spills; and describe BMPs for controlling site runoff.

Furthermore, the previous uses on the Project Site included underground storage tanks (USTs) for fuel (gasoline and diesel) storage. Other hazardous materials commonly associated with nurseries

include fertilizers, herbicides, and pesticides. Like the proposed Project, the Reduced Commercial Alternative would implement Mitigation Measures MM-HAZ-1 through MM-HAZ-3, which would ensure removal of contaminated soils and ensure that workers are provided appropriate training in the recognition and response to encountering hazardous materials, and that a plan is in place that provides procedures for the testing, handling, and disposal of hazardous materials. With implementation of these mitigation measures, construction and operation of the Reduced Commercial Alternative would result in similar, less than significant impacts, to hazards and hazardous materials as under the proposed Project.

The Reduced Commercial Alternative would result in similar less-than-significant impacts to the emissions or handling of hazardous materials within one-quarter mile of an existing or proposed school, interference with an adopted emergency response plan, and wildland fire risks. There would be no impacts related to airport land use plans or public airports or private airstrips. Therefore, impacts would be similar to those under the proposed Project.

Hydrology and Water Quality

Under the Reduced Commercial Alternative, construction activities would occur, and the Project Site would be developed with mixed uses at a lower development intensity than the proposed Project (see **Table 4-3**). The Reduced Commercial Alternative would result in a central park, including the pavilion/art piece, community gatherings, etc.

As with the proposed Project, water would be used during the temporary construction phases of the Reduced Commercial Alternative (e.g., for dust suppression). However, this water would be mechanically and precisely applied and would, in general, infiltrate or evaporate. As such, water used during construction would not exceed the capacity of existing stormwater drainage systems surrounding the Project Site. In accordance with the requirements of the NPDES General Permit, this Reduced Commercial Alternative would also implement a SWPPP that specifies BMPs to be implemented during construction to manage runoff flow volumes and water quality and would ensure that they do not exceed the capacity of existing stormwater drainage systems. With regard to operation, impervious surfaces would be added to the Project Site, similar to the proposed Project, but the reduction in provided open space under the Reduced Commercial Alternative, as compared to the Project, would result in increased impervious surfaces. However, the stormwater treatment design included as part of the Reduced Commercial Alternative would account for this increase in flow. In addition, all on-site drainage would be collected through infiltration dry wells distributed throughout the Project Site. Therefore, the Reduced Commercial Alternative would not violate any water quality standards, waste discharge requirements, substantially degrade water quality, decrease groundwater supplies, interfere with groundwater recharge, increase the amount of surface runoff resulting in flooding, create runoff water in exceedance of the capacity of stormwater drainage systems, or provide substantial additional sources of polluted runoff, and impacts would be less than significant, but slightly greater than under the proposed Project.

The proposed Project, as well as the Reduced Commercial Alternative, would increase the impervious area on the Project Site compared to existing conditions through the introduction of buildings, parking areas, walkways, and other hardscape elements. While impervious surfaces would be added to the Project Site, the stormwater treatment design included as part of the proposed

Project, and that would also be required under the Reduced Commercial Alternative, accounts for this increase in flow. Development of the Reduced Commercial Alternative would also result in a change to the existing on-site drainage pattern. Under existing conditions, the water would flow westerly towards S. San Gabriel Boulevard and E. Grand Avenue. However, under the Reduced Commercial Alternative, as with the proposed Project, water would also flow easterly towards Gladys Avenue as well as S. San Gabriel Boulevard and E. Grand Avenue. Therefore, similar to the proposed Project, new parkway drains would be installed as part of the Reduced Commercial Alternative development layout, which would ensure stormwater runoff is routed properly. All on-site drainage would be collected in a proposed private storm drain system and treated before discharging to the public street. The stormwater treatment design and new parkway drains that would be implemented as part of the Reduced Commercial Alternative would minimize the potential for both on- and off-site erosion and siltation during operation of the Reduced Commercial Alternative.

Regarding flood flows and risks, the Project Site is mapped by the FEMA as lying within a Zone X area, which is an "Area of Minimal Flood Hazard" and is not located within a Special Flood Hazard Area. The Project Site is also not located within a potential inundation area, as the Rio Wash is located 800 feet east of the Project Site. Therefore, similar to the proposed Project, the Reduced Commercial Alternative would not impede or redirect flood flows, risk release of pollutants due to project inundation within flood hazard, tsunami, or seiche zones, and impacts would be less than significant.

The Project Site falls within the jurisdiction of water quality plans with related regulations and permitting requirements that assure that development projects are in compliance with clean water policies. Most notably, the Project Site is under the jurisdiction of the LARWQB (Region 4) Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties and the Rio Hondo/San Gabriel River Watershed EWMP; and the LARWQCB is also given authority to issue waste discharge requirements, enforce actions against stormwater discharge violators, and monitor water quality. Similar to the proposed Project, the Reduced Commercial Alternative would implement the necessary BMPs to support the applicable plans; and the Reduced Commercial Alternative would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be similar to the proposed Project and would be less than significant.

Land Use and Planning

Like with the proposed Project, the Reduced Commercial Alternative would be consistent with the goals and policies of SCAG's RTP/SCS, the City's General Plan, and the SGMC. With implementation of the PD and Zone Map Amendment that is part of the Project approvals being sought, the Reduced Commercial Alternative would be consistent with the City's General Plan and SGMC. Therefore, as the Reduced Commercial Alternative would not conflict with regional plans, policies, or regulations that have been adopted for the purpose of avoiding or mitigating an environmental impact, a less than significant impact would occur, similar to the proposed Project.

Furthermore, as under the proposed Project, the Reduced Commercial Alternative would be situated mid-block between the 700 Plaza and the 800 Plaza, and would facilitate movement

internally within the Project Site and from the larger community to the east and west. The Alternative would be designed to be well-integrated into the larger established community and would not present a barrier to physical access. Therefore, the Reduced Commercial Alternative would not divide an established community. Impacts would be similar to the proposed Project and would be less than significant.

Noise

Under the Reduced Commercial Alternative, construction activities would occur, and the Project Site would be developed with 419,498 square feet of residential uses and 70,009 square feet of commercial uses. The Reduced Commercial Alternative would result in a central park, including the pavilion/art piece, community gatherings, etc. This comparative decrease in development intensity and uses (see **Table 4-3**) would result in reduced construction and operational noise impacts under the Reduced Commercial Alternative. Additionally, operational noise impacts under the Reduced Commercial Alternative would be reduced as compared to the proposed Project, due to the reduction in Project development intensity.

Like with the proposed Project, construction of the Reduced Commercial Alternative would be conducted on two sites (the 700 and 800 plazas). Due to the reduced development intensity proposed under this Reduced Commercial Alternative, the construction time required would be reduced as well. During Reduced Commercial Alternative construction activities, the highest noise levels would be generated when multiple pieces of construction equipment are being operated concurrently (including the overlapping of construction at the 700 and 800 plazas) at the Project Site boundary nearest noise sensitive receptors. Due to the proximity of off-site noise sensitive uses to the Site, the Alternative's construction activities would temporarily expose these sensitive receptors to increased exterior noise levels, similar to the proposed Project. To reduce this impact, the Reduced Commercial Alternative would implement Mitigation Measure MM-NOI-1, which would require noise-attenuation techniques to be employed to ensure that noise remains as low as possible during construction at the nearby sensitive receptors. Due to the reduction in development intensity, this Reduced Commercial Alternative would result in a reduction in construction noise levels when compared with the proposed Project, and impacts would be less than significant with mitigation.

Operation of the Reduced Commercial Alternative would be at a smaller scale than the proposed Project and would still include outdoor events. As such, operational noise impacts would be overall similar under this Alternative in comparison with the proposed Project. Similar to the proposed Project, the Reduced Commercial Alternative would provide a central park and would host periodic outdoor events, which would have the potential to result in a significant impact related to operations noise. However, the Reduced Commercial Alternative would also implement Mitigation Measure MM-NOI-2, which would require the implementation of BMPs during outdoor events to reduce event-generated noise levels to the extent practicable. With implementation of Mitigation Measure MM-NOI-2, operational noise impacts under the Reduced Commercial Alternative would be less than significant and similar to the proposed Project.

Similar to the Reduced Commercial Alternative's noise impact reduction during construction and operation when compared with the proposed Project, this Reduced Commercial Alternative would also reduce groundborne vibration impacts due to the decrease in development intensity and day-

to-day activity during construction and operation. Given that the proposed Project would result in less than significant impacts due to the generation of groundborne vibrations, the Reduced Commercial Alternative would similarly result in a less than significant impact.

Population and Housing

Under the Reduced Commercial Alternative, construction activities would occur, and the Project Site would be developed with 419,498 square feet of residential uses, including 46 one-bedroom units, 153 two-unit units, 48 three-bedroom units, 4 four-bedroom units, and 70,009 square feet of commercial uses, including a market, a fitness center, and restaurant, retail, or office uses.

Construction of the Reduced Commercial Alternative, as with the proposed Project, would require construction workers who would be hired from a large, highly mobile regional construction work force already living and working within the Los Angeles metropolitan region that moves from project to project. Given the short duration of the work for each job, and the large size and mobility of the construction labor pool that can be drawn upon in the region, construction employees would not be expected to relocate their residences within this region or move from other regions into this region in response to the short-term Project-related construction employment opportunities.

As discussed above, the Reduced Commercial Alternative would reduce development intensity when compared to the proposed Project, and therefore, would comprise a smaller percentage of SCAG's forecasted growth projections. With this reduction in intensity, the Reduced Commercial Alternative would result in less than significant impacts on population and housing, and would be reduced in comparison with the proposed Project.

Public Services

Under the Reduced Commercial Alternative, construction activities would occur, and the Project Site would be developed with 419,498 square feet of residential uses and 70,009 square feet of commercial uses. This comparative decrease in development intensity and uses (see **Table 4-3**) would result in similar construction and operational public services impacts under the Reduced Commercial Alternative.

Given that the Reduced Commercial Alternative would reduce development intensity of the Project Site, thereby reducing the operational populations on the Project Site, demand for police and fire protection resources, as well as school resources, would also be reduced in comparison with the proposed Project. Impacts on public services under the Reduced Commercial Alternative would be less than significant, and would be reduced as compared to the proposed Project.

Recreation

Under the Reduced Commercial Alternative, construction activities would occur, and the Project Site would be developed with 419,498 square feet of residential uses and 70,009 square feet of commercial uses. The Reduced Commercial Alternative would result in a central park, including the pavilion/art piece, community gatherings, etc. This comparative decrease in development intensity and uses (see **Table 4-3**) would result in similar construction and operational recreation impacts under the Reduced Commercial Alternative.

Regarding the Reduced Commercial Alternative's potential to result in increased use of existing neighborhood and regional parks such that physical deterioration would occur, given the reduction in construction workforce and operational populations under this Reduced Commercial Alternative, impacts on existing parks would be reduced as well, when compared with the proposed Project.

Under the Reduced Commercial Alternative, a central park would be constructed. If the provided open space under this Reduced Commercial Alternative would not provide sufficient area to meet the City's General Plan goal of four acres of parkland per thousand residents, the payment of a City-designated in-lieu fee would be required, as authorized by Quimby Act. Payment of these fees would offset parkland impacts by providing funding for new and/or renovated parks equipment and facilities. Therefore, the Reduced Commercial Alternative would comply with the Open Space and Recreation Impact Fee and would satisfy the Quimby Act. With a combination of the provided open space and the payment of Open Space and Recreation Impact Fee, impacts would be less than significant, but would be similar to the proposed Project.

Transportation

Under the Reduced Commercial Alternative, construction activities would occur, and the Project Site would be developed with 419,498 square feet of residential uses and 70,009 square feet of commercial uses. The Reduced Commercial Alternative would result in a central park, including the pavilion/art piece, community gatherings, etc. This comparative decrease in development intensity and uses (see **Table 4-3**) would result in fewer construction impacts and operational transportation impacts under the Reduced Commercial Alternative.

For impacts related to conflicting with a program, ordinance, or policy, similar to the proposed Project, construction of the Reduced Commercial Alternative would similarly require the incorporation of Mitigation Measure MM-TRA-1, a Construction Traffic Management Plan, to ensure that short-term construction-related traffic impacts would be reduced to less-than-significant levels. During operation, the Reduced Commercial Alternative would, similar to the proposed Project, be consistent with the City's Circulation Element of the General Plan, SCAG 2016-2040 RTP/SCS, and Caltrans facilities. For impacts related to transit facilities, similar to conditions under the Project, the Montebello Bus Lines bus service (Line 20 San Gabriel) on northbound San Gabriel Boulevard was recently suspended. Similar to under the proposed Project, the Reduced Commercial Alternative would implement Mitigation Measure MM-TRA-2 to reduce impacts to transit operations to less-than-significant levels. For impacts related to alternative transportation and hazardous conditions due to a geometric design feature or incompatible land use, impacts would be similar to the proposed Project and less than significant. Regarding emergency access, similar to the Project, the Reduced Commercial Alternative would be required to implement Mitigation Measure MM-TRA-1 to reduce impacts on construction to less than significant levels. Operation of the Reduced Commercial Alternative related to emergency access would be less than significant and similar to the proposed Project.

Like with the proposed Project, the Reduced Commercial Alternative would be of a mixed-use nature, and therefore, VMT would be measured using the VMT per service population metric, which combines residents and employees in its methodology. Furthermore, the Reduced Commercial Alternative and proposed Project would both be on the same Project Site, which is

located in a low VMT area. Therefore, the Alternative is also exempt from further VMT analysis. Therefore, the Reduced Commercial Alternative would result in reduced impacts to transportation compared with the proposed Project, and impacts would be less than significant.

Tribal Cultural Resources

The Reduced Commercial Alternative would include similar excavation as the proposed Project. During these ground disturbing activities, previously buried tribal cultural resources could be disturbed. The Reduced Commercial Alternative would implement Mitigation Measures MM-CUL-1 through MM-CUL-5, similar to those under the proposed Project, which would provide for resource sensitivity training of construction workers and procedures to follow in the event of a discovery. With implementation of these mitigation measures, impacts to tribal cultural resources during construction under the Reduced Commercial Alternative would be less than significant and similar compared to the proposed Project.

Operation of the Reduced Commercial Alternative would not result in any further ground disturbing activities such as grading or excavation; and therefore, there would be no potential to encounter, alter, or disturb tribal cultural resources. Therefore, operational impacts to tribal cultural resources under the Reduced Commercial Alternative would be similar to the proposed Project.

Utilities and Service Systems

Under the Reduced Commercial Alternative, construction activities would occur, and the Project Site would be developed with 419,498 square feet of residential uses and 70,009 square feet of commercial uses. Impacts to utilities and service systems under the Reduced Commercial Alternative would be similar to or reduced as compared to the proposed Project, due to the reduction in Project development intensity.

Water Supply

During construction activities associated with the future development within the Project Site, there would be a temporary, intermittent demand for water for such activities as soil watering for site preparation, fugitive dust control, concrete preparation, painting, cleanup, and other short-term activities. Similar to the proposed Project, construction-related water usage for this Reduced Commercial Alternative is not expected to have an adverse impact on available water supplies or the existing water distribution system, and impacts would be less than significant and reduced compared to the Project.

Furthermore, as under the proposed Project, operation of the Reduced Commercial Alternative would require new connections from existing facilities, with coordination with SGCWD, operation of this Reduced Commercial Alternative would not result in the relocation or construction of new or expanded water facilities, the construction or relocation of which would cause significant environmental effects. As the Reduced Commercial Alternative would develop fewer uses at a lesser density on the Project Site as compared to the proposed Project, the Reduced Commercial Alternative would require less water demand as compared to the Project. As the SGCWD has adequate resources to meet the water demands for the proposed Project, there would be adequate resources to meet the water demands for the Reduced Commercial Alternative. Operational impacts

on water infrastructure would be less than significant under the Reduced Commercial Alternative and would be reduced as compared to the proposed Project.

Wastewater

There are existing water and sewer facilities surrounding the Site. However, as the Project Site is currently vacant, new water and sewer conveyance infrastructure would be necessary to serve the Reduced Commercial Alternative. Similar to the Project, all lines would be connected to the City's water lines to provide a public combined water system. As with the proposed Project, the JWPCP currently has the capacity to accommodate the wastewater from this Reduced Commercial Alternative. Final design criteria and specifications for all wastewater facilities would comply with all applicable requirements and policies. Therefore, the Reduced Commercial Alternative would not require or result in the relocation or construction of new or expanded wastewater treatment facilities, and impacts would be less than significant and would be reduced as compared to the proposed Project.

Stormwater Drainage

During construction, water would be used during the temporary construction phases of the Reduced Commercial Alternative, similar to the proposed Project (e.g., for dust suppression). However, this water would be mechanically and precisely applied and would, in general, infiltrate or evaporate. As such, water used during construction would not exceed the capacity of existing stormwater drainage systems surrounding the Site. In accordance with the requirements of the NPDES General Permit, this Alternative would also implement a SWPPP that specifies BMPs to be implemented during construction to manage runoff flow volumes and water quality and would ensure that they do not exceed the capacity of existing stormwater drainage systems. With regard to operation, while impervious surfaces would be added to the Site, similar to the proposed Project, the stormwater treatment design included as part of the Reduced Commercial Alternative would account for this increase in flow. In addition, all on-site drainage would be collected through infiltration dry wells distributed throughout the Site. Therefore, the Reduced Commercial Alternative would not require or result in the relocation or construction of new or expanded stormwater drainage systems, and impacts would be less than significant.

Electric Power and Natural Gas

Regarding electric power and natural gas, the Project Site is located in a developed and urbanized area in the City that would be served by existing electrical power and natural gas services. As with the proposed Project, the Reduced Commercial Alternative would be required to coordinate electrical infrastructure removals or relocations with SCE and comply with site-specific requirements set forth by SCE. Furthermore, this Alternative would include installation of new natural gas connections to serve the Project Site in coordination with SoCalGas. Therefore, based on the above, the Reduced Commercial Alternative would not require or result in the relocation or construction of new or expanded electric power or natural gas facilities, and impacts would be less than significant and would be reduced as compared to the proposed Project.

Telecommunications

Telecommunications for the Reduced Commercial Alternative would be implemented in the same way as under the proposed Project. The Reduced Commercial Alternative would require installation of new

underground telecommunication lines (e.g., internet, telephone, and other services) to serve the new uses and building on site. Installation of new telecommunications infrastructure would be limited to on-site telecommunications distribution and minor off-site work associated with connections to the public system. As telecommunication providers already deliver their services to a large number of homes in in the vicinity of the Project Site, it is anticipated that existing telecommunications facilities would be sufficient to support the Alternative's needs for telecommunication services. As such, no upgrades to off-site telecommunications facilities are anticipated, and impacts would be less than significant and would be reduced as compared to the proposed Project.

Solid Waste

Regarding the Reduced Commercial Alternative's impact on solid waste, similar to the proposed Project, this Reduced Commercial Alternative would not generate significant waste from construction activities. Operation of the Reduced Commercial Alternative would result in a reduced rate of solid waste generation, due to the decreased development intensity of the Reduced Commercial Alternative in comparison to the proposed Project. Given that the proposed Project would be served by a landfill with sufficient capacity to accommodate waste disposal needs, the decreased amount of solid waste generated under the Reduced Commercial Alternative would result in a less than significant impact. Furthermore, as under the proposed Project, the Reduced Commercial Alternative would comply with federal, State, and local management and reduction statutes and regulations related to solid waste, resulting in a less than significant impact. Therefore, solid waste impacts under the Reduced Commercial Alternative would be reduced as compared to the proposed Project.

Relationship of the Reduced Commercial Alternative to Project Objectives

The Reduced Commercial Alternative would develop the same amount of residential uses as under the proposed Project, but would remove the bakery and café from the Project Site. The Reduced Commercial Alternative would not meet all of the identified Project Objectives. The Reduced Commercial Alternative would meet the objective to develop new, infill housing with a mix of residential dwelling types to serve a range of household sizes in proximity to major thoroughfares. The Reduced Commercial Alternative would also meet the objective to redevelop a vacant site with an economically viable and attractive mixed-use development that combines residential uses with community-serving retail, grocery, restaurant, and fitness center uses. As the Reduced Commercial Alternative would still develop the same central plaza and provide the programmable events as proposed under the Project, the Reduced Commercial Alternative would meet the objectives related to creating a high-quality landscape design and publicly accessible open space area to improve the visual character of the Project Site while creating connections and integrating with the surrounding neighborhood and providing public art and entertainment options in the plaza. The Reduced Commercial Alternative would also meet the objective to encourage pedestrian activity by providing residents, employees, and visitors with commercial uses within proximity of residential neighborhoods and public transit, publicly accessible open space with landscaped seating areas and event space, and streetscape improvements to ensure pedestrian safety. Furthermore, the Reduced Commercial Alternative would meet the objective to support multi-modal transit opportunities at or near the Project Site, including bus transit with links to Metro Rail, designated ridesharing pickup, and drop-off areas, and on-site bicycle facilities. The Reduced Commercial Alternative

would also meet the objective to create a multi-purpose hub of activity surrounded by ground-floor retail and a variety of restaurant uses, public art, and a publicly accessible central park and plaza to enhance the quality of the pedestrian environment for the residents and to provide additional publicly accessible open space for the City's residents.

Because the Reduced Commercial Alternative would not provide the bakery and café as under the proposed Project, the Reduced Commercial Alternative would not meet the objective for combining residential uses for providing sufficient square footage and visibility for high-quality main stream retail and restaurant uses that cater to community needs to the same extent as the proposed Project.

4.7.5 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR, and that if the "no project" alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives.

Selection of an environmentally superior alternative is based on comparison of the alternatives that would reduce or eliminate the significant impacts associated with the proposed Project, and on a comparison of the remaining environmental impacts of each alternative to the proposed Project's impacts. The comparative impacts of the proposed Project, the No Project Alternative, the Code-Compliant Alternative, the Reduced Density Alternative, and the Reduced Commercial Alternative are summarized in **Table 4-4.**

Of the alternatives analyzed in this Draft EIR, the No Project Alternative would avoid all of the proposed Project's significant environmental effects. However, the No Project Alternative would not achieve any of the proposed Project's objectives. Furthermore, as there are no significant and unavoidable impacts under the proposed Project, the Code-Compliant Alternative, the Reduced Density Alternative, and the Reduced Commercial Alternative would similarly avoid any potentially significant impacts through the implementation of mitigation measures as proposed under the Project. As discussed above, the Code-Compliant Alternative, the Reduced Density Alternative, and the Reduced Commercial Alternative, would meet all of the Project objectives, but to a lesser extent than the proposed Project, due to the various reductions in development intensity and provided uses.

In accordance with the CEQA Guidelines requirement to identify an Environmentally Superior Alternative other than the No Project Alternative, a comparative evaluation of the remaining alternatives indicates that the Reduced Density Alternative would be the Environmentally Superior Alternative. The Reduced Density Alternative would reduce environmental impacts when compared to the proposed Project and the other Alternatives. While the Code-Compliant Alternative and the Reduced Commercial Alternative would also reduce impacts, it would not be to the same extent as the Reduced Density Project Alternative. Overall, the Reduced Density Project Alternative, when compared to the Code-Compliant Alternative and the Reduced Commercial Alternative, would be the Environmentally Superior Alternative. However, the Reduced Density Alternative would not satisfy a portion of the Project Objectives and would meet other Objectives to lesser extent than the Project. The Reduced Commercial Alternative would meet the most Project Objectives compared to the other Alternatives, though still to a lesser extent than the proposed Project.

TABLE 4-4
COMPARISON OF IMPACTS ASSOCIATED WITH THE ALTERNATIVES AND THE PROJECT

Impact	Project	No Project	Code-Compliant Alternative	Reduced Density Alternative	Reduced Commercial Alternative
Aesthetics					
AES-1: Scenic Vista	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
AES-2: Scenic Resources	No Impact	No Impact (Less)	No Impact (Similar)	No Impact (Similar)	No Impact (Similar)
AES-3: Conflict with Zoning	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
AES-4: Light and Glare	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)
Air Quality					
AIR-1: Conflict with Air Quality Management Plan					
Construction	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Less)	Less than Significant with Mitigation (Less)	Less than Significant with Mitigation (Less)
Operation	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)
AIR-2: Cumulatively Considerable Increase of Criteria Pollutant in Nonattainment Area					
Construction	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Less)	Less than Significant with Mitigation (Less)	Less than Significant with Mitigation (Less)
Operation	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)
AIR-3: Sensitive Receptors Exposure to Pollutant Concentrations					
Construction	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Less)	Less than Significant with Mitigation (Less)	Less than Significant with Mitigation (Less)
Operation	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)
AIR-4: Odors	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)

Impact	Project	No Project	Code-Compliant Alternative	Reduced Density Alternative	Reduced Commercial Alternative
Cultural Resources					
CUL-1: Historic Resources					
Construction	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)
Operation	No Impact	No Impact (Less)	No impact (Similar)	No impact (Similar)	No impact (Similar)
CUL-2: Archaeological Resources					
Construction	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Greater)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)
Operation	No Impact	No Impact (Less)	No impact (Similar)	No impact (Similar)	No impact (Similar)
CUL-3: Human Remains					
Construction	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Greater)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)
Operation	No Impact	No Impact (Less)	No Impact (Similar)	No Impact (Similar)	No Impact (Similar)
Energy					
ENE-1: Cause Wasteful, Inefficient, or Unnecessary Consumption of Energy	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Similar)
ENE-2: Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Similar)
Geology and Soils					
GEO-1:					
Earthquake Fault	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
Seismic Shaking	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
Ground Failure	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
Landslides	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)

Impact	Project	No Project	Code-Compliant Alternative	Reduced Density Alternative	Reduced Commercial Alternative
GEO-2: Result in Soil Erosion	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
GEO-3: Unstable Geologic Unit	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
GEO-4: Expansive Soil	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
GEO-5: Soils Incapable of Supporting Septic Tanks or Alternative Waste Water Disposal Systems	No Impact	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
GEO-6: Paleontological Resources					
Construction	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Greater)	Less than Significant with Mitigation (Less)	Less than Significant with Mitigation (Similar)
Operation	No Impact	No Impact (Similar)	No Impact (Similar)	No Impact (Similar)	No Impact (Similar)
Greenhouse Gas Emissions					
GHG-1: Generate Emissions	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)
GHG-2: Conflict with Applicable Plans	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)
Hazards and Hazardous Materials					
HAZ-1: Routine Transport, Use, or Disposal of Hazardous Materials and Upset and Accident Conditions	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)
HAZ-2: Upset and Accident Conditions	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)
HAZ-3: One-quarter Mile from an Existing School	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
HAZ-4: Hazardous Materials Database Listings	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)
HAZ-5 and HAZ-6: Located Within an Airport Land Use Plan or Within Two Miles of a Public Airport, or Private Airstrip	No Impact	No Impact (Similar)	No Impact (Similar)	No Impact (Similar)	No Impact (Similar)

Impact	Project	No Project	Code-Compliant Alternative	Reduced Density Alternative	Reduced Commercial Alternative
HAZ-7: Emergency Response Plan or Emergency Evacuation Plan	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
HAZ-8: Wildland Fires	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
Hydrology and Water Quality					
HYDRO-1: Violate Water Quality Standards or Waste Discharge Requirements	Less than Significant	No Impact (Less)	Less than Significant (Greater)	Less than Significant (Greater)	Less than Significant (Similar)
HYDRO-2: Deplete Groundwater Supplies or Interfere with Recharge	Less than Significant	No Impact (Less)	Less than Significant (Greater)	Less than Significant (Greater)	Less than Significant (Similar)
HYDRO-3:					
Erosion or Siltation	Less than Significant	No Impact (Less)	Less than Significant (Greater)	Less than Significant (Greater)	Less than Significant (Similar)
Increase Surface Runoff	Less than Significant	No Impact (Less)	Less than Significant (Greater)	Less than Significant (Greater)	Less than Significant (Similar)
Runoff Water	Less than Significant	No Impact (Less)	Less than Significant (Greater)	Less than Significant (Greater)	Less than Significant (Similar)
Impede or Redirect Flood Flows	Less than Significant	No Impact (Less)	Less than Significant (Greater)	Less than Significant (Greater)	Less than Significant (Similar)
HYDRO-4: Release of Pollutants due to Inundation	No Impact	No Impact (Similar)	No Impact (Similar)	No Impact (Similar)	No Impact (Similar)
HYDRO-5: Conflict with or Obstruct Water Quality Control Plan or Sustainable Groundwater Management Plan	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
Land Use and Planning					
LUP-1: Physically Divide and Established Community	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
LUP-2: Create a Significant Impact due to a Conflict with Plans, Policies, or Regulations	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)

Impact	Project	No Project	Code-Compliant Alternative	Reduced Density Alternative	Reduced Commercial Alternative
Noise					
NOI-1: Noise Levels in Excess of Established Standards					
Construction	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Less)	Less than Significant with Mitigation (Less)	Less than Significant with Mitigation (Similar)
Operation	Less than Significant with Mitigation	No Impact (Less)	Less than Significant (Less)	Less than Significant with Mitigation (Less)	Less than Significant with Mitigation (Similar)
NOI-2: Excessive Groundborne Vibration or Groundborne Noise Levels					
Construction	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Similar)
Operation	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Similar)
Population and Housing					
POP-1: Induce Unplanned Population Growth	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)
POP-2: Displace Substantial Numbers of Existing People or Housing	No Impact	No Impact (Less)	No Impact (Similar)	No Impact (Similar)	No Impact (Similar)
Public Services					
PS-1: Result in Adverse Impacts Associated with the Provision of New or Physically Altered Governmental Facilities	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)
Recreation					
REC-1: Increase Use of Existing Parks or Other Recreational Facilities	Less than Significant	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)
REC-2: Include or Require the Construction or Expansion of Recreational Facilities	Less than Significant	Less than Significant (Greater)	Less than Significant (Greater)	Less than Significant (Greater)	Less than Significant (Similar)
REC-3: Result in Substantial Adverse Impacts Associated with the Provision of New or Physically Altered Governmental Facilities for Parks	Less than Significant	Less than Significant (Greater)	Less than Significant (Greater)	Less than Significant (Greater)	Less than Significant (Similar)

Impact	Project	No Project	Code-Compliant Alternative	Reduced Density Alternative	Reduced Commercial Alternative
Transportation					
TRA-1: Conflict with Plan, Ordinance, or Policy Addressing Circulation System, Including Transit, Roadway, Bicycle, and Pedestrian Facilities					
Construction	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)
Operation	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)
TRA-2: Conflict or be Inconsistent with CEQA Guidelines Section 15064.3	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
TRA-3: Increase Hazards due to a Geometric Design Feature or Incompatible Uses	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
TRA-4: Inadequate Emergency Access					
Construction	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)
Operation	Less than Significant	No Impact (Less)	Less than Significant (Similar)	Less than Significant (Similar)	Less than Significant (Similar)
Tribal Cultural Resources					
TCR-1: Change in the significance of a Tribal Cultural Resource	Less than Significant with Mitigation	No Impact (Less)	Less than Significant with Mitigation (Greater)	Less than Significant with Mitigation (Similar)	Less than Significant with Mitigation (Similar)
Utilities and Service Systems					
UTL-1: Relocation or Construction of New Facilities	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)
UTL-2: Sufficient Water Supplies Available	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)
UTL-3: Adequate Capacity by Wastewater Treatment Provider	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)
UTL-4: Generate Solid Waste in Excess of Standards	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)
UTL-5: Comply with Statues and Regulations Related to Solid Waste	Less than Significant	No Impact (Less)	Less than Significant (Less)	Less than Significant (Less)	Less than Significant (Less)

SOURCE: ESA, 2020.

CHAPTER 5
Other CEQA Considerations

5.1 Unavoidable Significant Impacts

CEQA Guidelines Section 15126.2(b) requires that an EIR describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to a less-than-significant level. As determined throughout Chapter 3, *Environmental Analysis*, of this Draft EIR, no impacts associated with the proposed Project were concluded to be significant and unavoidable.

5.2 Significant Irreversible Environmental Changes

According to Sections 15126(c) and 15126.2(c) of the CEQA Guidelines, an EIR is required to address any significant irreversible environmental changes that would occur should the proposed Project be implemented. As stated in the State CEQA Guidelines Section 15126.2(c):

> *Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter likely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the Project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.*

The evaluation below addresses whether the proposed Project would result in significant irreversible environmental changes if they would:

1. Involve a large commitment of nonrenewable resources;
2. Result in primary or secondary impacts that would generally commit future generations to similar uses;
3. Involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
4. Result in consumption of resources that is not justified (e.g., the project involves the wasteful use of energy).

Each of these issues is discussed below for the proposed Project.

5.2.1 Large Commitment of Resources

Implementation of the proposed Project would result in the long-term commitment of resources to continued urban development. As previously described in Chapter 1, *Introduction*, and Chapter 2, *Project Description*, of this Draft EIR, The Project Site previously contained vacant greenhouses and associated structures, eight of which were burned down by an act of arson on February 14, 2018, which left the site severely burned and in damaged condition with a large amount of debris. Since July 2018, the Project Site has been graded and cleaned of all burnt debris. The Project Site currently consists of only vacant land with no present structures. The proposed Project would recommit the land resources of the site to urban development compatible with the surrounding developed area. In addition, construction activities related to the proposed Project would result in the irretrievable commitment of construction materials (e.g., steel products, cement, glass, etc.).

5.2.2 Commitment of the Project Site for Future Generations

Development of the proposed Project would result in the commitment of the Project Site to a mixed-use residential and commercial development, thereby precluding other uses for the lifespan of the proposed Project, a period of time anticipated to be at least 30 years.

5.2.3 Irreversible Environmental Damage

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage that could be caused by an accident associated with the proposed Project. While the proposed Project could result in the use, transport, storage, and disposal of limited amounts of hazardous wastes during construction and operation, as described in Section 3.7, *Hazards and Hazardous Materials*, all activities would comply with applicable state and federal laws related to hazardous materials, which significantly reduce the likelihood and severity of the occurrence of accidents that could result in irreversible environmental damage.

Over the past decade, the understanding of global climate change and the role that communities can play in mitigating and/or adapting to it has grown tremendously. There is broad scientific consensus that recent changes in climatic conditions, including increases in global temperatures, are associated with corresponding increases of greenhouse gases (GHGs). Temperature increases are beginning to affect regional climates and continued increases are expected to result in impacts to the southern California region and the world. Climate change is anticipated to have profound implications for the availability of the natural resources on which economic prosperity and human development depend.

As discussed in detail in Section 3.6, *Greenhouse Gas Emissions*, the emission of GHGs is known to have long-term effects on atmospheric conditions that affect the global climate, with resultant changes in sea level, hydrological conditions in rivers, heat island effects, and a range of other conditions. While these changes are not considered irreversible, they could last for generations. As further described in Section 3.6, *Greenhouse Gas Emissions*, the proposed Project could result in short-term increases in GHG emissions. However, the Project would not conflict with State plans, policies, or regulations that would reduce the emissions of GHGs and would therefore not contribute to global climate changes and related irreversible environmental damage.

The most notable significant irreversible impacts of the proposed Project are intensification of the visual character of the Project Site, increased generation of pollutants from vehicle travel and stationary operations, and the short-term commitment of non-renewable and/or slowly renewable natural and energy resources, such as water and energy resources used during construction activities. Operations associated with future uses would also consume water, natural gas and electrical energy. The unavoidable environmental consequences of the proposed Project are described in the appropriate sections in Chapter 3, *Environmental Analysis*, of this Draft EIR.

5.2.4 Unjustified Consumption of Resources

Resources that would be permanently and continually consumed by implementation of the proposed Project include water, electricity, natural gas, and fossil fuels; however, the amount and rate of consumption of these resources would not result in the unnecessary, inefficient, or wasteful use of resources (see Section 3.4, *Energy*, and 3.16, *Utilities and Service Systems*). As shown in Section 3.4, *Energy*, the proposed Project's annual new energy demand would be approximately 5.50 million kilowatt hours (kWh) of electricity, 9.08 million kilo-British thermal unit (kBtu) of natural gas, 389,309 gallons of diesel fuel. In addition, electricity and fossil fuels would also be consumed in the use of vehicles and equipment during construction of the proposed Project.

Project Construction

Consumption of non-renewable fossil fuels during construction of the proposed Project is described in Section 3.4, *Energy*, of the Draft EIR. Construction of the proposed Project would result in the irretrievable commitment of construction materials (e.g., steel products, cement, glass). While construction of the proposed Project would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels, natural gas, and gasoline for automobiles and construction equipment, the consumption of fossil fuels would occur on a temporary basis during the construction period.

Construction of the proposed Project would employ fuel-efficient equipment consistent with State and federal regulations, such as fuel efficiency regulations in accordance with the California Air Resources Board (CARB) Pavley Phase II standards, anti-idling regulations, and fuel requirements for stationary equipment. Use of construction equipment that is compliant with these regulations would result in the use of more fuel-efficient engines and associated fuel savings. As such, the consumption of energy during project construction would not be wasteful, inefficient, or unnecessary.

Project Operation

Operation of the proposed Project would result in the demand for electricity and natural gas for Project operations, and diesel fuel for transportation and backup generation functions. As described in Section 3.4, *Energy*, the Project's operational energy use would represent about 0.006 percent of total Southern California Edison (SCE) sales and would be within the SCE projected electricity supplies. The proposed Project would account for approximately 0.002 percent of the 2018 annual consumption in the SoCalGas planning area and would fall within the SoCalGas projected consumption for the area and would be consistent with the SoCalGas anticipated regional demand

from population or economic growth. The Proposed Project would account for 0.01 percent of County-wide gasoline consumption, based on the available County fuel sales data for the year 2018.

Operation of the Proposed Project would comply with all applicable building codes, including the 2019 Title 24 building energy efficiency standards, CAFE fuel economy standards, consistency with the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), compliance with the County's Low Impact Development (LID) Development Standards Manual, and the City's Energy Action Plan. The Project would ensure that natural resources are used efficiently and conserved to the maximum extent possible. Further, it is expected that, over time, new technologies or systems will emerge, or will become more cost-effective or user-friendly, to further reduce the reliance upon nonrenewable natural resources. For example, future implementation of the Clean Fuel Standard and the Renewable Portfolio Standard are expected to decrease the use of nonrenewable fossil fuels.

In order to reduce the use of transportation energy, the proposed Project would comply with CAFE fuel economy standards, which would result in more efficient use of transportation fuels (lower consumption). Project-related vehicle trips would also comply with Pavley and Low Carbon Fuel Standards which are designed to reduce vehicle GHG emissions, but would also result in fuel savings in addition to compliance with CAFE standards. The close proximity of the proposed Project to retail, restaurant, commercial, and residential uses support achievement of reductions in vehicle miles traveled (VMT). Additionally, the proposed Project design would provide for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations for a minimum of 8 percent of the parking spaces pursuant to the CALGreen Code, reducing the amount of fossil fuel consumed during vehicular travel to and from the Project Site.

Collectively, the incorporation of the above described conservation measures and features, operation of the proposed Project would minimize the consumption of electricity, natural gas, and transportation fuels. Therefore, as proposed operation of the proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of electricity, natural gas, and transportation fuels, and thus would not result in the unjustified consumption of natural resources.

5.3 Growth Inducement

CEQA Guidelines Section 15126.2(d) requires an EIR to discuss the ways a proposed project could foster economic or population growth or the construction of additional housing, directly or indirectly, in the surrounding environment. Growth-inducing impacts include the removal of obstacles to population growth (e.g., the expansion of a wastewater treatment plant allowing more development in a service area) and the development and construction of new service facilities that could significantly affect the environment individually or cumulatively. In addition, pursuant to CEQA, growth must not be assumed as beneficial, detrimental, or of little significance to the environment.

The proposed Project would develop 243 residential units, 8 live/work units, and 76,046 square feet of commercial space on an approximately 5.85 acre (255,000 square feet) site within the City. The proposed Project is located on undeveloped land in an urbanized area where surrounding land

uses are predominantly commercial and residential. The proposed commercial developments under the proposed Project include restaurant, retail, café, fitness center, and a market. Additionally, proposed Project development includes open space/landscape use; in between the two plazas would be a 33,543 square foot central park area (23,218 square foot central park and 10,325 square foot central plaza) with expansive landscaping and outdoor seating areas; and a 24,280 square foot secondary plaza with landscaped and hardscape areas would surround the perimeter of the entire Project Site. The City has identified a community park as a City need. Therefore, Project developments would allow for an immediate and efficient benefit to the neighborhood and the City at large.

As discussed in Section 3.11, *Population and Housing*, of this Draft EIR, the Project's 251 total residential units and 76,046 square feet of commercial uses would result in 804 new residents and 171 new employees within the Project Site. The analysis therein determined that based on the proposed Project's contributions to population, housing, and employment compared to the growth projections for the City in SCAG's 2016 RTP/SCS for both the Project's fully operational year (2023) and the 2016 RTP/SCS horizon year (2040), the proposed Project would not induce unplanned substantial population growth in the area directly through the development of new housing and employment opportunities.

The Project would propose an infill development located in an urban area with an established infrastructure system, would include necessary infrastructure improvements, including upgrading water, stormwater management, and energy (e.g., electrical facilities, natural gas, and telecom lines) systems. While the proposed Project would generate an increase in population, housing, and employment, which would lead to increased demand on infrastructure to serve the Project Site and the surrounding area, the proposed Project would link with and tie into existing infrastructure. New infrastructure that would be required, such as service connections to local water and sewer network and electricity and natural gas utilities would be sized and undergrounded where appropriate to serve the proposed Project's needs. Project operation would modify access (e.g., turn lanes, signalization) from the streets, but these implementations would represent improvements that would not induce substantial unplanned growth indirectly through the extension of roads or other infrastructure. As there are limited isolated opportunities for growth and redevelopment in the City, the Project, which would assist with the City's growth projections over the long term, would not lead to other off-site induced growth. Based on the above, the proposed Project would not foster growth-inducing impacts.

5.4 Environmental Effects Found Not to be Significant

CEQA Guidelines Section 15128 requires that an EIR shall contain a brief discussion stating the reasons why various possible significant effects of a project were determined not to be significant and are therefore not discussed in detail in the EIR. In accordance with the CEQA Guidelines, this section discusses the environmental issue areas where impacts were found to not be significant. These discussions address the CEQA Guidelines Appendix G Checklist questions for the following environmental topic areas: agricultural and forest resources, biological resources, mineral resources, and wildfire.

5.4.1 Agricultural and Forest Resources

The Project Site is characterized by urban development. While it formerly operated as a nursery, those uses are no longer present on site, and it was not designated as an agricultural use by the City. There are no agricultural uses within or immediately adjacent to the Project Site. The National Resource Conservation Service (NRCS) mapped soils within Los Angeles County, where the Project Site is located; however, no soils in the area have been designated as agricultural soils (NRCS, 2016). The California Department of Conservation's Farmland Mapping and Monitoring Program does not designate the Project Site or surrounding sites as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Department of Conservation, 2016a).

Similarly, the Project Site is not included in mapping for Williamson Act contracts. As such, no lands under a Williamson Act contract are on or near the Project Site (California Department of Conservation, 2016b). According to a historical assessment prepared for the proposed Project, there have been no known agricultural uses on site. Historically, the Project Site was without any buildings in 1925 until 1938 where the site showed three existing greenhouse buildings. Because there are no identified historical or current agricultural resources within the Project Site, no direct or indirect impacts on agricultural resources would occur from implementation of the proposed Project.

The proposed Project would not be located on land zoned as forest land or timberland. As discussed, the Project Site has not been designated as Prime Farmland, nor does the proposed Project conflict with an existing Williamson Act contract. As a result, no land within the Project Site would be converted to non-forest or nonagricultural use and no impact would occur.

5.4.2 Biological Resources

The proposed Project would have no impact on biological resources, as further described below. The Project Site is located in an urban area on vacant land with no present structures. The Project Site previously contained vacant greenhouses and associated structures, which were burned down by an act of arson in 2018. The fire left the Project Site severely burned and in damaged condition, with a large amount of debris that has since been removed and cleaned, and without any existing structures. A row of planted king palm trees that were formerly part of the nursery are located in the southeastern part of the Project Site (Arbor Culture LLC, 2018). The King palms would not be the best candidates for relocation due to their drought stressed conditions and species' sensitivity to root disturbance necessary to relocate. However, an effort would be made to either relocate the palm trees within the Project Site as feasible. The existing trees on the Project Site could provide suitable nesting habitat for avian species protected under the Migratory Bird Treaty Act (MBTA). Project construction activities and tree maintenance activities should occur outside of the general avian breeding season of February 1st to through August 31st to the extent feasible. If Project-related construction, demolition, and tree maintenance activities cannot occur outside of the general avian breeding season (February 1st to through August 31st), a pre-activity nesting bird survey shall be conducted prior to the onset of the aforementioned activities, within a maximum of 14 days prior to commencement. The survey shall be conducted by a qualified biologist. The survey shall be conducted within all suitable nesting habitat located within the area of activity, which includes a 250-foot survey buffer around the activity site to account for all potentially nesting birds on and in

the immediate vicinity. If no nesting birds are found, the Project-related activities may commence without potential impacts to nesting birds. The Project Site does not contain habitat which would support special-status or wildlife species, nor does it contain riparian habitat or natural community, as it has been heavily disturbed, burned, and subsequently cleared. Therefore, implementation of the proposed Project would have no impact on habitats, sensitive species, migratory songbirds and raptors protected by the MBTA, or any native resident or migratory fish or wildlife species or established migratory wildlife corridor.

Additionally, the Project Site does not include any discernable drainage courses, inundated areas, wetland vegetation, or hydric soils and thus does not include U.S. Army Corps of Engineers jurisdictional drainages or wetlands (ArcGIS, 2020). Therefore, the proposed Project would have no impact to Federally or state protected wetlands as defined by Section 404 of the Clean Water Act.

The proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance because the City does not have any local policies or ordinances that are applicable to the proposed Project. Additionally, the proposed Project includes a decorative walkway that enters the central park from S. Gladys Avenue and is lined with a grove of juniper trees leading to a water feature. The juniper grove would consist of trees relocated from along S. San Gabriel Boulevard and incorporated into the central park as a tribute to the history of the property's past use as the cultivation grounds for the San Gabriel Nursery.

The City does not have an adopted Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). There are no approved local, regional, or State habitat conservation plans (CDFW, 2017). Therefore, the proposed Project would have no impact to an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. No impact would occur.

5.4.3 Mineral Resources

A geologic evaluation was prepared for the Project Site, which stated that mineral resources are not considered present within the Project Site. There are no known mineral resources of statewide or regional importance located within the Project Site (Geosyntec, 2018). No known historical mining occurred on the Project Site or surrounding area. There are no active mines or mining districts near the Project Site. Los Angeles County contains several mining activities that result in the production of gypsum, clay, sand and gravel, titanium minerals, crushed stone, as well as other mineral resources (California Department of Conservation et al, 2004). The proposed Project would not result in the loss of availability of a known mineral resource.

There are no known mineral resource recovery sites of local importance within the Project Site (California Department of Conservation, 2020). As there are no mineral resource recovery sites and no mineral resources on the Project Site, there would be no expected impacts to mineral resources related to the loss of availability of a known locally important mineral resource recovery site. The proposed Project would not be expected to result in the loss of availability of a locally important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan.

5.4.4 Wildfire

The undeveloped Project Site is located in an urbanized area surrounded by development, with no natural vegetation that could serve as a fuel source. There are no state responsibility areas (California Board of Forestry and Fire Protection, 2020) or lands classified as very high fire hazard severity zones (County of Los Angeles, 2020) on or near the Project Site. In combination with the fact that there are no undeveloped areas prone to wildfire in this developed urban area, and because the Project Site is not located near state responsibility areas or lands classified as very high fire hazard severity zones, development of the proposed Project would not have any impacts related to wildfire, including: substantially impairing and adopted emergency response plan or emergency evacuation plan; exposing occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; exacerbating a fire risk or result in temporary ongoing impacts to the environment; and exposing 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.

5.5 References

Arbor Culture LLC, 2018. Observations and comments regarding trees located at 700-800 San Gabriel Blvd.

ArcGIS, 2020. Los Angeles County Drainage Area Flood Control Map.

California Board of Forestry and Fire Protection, 2020. Los State Responsibility Area Viewer. Available at: https://bofdata.fire.ca.gov/projects-and-programs/state-responsibility-area-viewer/. Accessed January 8, 2020.

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