Alexan Mixed-Use Development Project
Draft Environmental Impact Report

State Clearinghouse No. 2021070271

Prepared for:

City of Arcadia
240 W. Huntington Drive
Arcadia, California 91007

Prepared by:

DUDEK
38 North Marengo Avenue
Pasadena, California 91101

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Executive Summary

The purpose of the Executive Summary for this Draft Environmental Impact Report (EIR) is to provide a brief summary of the proposed Alexan Mixed-Use Development Project (Project), its environmental consequences, mitigation measures, and alternatives to the Project. Per the requirements of Section 15123 of the State California Environmental Quality Act (CEQA) Guidelines, a summary shall identify:

(1) Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect (see Section ES.4 and ES.5);

(2) Areas of controversy known to the Lead Agency including issues raised by agencies and the public (see Section ES.6)

(3) Issues to be resolved including the choice among alternatives and whether or how to mitigate significant effects (see Section ES.6)

ES.1 Introduction

This Draft Environmental Impact Report (EIR) has been prepared by the City of Arcadia (City) to evaluate potential environmental effects that would result from implementation of the proposed Project. This Draft EIR has been prepared in conformance with the California Environmental Quality Act of 1970 (CEQA) statutes (California Public Resources Code Section 2100 et seq., as amended) and its implementing guidelines (California Code of Regulations [CCR] Title 14, Section 15000 et seq.). The proposed Project constitutes a "project" as defined in the CEQA Guidelines Section 15378. Pursuant to Section 15367 of the State CEQA Guidelines, the City of Arcadia is the lead agency for the Project.

The Project site includes four parcels that total 2.95 gross acres. The Project site is currently occupied by a 2-story office building, two single-story commercial buildings, and surface parking. The Project site also contains an existing 8-story office building and single-story bank drive through within APN 5773-006-036, which would remain in place. The proposed Project involves the demolition of existing structures, including a 2-story office building, two single-story commercial buildings, and surface parking. The Project proposes to construct a seven-story multi-family residential building, containing a total of 319 dwelling units.

CEQA requires the preparation of an EIR for any project that a lead agency determines may have a significant impact on the environment. CEQA also establishes mechanisms whereby the public and decision makers can be informed about the nature of the project being proposed and the extent and types of impacts that the project and its alternatives would have on the environment, if they were to be implemented.

The basic purposes of CEQA are as follows (14 CCR 15002):

1. Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities;
2. Identify the ways that impacts to the environment can be avoided or significantly reduced;
3. Prevent significant, avoidable impacts to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
4. 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.

In compliance with CEQA, this Draft EIR has been prepared to analyze the potential environmental impacts that may result from implementation of the proposed Project. This Draft EIR identifies feasible mitigation measures and/or alternatives that would minimize or eliminate the potential significant impacts associated with the Project. This Draft EIR evaluates potential environmental impacts associated with implementation of the Project and provides information regarding short-term, long-term, direct, indirect, and cumulative environmental effects of the Project. The Draft EIR must allow the City, responsible agencies, and other interested parties, to evaluate the environmental impacts of Project implementation and the environmental consequences of Project implementation, thereby enabling them to make informed decisions regarding the requested entitlements.

The following is a summary of discretionary actions the City of Arcadia will consider:

- Certification of Environmental Impact Report
- Minor Use Permit No. MUP 21-08
- Architectural Design Review No. 21-12
- Tentative Parcel Map No. TPM 21-02
- Certification of Demolition No. COD 21-22
- Street Vacation of an Alley

Other permits and approvals are required for Project implementation that are not subject to discretionary review, but nevertheless require actions by the applicant and/or the City to obtain the necessary approvals to implement the proposed Project. Other permits and approvals required, and their respective agency administrators, are listed below:

- **City of Arcadia**
    - Modification to reduce the required parking in conformance with State Density Bonus law
    - Tree Permit
    - Grading/Building permits
- **California Department of Transportation, District 7**
    - Oversized Vehicle Permit
- **California Water Resources Control Board**
    - Coverage under National Pollutant Discharge Elimination System Permit No. CAS000002, General Construction Activity Storm Water Permit and Stormwater Pollution Prevention Plan

ES.2 EIR Document Organization

This Draft EIR is organized into seven chapters, including the Executive Summary. A list of the Draft EIR chapters and a brief description of their contents is provided below to assist the reader in locating information.

Executive Summary: This chapter provides a summary of the Project description, Alternatives to the proposed Project, environmental impacts, mitigation measures, and determination of significance.

Chapter1, Introduction: This chapter briefly discusses the purpose of the Draft EIR, provides an overview of the purposes of a Specific Plan, and provides a summary of the relevant CEQA Guidelines that govern the preparation of this EIR. This chapter summarizes the scoping period and the comments received by the City on the Notice of Preparation (NOP) during the scoping process.

Chapter 2, Environmental Setting: In accordance with Section 15125 of the State CEQA Guidelines, this chapter includes a description of the physical environmental conditions of the Project site and vicinity, which will constitute as the baseline physical conditions. This chapter provides an overview of the regulatory setting and a discussion of related projects considered in the cumulative impact analysis.

Chapter 3, Project Description: In accordance with Section 15124 of the State CEQA Guidelines, this chapter outlines the City's underlying purpose and objectives for the Project; includes a summary of the components of the Specific Plan; and discusses a potential Maximum Buildout Scenario for the City's portion of the Inglewood Oil Field allowed within the parameters of the Specific Plan. A discussion of discretionary actions needed to approve the Project and a list of other public agencies expected to use the EIR in their decision making are also included.

Chapter 4, Introduction to Environmental Analysis: This chapter contains Section 4.1, Aesthetics, through Section 4.15, Utilities and Service Systems. Each section includes the following: existing conditions of the Project site and vicinity, identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures (if any), level of significance after mitigation, and references. Chapter 4 includes the following sections:

- Section 4.1, Aesthetics
- Section 4.2, Air Quality
- Section 4.3, Cultural Resources
- Section 4.4, Energy
- Section 4.5, Geology and Soils
- Section 4.6, Greenhouse Gas Emissions
- Section 4.7, Hazards and Hazardous Materials
- Section 4.8, Hydrology and Water Quality
- Section 4.9, Land Use and Planning
- Section 4.10, Noise
- Section 4.11, Population and Housing
- Section 4.12, Public Services and Recreation
- Section 4.13, Transportation
- Section 4.14, Tribal Cultural Resources
- Section 4.15, Utilities and Service Systems

Chapter 5, Other CEQA Considerations: This chapter contains a summary discussion of any significant unavoidable impacts, potential growth-inducing impacts, energy impacts, and any significant irreversible environmental changes

that would be caused by the Project. Additionally, this chapter includes an overview of Agriculture and Forestry Resources, Biological Resources, Mineral Resources, and Wildfire, which were determined by the City to not have the potential to result in any significant effects on the environment.

Chapter 6, Alternatives: Pursuant to Section 15126.6 of the State CEQA Guidelines, this chapter includes an analysis of a reasonable range of feasible alternatives to the Project. Alternatives are analyzed that would feasibly attain most of the basic objectives of the Project, but would avoid or reduce any of the significant effects of the Project. The comparative merits of each alternative are evaluated when compared to the proposed Project, and an environmentally superior alternative is identified in compliance with Section 15126.6(e)(2).

Chapter 7, List of Preparers: This chapter lists the persons who directly contributed to preparation of the Draft EIR.

ES.3 Project Description

ES.3.1 Project Overview

The Project site, which totals approximately 2.95 acres, is located in the City of Arcadia (City) within Los Angeles County, approximately 13 miles east of downtown Los Angeles. The regional points of interest such as Los Angeles County Arboretum and Botanical Gardens and Santa Anita Park (live horse racing) are located near the Project site within the City limits. The City of Sierra Madre is located just north of the City and the City of Monrovia to the east. The City of Temple City is located directly south, and the City of Pasadena and the unincorporated communities of East Pasadena and East San Gabriel are located to the west of the City.

The Project site is located at 150 North Santa Anita Avenue. Regional access to the Project site is provided by the eastbound/westbound Foothill Freeway (Interstate [I-] 210) to the north, with freeway access ramps via Santa Anita Avenue located approximately 0.35-mile from the Project site. The Project site is located approximately 350 feet to the southwest of the Los Angeles County Metropolitan Transportation Authority (Metro) L Line (formerly Gold Line) Arcadia Station, which is located near the intersection of Santa Clara Street and First Avenue. Direct access to the Project site is currently provided by Santa Clara Street on the north, Santa Anita Avenue on the west, and Wheeler Avenue on the south. Figure 2-1, Regional Location and Vicinity Map, included in Chapter 2, Environmental Setting, of this Draft EIR, provides the Project boundaries in the context of the surrounding community and jurisdictions.

Figure 3-1, Conceptual Site Plan, identifies the Project site's existing conditions with the proposed development overlaid. Under existing conditions, commercial and office space as well as associated surface parking occupy the Project site. The proposed Project would demolish a 2-story office building, demolish two single-story commercial buildings, and demolish the existing surface parking on site to construct a 7-story multi-family residential building with 319 units. The existing 8-story office building, an associated single-story brick building, as well as the single-story bank drive through would remain in place. An interior renovation is planned within the existing 8-story office building to accommodate an approximately 750 square feet conversion of the southern building footprint from a lobby to a café. Currently, there is a coffee station in the lobby of the 8-story building, which would be removed. The construction of the proposed 7-story multi-family residential building would result in a mixed-use development on the Project site. As such, the proposed Project is consistent and permitted by the site's General Plan land use designation of "Downtown Mixed Use" and a zoning designation of Downtown Mixed Use (DMU). The environmental impact assessments contained in Section 4.1 through Section 4.15 of this Draft EIR are focused on the

environmental impacts associated with redevelopment of the Project site and off-site components required to implement the Project.

The Project site's total floor area would be 350,875 square feet, consisting of the proposed seven story residential building and three existing buildings to be preserved on-site. Floor area ratio (FAR) is calculated by dividing the net maximum development capacity by the developable parcel square footage. The City's General Plan Downtown Mixed Use (DMU) land use designation allows for a maximum FAR of 1.0; however, only commercial square footage is considered in the calculation of the FAR. With an existing 83,253 square feet of commercial uses and an additional 9,281 square feet of "work" uses[1] from the proposed live-work units, the total non-residential square footage on site would be 92,534 square feet. As such, the Project's FAR is 0.72[2], which is consistent with the DMU restrictions.

ES.3.2 Project Objectives

CEQA Guidelines Section 15124 requires an EIR to include a statement of objectives sought by the Project. The objectives assist the City in developing a reasonable range of alternatives to be evaluated in the EIR. The Project objectives also aid decision makers in preparing Findings of Fact and a Statement of Overriding Considerations, if necessary. The statement of objectives also is to include the purpose of a project and may discuss a project's benefits. The Project's specific objectives are as follows:

1. To efficiently develop currently under-utilized property within a Transit Priority Area into a mixed-use, high-density, urban development that provides convenient access to alternative forms of transportation, including bicycling, bus lines and the Metro L (Gold) Line light-rail station.

2. To provide new multifamily residential housing, including affordable housing, that helps meet the City's Regional Housing Needs Allocation (RHNA) requirements.

3. To provide compact, mixed-use development in Downtown Arcadia within an established Land Use Focus Area to further facilitate the City as "a destination stop on the L (Gold) Line".

4. To facilitate development that is consistent with the existing Downtown Mixed-Use zoning and land use designation.

5. To promote pedestrian connectivity within the Downton Mixed-Use area and to the Metro L (Gold) Line Station by integrating plazas, paseos, and attractive landscaping into Project design.

6. To encourage building design that creates a cohesive, vibrant look in Downtown Arcadia and that minimizes the appearance of expansive parking lots on major commercial corridors.

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[1] 15,145 square feet is proposed of live-work units. Approximately 9,281 square feet (61%) is designated for "work" (i.e., Office) and 5,864 square feet (39%) is designated for "live" (i.e., Residential).

[2] The total of 83,253 square feet of existing commercial/office uses + 9,281 square feet of "live" space = 92,534 square feet. The Project site has a total lot area of 128,510 square feet. Therefore, 92,534/128,510 = 0.72 FAR

7. To provide an adequate amount of on-site parking stalls that satisfy the City's Municipal Code Parking Requirements

ES.4 Summary of Environmental Impacts and Mitigation Measures

Table ES-1, Summary of Environmental Impacts and Mitigation Measures, provides a summary of the impact analysis related to the Project. Table ES-1 identifies a summary of the significant environmental impacts resulting from the Project pursuant to State CEQA Guidelines Section 15123(b)(1). For more detailed discussion, please see Chapter 4 of this Draft EIR. Table ES-1 lists the applicable mitigation measures related to potentially significant impacts, as well as the level of significance after mitigation.

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Aesthetics			
Would the project have a substantial adverse effect on a scenic vista?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact	No mitigation measures are required.	Not Applicable
In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project have a cumulative effect on aesthetic resources?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Air Quality			
Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Potentially Significant Impact	No mitigation measures are required.	Not Applicable
Would the project expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant
Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project have a cumulative effect on air quality resources?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Cultural Resources			
Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Potentially Significant Impact	**MM-CUL-1** Prior to commencement of construction activities, an inadvertent discovery clause, written by an archaeologist, shall be added to all construction plans associated with ground disturbing activities and the Project applicant shall retain a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, to prepare a Worker Environmental Awareness Program (WEAP). The WEAP shall be submitted to the City of Arcadia Planning and Community Development department (City) for review and approval. All construction personnel and monitors shall be presented the WEAP training prior to the start of construction activities. The WEAP shall be prepared to inform all personnel working on the proposed Project about the archaeological sensitivity of the area, to provide specific details on the kinds of archaeological materials that may be identified during construction, to explain the importance of and legal basis for the protection of significant archaeological resources, and to outline the actions to be taken in the event of a discovery of cultural resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor.	Less Than Significant

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		The WEAP shall require that a qualified archaeologist be retained and on-call to respond to and address any inadvertent discoveries identified during initial excavation in native soils, which underly the 2-4 feet below ground surface (bgs) of artificial fill soils. As it pertains to archaeological monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by project-related construction. If potential archaeological resources (i.e., sites, features, or artifacts) are exposed during construction activities for the proposed Project, the City shall be notified and all construction work occurring within 50 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted. The archaeologist shall be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5[f]; PRC, Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan and data recovery, may be warranted. The archaeologist shall also be required to curate any discovered specimens in a repository with permanent retrievable storage and submit a written report to the City of Arcadia for review and approval prior to occupancy of the first building on the site. Once approved, the final report shall be filed with the South Central Coastal Information Center (SCCIC).	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project have a cumulative effect on cultural resources?	Potentially Significant Impact	**MM-CUL-1**	Less Than Significant
Energy			
Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project have a cumulative effect on energy resources?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Geology and Soils			
Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			
i. Rupture of a known earthquake fault, as	No Impact	No mitigation measures are required.	Not applicable.

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?			
ii. Strong seismic ground shaking?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
iii. Seismic related ground failure including liquefaction?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
iv. Landslides?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project result in substantial soil erosion or the loss of topsoil?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially Significant Impact	**MM-GEO-1** Prior to commencement of any grading activity on-site, the Applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the Project. The PRIMP shall be consistent with the SVP (2010) guidelines and shall outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the Project area based on construction plans and/or	Less Than Significant

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The qualified paleontologist shall attend the preconstruction meeting and a paleontological monitor shall be on-site during all rough grading and other significant ground-disturbing activities in previously undisturbed, Pleistocene alluvial deposits. These deposits may be encountered at depths as shallow as 5-10 feet below ground surface. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find.	
Would the project have a cumulative effect on geology and soils resources?	Potentially Significant Impact	**MM-GEO-1**	Less Than Significant
Greenhouse Gas Emissions			
Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
the emissions of greenhouse gases?			
Would the project have a cumulative effect on greenhouse gas emissions?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Hazards and Hazardous Materials			
Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Potentially Significant Impact	**MM-HAZ-1** Prior to the issuance of a demolition permit, the Project applicant/developer or their designated contractor shall ensure that the demolition contractor's contract specifications incorporate abatement procedures for the removal of materials containing asbestos, as identified in previous surveys, and identification and removal of polychlorinated biphenyls, hazardous material, hazardous wastes, and universal waste items. All abatement work shall be done in accordance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District. Confirmation of adequate removal of such materials shall be provided to the City prior to the issuance of a building permit.	Less Than Significant
Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the	Potentially Significant Impact	**MM-HAZ-1 (see above)** **MM-HAZ-2** Prior to the issuance of a grading permit, the Project applicant/developer or their designated contractor shall prepare a soil management plan (SMP) that outlines the proper screening, handling, characterization, transportation, and disposal	Less Than Significant

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
release of hazardous materials into the environment?		procedures for contaminated soils on site. The SMP shall include health and safety and training procedures for workers who may come in contact with contaminated soils. The health and safety procedures shall also include periodic breathing zone monitoring and monitoring for VOCs using a handheld organic vapor analyzer and include required actions to be taken if concentrations of VOCs exceed applicable screening levels for health and safety of onsite workers. The SMP will be based on the findings of the Soil and Soil Vapor Investigation prepared for the Project, will outline areas of known or suspected soil contamination, and will be implemented by the applicant or their designated contractor for all confirmed and suspected contaminated soils which require excavation and offsite disposal. Contaminated soil shall be managed and disposed of in accordance with applicable federal, state, and local regulations. MM-HAZ-3 Prior to the issuance of a grading permit, vapor mitigation design features shall be implemented in accordance with the Department of Toxic Substances Control (DTSC) Vapor Intrusion Mitigation Advisory for all future residential buildings and enclosed structures. The construction contractor shall incorporate vapor mitigation design features into building plans that reduce potential vapor intrusion in buildings and enclosed structures on the Project site below DTSC Screening Levels. Vapor mitigation systems may be passive or active in nature, so long as they are designed to prevent vapor contamination on the Project site in accordance with applicable DTSC regulations at the time the systems are designed. Vapor mitigation systems must be reviewed and approved by the permitting agency(ies) (City of Arcadia, County of Los Angeles) prior to construction and prior to issuance of certificate of occupancy. Operation of the Project shall maintain functionality of these features as required to continue	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		protection from vapor intrusion. Following completion of construction and occupancy of the buildings, indoor air monitoring will occur semiannually for one year to verify implemented measures are functioning properly and adequately mitigating vapor intrusion to below residential DTSC Screening Levels. Results shall be submitted to the City of Arcadia for confirmation of the adequacy of the designed systems. If indoor air samples reveal vapor intrusion occurring at levels above applicable DTSC Screening Levels, modifications shall be made, as necessary, to the designed system to improve the efficacy in reducing vapor intrusion to below applicable screening levels.	
Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?			
Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project have a cumulative effect on hazards or hazardous materials?	Potentially Significant Impact	**MM-HAZ-1 (see above)** **MM-HAZ-2 (see above)** **MM-HAZ-3 (see above)**	Not Applicable
Hydrology and Water Quality			
Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	–	–	–
i. result in substantial erosion or siltation on or off site;	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
drainage systems or provide substantial additional sources of polluted runoff; or			
iv. impede or redirect flood flows?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project have a cumulative effect on hydrology or water quality resources?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Land Use and Planning			
Would the project physically divide an established community?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted	Less than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
for the purpose of avoiding or mitigating an environmental effect?			
Would the project have a cumulative effect on land use resources?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Noise			
Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
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	No Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
in the project area to excessive noise levels?			
Would the project have a cumulative effect on noise resources?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Population and Housing			
Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project have a cumulative effect on housing and/or population resources?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Public Services and Recreation			
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:			

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Fire protection?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Police protection?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Schools?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Parks?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Other public facilities?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might	Less than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
have an adverse physical effect on the environment?			
Would the project have a cumulative effect on public services and recreation resources?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Transportation			
Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project result in inadequate emergency access?	Potentially Significant Impact	**MM-TRA-1** Prior to the issuance of demolition or grading permits, the Project applicant/developer shall develop and implement a City-approved Construction Traffic Control Plan. The Plan shall be prepared in accordance with applicable City guidelines and shall address the potential for construction-related vehicular traffic, as well as pedestrian and bicycle circulation disruption in the public right-	Less Than Significant

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		of-way. The Plan shall describe safe detours and shall include protocols for implementing the following: temporary traffic controls (e.g., a flag person during heavy truck traffic for soil export) to maintain smooth pedestrian and traffic flow; dedicated on-site turn lanes for construction trucks and equipment leaving the site; scheduling of peak construction truck traffic that affects traffic flow on the arterial system to off-peak hours; consolidation of truck deliveries; and/or rerouting of construction trucks away from congested streets or sensitive receptors.	
Would the project have a cumulative effect on transportation resources?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Tribal Cultural Resources			
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	–	–	–

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	Less than Significant Impact	No mitigation measures are required.	Less Than Significant
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	Potentially Significant Impact	**MM-TCR-1** The project applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation ("Tribe" or "Kizh"). The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. "Ground-disturbing activity" refers to ground disturbance occurring from 1 foot above native soils and below, and it does not include movement of sediments after they have been initially disturbed or displaced by current Project-related construction. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.	Less Than Significant

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe. On-site tribal monitoring shall conclude upon the earlier of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant or lead agency that all ground-disturbing activities as defined in TCR-1.A and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant or lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs. Upon discovery of any Kizh TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the Kizh recovers and retains all discovered Kizh TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes. The Tribe shall have up to 48 hours to recover and retain any discovered Kizh TCRs, after which time construction activities in the immediate vicinity of the discovery may continue.	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-TCR-2 Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. In accordance with Health and Safety Code Section 7050.5, any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed. Consistent with California Public Resources Code section 5097.98(d)(2), any items associated with the human remains that are placed or buried with the Native American human remains are to be treated in the same manner as the remains, but do not by themselves constitute human remains. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-TCR-3 If the Tribe is designated by the Native American Heritage Commission ("NAHC") as the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. Accordingly, if the Tribe is designated as the MLD for discovered human remains, the prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials. If the Tribe is designated by the NAHC as the MLD, the following condition will apply: If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created. If the Tribe is designated by the NAHC as the MLD, the following condition will apply: In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. If the Tribe is designated by the NAHC as the MLD, the following condition will apply: In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. If the Tribe is designated by the NAHC as the MLD, the following condition will apply: Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. Where the Tribe is designated as the MLD, the site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered. If the Tribe is designated by the NAHC as the MLD, the following condition will apply: The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		include (at a minimum) detailed descriptive notes and sketches. All data recovery and data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.	
Would the project have a cumulative effect on tribal cultural resources?	Potentially Significant Impact	**MM-TCR-1 (see above)** **MM-TCR-2 (see above)** **MM-TCR-3 (see above)**	Less Than Significant
Utilities and Service Systems			
Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project have a cumulative effect on utilities and/or service systems resources?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

ES.5 Summary of Project Alternatives

CEQA requires that Environmental Impact Reports (EIRs) "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" (14 CCR 15126.6[a]). The CEQA Guidelines direct that the selection of alternatives be governed by "a rule of reason" (14 CCR 15126.6[a] and [f]).

As presented in this Draft EIR, the Project would not result in significant and unavoidable impacts after implementation of all mitigation measures. This Draft EIR includes the analysis of two alternatives to the proposed Project:

- Alternative A – No Project/Existing Development
- Alternative B – Increased Commercial-Use Alternative: Conversion of Live/Work Units to Commercial

E.S.5.1 Alternative A - No Project/Existing Development

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate the specific alternative of "no project" along with its impact. As stated in this section of the CEQA Guidelines, the purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving a proposed project. As stated in Section 15126.6(e)(3)(A), when a project is the revision of an existing land use or regulatory plan or policy or an ongoing operation, the no project alternative will be the continuation of the plan, policy, or operation into the future. Section 15126.6(e)(3)(B) further states that "in certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained." The proposed Project does not include a General Plan Amendment or a Zone Change. Accordingly, Alternative A assumes the proposed Project would not proceed, no new permanent development or land uses would be introduced within the Project site, and the existing environment would be maintained. The existing uses would continue to operate as they do currently. The existing office and commercial uses would remain in place and operational, the existing surface parking lots would be retained, no new buildings or subterranean parking would be constructed, and no on-site landscaping improvements or pedestrian connections would occur. Additionally, all 36 onsite trees, including six (6) protected species under Section 9110.01 of the City's Tree Preservation Ordinance, would be preserved under this alternative, and none of the nine (9) Project adjacent street-trees would be encroached upon.

E.S.5.2 Alternative B – Increased Commercial-Use Alternative: Conversion of Live/Work Units to Commercial

CEQA requires that EIRs "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" (14 CCR 15126[a]).

As presented in prior sections of this EIR, the Project would not result in significant and unavoidable impacts after implementation of all mitigation measures. Therefore, Alternative B considers an alternative design that would not substantively alter the environmental impacts of the proposed Project, but would potentially improve the Project's

consistency with local policies related to increasing density near transit, and provide more employment-generating uses.

As stated in Section 4.9, Land Use and Planning, the Downtown Mixed Use (DMU) land use designation permits service and retail uses, commercial businesses, professional offices, and residential uses within the City's downtown, at a maximum floor area ratio (FAR) of 1.0 (in which only commercial square footage is counted in calculation of FAR) and a maximum unit density of up to 80 dwelling units per acre (City of Arcadia 2018). The proposed Project satisfies the allowable 80 dwelling units per acre (i.e., 236 units on the 2.95-acre site), and with addition of the 35% density bonus under Density Bonus Law, the Project proposes a dwelling unit count to 319 total units, which would include 293 market-rate and 26 affordable dwelling units. Alternative B proposes a slight adjustment to this unit count by converting the 8 live-work units to all-commercial, without altering the 26 affordable units, resulting in a total of 311 units.

The purpose of converting these live-work units to all-commercial would be to increase the amount of employment-generating commercial uses on the Project site. Under the proposed Project, with the existing 83,253 square feet of commercial uses and the additional 9,281 square feet of "work" uses[3] from the proposed live-work units, the total non-residential square footage on site would be 92,534 square feet, resulting in a FAR of 0.72[4]. Under Alternative B, as demonstrated in Table 6-1, Alternative B, Project Land Use Summary, the conversion of 5,864 square feet from residential to commercial would increase the FAR to 0.77.

Alternative B would generate residents associated with the 311 units and employment associated with construction of the 15,145 square feet of commercial use, which is 5,864 square feet more than the proposed Project and would generate an additional approximately 14 employees. Under Alternative B, due to the increased commercial square footage, the number of potential employees would increase from 30 under the proposed Project (a net deficit of 20 employees when compared to the existing conditions- See Table 4.11-8 in Section 4.11, Population and Housing), to 44 under Alternative B (a net deficit of 6 employees when compared to the existing conditions).

As required under CEQA Guidelines Section 15126.6(e)(2), if the environmentally superior alternative is the "no project" alternative, the EIR must also identify an environmentally superior alternative among the other alternatives. The proposed Project has no significant unavoidable impacts that could be addressed by the adoption of any alternative. Alternative B would have similar environmental impacts when compared to the proposed Project for almost environmental topics and would not eliminate the need for any proposed mitigation measures. Alternative B would result in slightly increased impacts associated with Air Quality and Greenhouse Gas Emissions, and result in slightly decreased impacts associated with Population and Housing. Therefore, because Alternative B would not reduce or eliminate any of the significant impacts of the proposed Project, the proposed Project would be the environmentally superior alternative.

[3] 15,145 square feet is proposed of live-work units. Approximately 9,281 square feet (61%) is designated for "work" and 5,864 square feet (39%) is designated for "live".

[4] The total of 83,253 square feet of existing commercial/office uses + 9,281 square feet of "live" space = 92,534 square feet. The Project site has a total lot area of 128,510 square feet. Therefore, 92,534/128,510 = 0.72 FAR

ES.6 Areas of Known Controversy/Issues to be Resolved

A Notice of Preparation for this EIR was released on July 19, 2021, beginning the 30-day public scoping period for the EIR (Appendix A-1). During the public scoping period, input is obtained from public agencies and the general public regarding the environmental issues and concerns that may potentially result from the proposed Project. Comments on the NOP were received from three agencies and three letters/emails were received from individuals or groups, which are provided in Appendix A-2. The City hosted one Scoping Meeting that was held on August 5, 2021 from 6 p.m. to 7 p.m. At the conclusion of the presentation, attendees of the webinar were able to provide comments and questions about the proposed Project to the City, the applicant, and the CEQA Consultant during the questions and answers portion of the meeting. The City received no comments/questions with environmental concerns during the Scoping Meeting.

The primary areas of controversy identified by the public and agencies included the following potential issues (the Draft EIR section that addresses the issue raised is provided in parentheses):

- Potential for impacts due to building massing and residential density (Section 4.1, Aesthetics, Section 4.9, Land Use, and Section 4.11)
- Potential for air pollution (Section 4.2, Air Quality)
- Potential impacts from operational noise and vibration (Section 4.10, Noise)
- Potential for increased traffic (Section 4.13, Transportation)

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1 Introduction

The purpose of this section is to introduce the proposed Alexan Mixed-Use Development Project (Project), the applicable environmental review procedures, and the organization of the Draft Environmental Impact Report (EIR).

1.1 CEQA Overview and Purpose of an EIR

This Draft Environmental Impact Report (EIR) has been prepared by the City of Arcadia (City) to evaluate potential environmental effects that would result from implementation of the proposed Project. This Draft EIR has been prepared in conformance with the California Environmental Quality Act of 1970 (CEQA) statutes (California Public Resources Code Section 2100 et seq., as amended) and its implementing guidelines (California Code of Regulations [CCR] Title 14, Section 15000 et seq.). The proposed Project constitutes a "project" as defined in the CEQA Guidelines Section 15378. Pursuant to Section 15367 of the State CEQA Guidelines, the City of Arcadia is the lead agency for the Project.

The Project site includes four parcels that total 2.95 gross acres. The Project site is currently occupied by a 2-story office building, two single-story commercial buildings, and surface parking. The Project site also contains an existing 8-story office building and single-story bank drive through within APN 5773-006-036, which would remain in place. The proposed Project involves the demolition of existing structures, including a 2-story office building, two single-story commercial buildings, and surface parking. The Project proposes to construct a seven-story multi-family residential building, containing a total of 319 dwelling units.

CEQA requires the preparation of an EIR for any project that a lead agency determines may have a significant impact on the environment. According to Section 21002.1(a) of CEQA:

> The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided.

CEQA also establishes mechanisms whereby the public and decision makers can be informed about the nature of the project being proposed and the extent and types of impacts that the project and its alternatives would have on the environment, if they were to be implemented.

The basic purposes of CEQA are as follows (14 CCR 15002):

1. Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities;
2. Identify the ways that impacts to the environment can be avoided or significantly reduced;
3. Prevent significant, avoidable impacts to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
4. 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.

This Draft EIR was prepared in accordance with Section 15151 of the State CEQA Guidelines, which defines the standards for EIR adequacy as follows:

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

A detailed description of the proposed Project is provided in Chapter 3, Project Description, of this Draft EIR, which includes a listing of the discretionary actions that must be considered by the City and other responsible agencies. This Draft EIR is intended to serve as a Project EIR under CEQA. Section 15161 of the CEQA Guidelines states that a Project EIR should focus primarily on changes in the environment that would result from development of the project. A Project EIR must examine all phases of a project, including planning, construction and operation. This Project EIR is intended to provide the environmental information necessary for the City to make a final decision on the requested discretionary actions to be considered as part of the proposed Project. This Draft EIR is also intended to support discretionary reviews and decisions by other agencies.

1.2 Organization of this EIR

This Draft EIR is organized into seven chapters, including the Executive Summary. A list of the Draft EIR chapters and a brief description of their contents is provided below to assist the reader in locating information.

Executive Summary: This chapter provides a summary of the Project description, Alternatives to the proposed Project, environmental impacts, mitigation measures, and determination of significance.

Chapter1, Introduction: This chapter briefly discusses the purpose of the Draft EIR, provides an overview of the purposes of a Specific Plan, and provides a summary of the relevant CEQA Guidelines that govern the preparation of this EIR. This chapter summarizes the scoping period and the comments received by the City on the Notice of Preparation (NOP) during the scoping process.

Chapter 2, Environmental Setting: In accordance with Section 15125 of the State CEQA Guidelines, this chapter includes a description of the physical environmental conditions of the Project site and vicinity, which will constitute as the baseline physical conditions. This chapter provides an overview of the regulatory setting and a discussion of related projects considered in the cumulative impact analysis.

Chapter 3, Project Description: In accordance with Section 15124 of the State CEQA Guidelines, this chapter outlines the City's underlying purpose and objectives for the Project; includes a summary of the components of the Specific Plan; and discusses a potential Maximum Buildout Scenario for the City's portion of the Inglewood Oil Field allowed within the parameters of the Specific Plan. A discussion of discretionary actions needed to approve the Project and a list of other public agencies expected to use the EIR in their decision making are also included.

Chapter 4, Introduction to Environmental Analysis: This chapter contains Section 4.1, Aesthetics, through Section 4.15, Utilities and Service Systems. Each section includes the following: existing conditions of the Project site and vicinity, identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures (if any), level of significance after mitigation, and references. Chapter 4 includes the following sections:

- Section 4.1, Aesthetics
- Section 4.2, Air Quality
- Section 4.3, Cultural Resources
- Section 4.4, Energy
- Section 4.5, Geology and Soils
- Section 4.6, Greenhouse Gas Emissions
- Section 4.7, Hazards and Hazardous Materials
- Section 4.8, Hydrology and Water Quality
- Section 4.9, Land Use and Planning
- Section 4.10, Noise
- Section 4.11, Population and Housing
- Section 4.12, Public Services and Recreation
- Section 4.13, Transportation
- Section 4.14, Tribal Cultural Resources
- Section 4.15, Utilities and Service Systems

Chapter 5, Other CEQA Considerations: This chapter contains a summary discussion of any significant unavoidable impacts, potential growth-inducing impacts, energy impacts, and any significant irreversible environmental changes that would be caused by the Project. Additionally, this chapter includes an overview of Agriculture and Forestry Resources, Biological Resources, Mineral Resources, and Wildfire, which were determined by the City to not have the potential to result in any significant effects on the environment.

Chapter 6, Alternatives: Pursuant to Section 15126.6 of the State CEQA Guidelines, this chapter includes an analysis of a reasonable range of feasible alternatives to the Project. Alternatives are analyzed that would feasibly attain most of the basic objectives of the Project, but would avoid or reduce any of the significant effects of the Project. The comparative merits of each alternative are evaluated when compared to the proposed Project, and an environmentally superior alternative is identified in compliance with Section 15126.6(e)(2).

Chapter 7, List of Preparers: This chapter lists the persons who directly contributed to preparation of the Draft EIR.

1.3 Public Review Process

Section 15051 of the State CEQA Guidelines identifies the lead agency as the public entity with the greatest responsibility for carrying out or approving a project as a whole. Arcadia Apartments, LLC applied for the Minor Use Permit and Architectural Design Review along with other applications, to allow for the proposed residential development. As such, the City is serving as the lead agency under CEQA and is responsible for complying with CEQA, as it relates to the environmental review clearance for the Project.

The City, as the lead agency, has determined that an EIR is required for the proposed Project and has authorized the preparation of this Draft EIR. The City will be reviewing and considering the findings of this EIR in its decision to approve, revise, or deny the proposed Project. If adopted, the Alexan Mixed-Use Development Project will also require a Parcel Map, among other discretionary actions described in Chapter 3, Project Description.

Although this Draft EIR was prepared with consultant support, the analysis and findings in this document have been independently reviewed by the City and reflect the City's conclusions, as required by Section 15084 of the State CEQA Guidelines.

1.3.1 Notice of Preparation

The City has complied with the State CEQA Guidelines by providing opportunities for early responsible and trustee agency participation in the environmental review process, as well as opportunity for early public consultation with bordering municipalities and interested organizations and individuals. Specifically, in accordance with Section 15082(a) of the State CEQA Guidelines, the City circulated an NOP for a 30-day public review. The NOP was sent to the State Clearinghouse, public agencies, special districts, responsible and trustee agencies, and other interested parties for a public review period that began on July 19, 2021 and ended on August 19, 2021 (CEQA Public Review and Scoping Period). The purpose of the NOP is to formally convey that the City, as the lead agency, solicited input regarding the scope and proposed content of the Draft EIR.

A notice announcing the availability of the NOP was also published in the Arcadia Weekly on July 14, 2021. Copies of the NOP were made available for electronic download on the City's website at: www.arcadiaca.gov/shape/development_services_department/current_projects.php

The NOP included a description of the Project; identification of potential environmental effects associated with Project approval and implementation; and an invitation to agencies and the public to review and comment on the NOP, which are provided in Appendix A1 of this Draft EIR. Comments on the NOP were received from two State agencies, one regional agency, and two letters/emails from individuals or organizations, which are provided in Appendix A2. The NOP comment letters, which contain environmental concerns, are listed in Table 1-1, along with a summary of the environmental issues raised and the Draft EIR section where the environmental topics are addressed. Only comment letters with environmental concerns are listed in Table 1-1.

Table 1-1. Notice of Preparation and Comment Letters Summary

Sender of Comments	Date Received	General Summary of Comments	Addressed In Section(s)
State Agency			
Native American Heritage Commission (NAHC)	July 23, 2021	NAHC provides recommendations for cultural assessment by contacting the appropriate regional California Historical Research Information System Center; contacting NAHC for Sacred Lands File search and Native American Tribal Consultation List; and consulting legal counsel about compliance with Assembly Bill 52, Senate Bill 18, and other applicable laws.	Section 4.3, Cultural Resources and Section 4.14, Tribal Cultural Resources
California Department of	August 13, 2021	Caltrans notes Senate Bill 743 has codified into CEQA that Vehicle Miles Traveled (VMT) is the standard transportation analysis metric. The comment	Section 4.13, Transportation

Table 1-1. Notice of Preparation and Comment Letters Summary

Sender of Comments	Date Received	General Summary of Comments	Addressed In Section(s)
Transportation (Caltrans), District 7		recommends multi-modal and complete streets transportation elements to promote alternatives to car use. Caltrans also recommends implementation of Transportation Demand Management strategies and Intelligent Transportation System (ITS) applications in order to better manage the transportation network, as well as transit service and bicycle or pedestrian connectivity improvements. The comment encourages the preparation of a traffic safety impact analysis on the State facilities for the Project as a part of the CEQA review process so that, through partnerships and collaboration, California can reach zero fatalities and serious injuries by 2050.	
Regional/Local Agency			
Los Angeles County Sanitation Districts (LACSD)	August 11, 2021	The LACSD offers comments regarding sewage and wastewater services. The comment provides information for existing conditions, generation rates, and capacity. The comment also notes a connection fee is required for payment to LACSD.	Section 4.15, Utilities and Service Systems
Organizations/Individuals			
Downtown Arcadia Improvement Association	July 2, 2021	The association is generally supportive of the proposed Project and notes support for the proposed design, concern for the building's proposed massing and density, concern for parking and traffic, and concern for setbacks on Wheeler Avenue.	Chapter 3, Project Description; Section 4.1, Aesthetics; Section 4.9, Land Use & Planning; and Section 4.13, Transportation.
Margaret Liu	August 8, 2021	The commenter expresses concern for construction and operational noise and vibration, parking, and air quality pollutants (i.e., dust).	Chapter 3, Project Description; Section 4.2, Air Quality; Section 4.10, Noise; and Section 4.13, Transportation
Attorneys for Southwest Regional Council of Carpenters	October 12, 2021 **(Outside of NOP Public Review Period: July 19, 2021 through August 19, 2021)**	The comment requests to be notified for any notice related to the proposed Project. In addition, the comment requests community benefits (e.g., require local hire and skilled and trained workforce, etc.) to reduce environmental impacts (i.e., transportation, air quality, and greenhouse gas emissions, etc.) as well as project design and mitigation recommendations to reduce substantial adverse effects on human beings.	Chapter 3, Project Description; Section 4.2, Air Quality; Section 4.6, Greenhouse Gas Emissions; Section 4.13, Transportation; and Chapter 5, Other CEQA Considerations

1.3.2 Scoping Meeting

Pursuant to Section 21083.9 of the CEQA Statutes and Section 15082(c) of the State CEQA Guidelines, the lead agency is required to conduct at least one scoping meeting for all projects of state-wide, regional, or area-wide significance as outlined in Section 15206 of the State CEQA Guidelines. The scoping meeting is for jurisdictional agencies and interested persons or groups to provide comments regarding, but not limited to, the range of actions, alternatives, mitigation measures, and environmental effects to be analyzed. Rather than conducting an in-person meeting, the Governor's Executive Order N-25-20 allows local governments to hold meetings via teleconferencing while still meeting state transparency requirements. Therefore, the Project's Scoping Meeting was held online, through a webinar type format. The City hosted one Scoping Meeting that was held on August 5, 2021 from 6:00 PM to 7:00 PM. that was made available through the City's website at:
www.arcadiaca.gov/shape/development_services_department/current_projects.php

At the conclusion of the presentation, attendees of the webinar were able to provide comments and questions about the proposed Project to the City, the applicant, and the CEQA Consultant during the questions and answers portion of the meeting. The City received no comments/questions with environmental concerns during the Scoping Meeting.

1.3.3 Public Review of the Draft EIR

Upon completion, the Draft EIR was distributed to responsible and trustee agencies, other affected agencies, bordering municipalities, interested parties, and all parties who requested a copy of the Draft EIR in writing in accordance with CEQA. A notice announcing the availability (Notice of Availability [NOA]) of the Draft EIR was published in the Arcadia Weekly. The 45-day public review period of the Draft EIR begins on Thursday, February 24, 2022 and ends on Monday, April 11, 2022. Comments on the Draft EIR from public agencies (including responsible and trustee agencies), bordering municipalities, interested parties, and the general public will be accepted during the 45-day public review period.

Written comments would need to be received by the City on or before Monday, April 11, 2022 Written comments could be provided via email to lflores@arcadia.gov, or by mail to:

City of Arcadia Planning Division
240 West Huntington Drive
P.O. Box 60021
Arcadia, CA 91066-6021
Attention: Ms. Lisa Flores, Planning and Community Development Administrator
Subject: Alexan Mixed-Use Development

A hardcopy of the Draft EIR is available at the Arcadia Planning Division located at 240 West Huntington Drive, Arcadia, CA 91066 during normal business hours. A hardcopy is also available at the Arcadia Library located at 20 West Duarte Rd, Arcadia, CA 91006 during normal business hours.

The Draft EIR can be viewed or downloaded at the City's website at:
www.arcadiaca.gov/shape/development_services_department/current_projects.php.

1.4 Effects Found Not To Be Significant

As discussed in the NOP, the proposed Project is not anticipated to result in significant impacts to the following topical areas: Agriculture and Forestry Resources, Biological Resources, Mineral Resources, and Wildfire. Nevertheless, these topics are briefly assessed in Chapter 5, Other CEQA Considerations of this Draft EIR. Further, as detailed in Sections 4.1, Aesthetics through 4.15, Utilities and Service Systems, this Draft EIR has concluded that all potential environmental impacts would be either less than significant or be able to be reduced through mitigation measures.

1.5 Mitigation Monitoring Procedures

CEQA Guidelines Section 15097 requires that the mitigation measures and revisions to the proposed Project identified in the EIR are implemented. Therefore, CEQA requires that the lead agency must adopt a program for monitoring or reporting on the required revisions and the measures it has imposed to mitigate or avoid significant environmental effects. The Mitigation Monitoring and Reporting Program for the Project will be completed as part of the Final EIR, prior to consideration of the Project by the City of Arcadia Planning Commission and City Council.

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2 Environmental Setting

2.1 Introduction

Chapter 2 of this Draft Environmental Impact Report (EIR) describes the environmental setting of the proposed Alexan Mixed-Use Project (Project) and provides an overview of the environmental setting and planning context. As stated in California Environmental Quality Act (CEQA) Guidelines Section 15125(a):

> 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 description of the environmental setting shall be no longer than is necessary to provide an understanding of the significant effects of the proposed project and its alternatives. The purpose of this requirement is to give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts.

CEQA requires that the lead agency describe the physical environmental conditions as they exist at the time the Notice of Preparation (NOP) is published, which was made available for public review from July 19, 2020 through August 19, 2021. Conditions at this time were not representative of typical environmental conditions due to the restrictions in place due to the Governor's various Executive Orders related to the COVID-19 pandemic (California, Executive Department State of California [Gavin Newsom]). As stated in CEQA Guidelines Section 15125(a)(1):

> Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a lead agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record.

Therefore, if the environmental baseline conditions set forth in this Draft EIR are different from the conditions at the time of the issuance of the NOP, then the applicable EIR section includes a discussion of the conditions used in the impact analysis.

2.2 Project Location

2.2.1 Regional Location

The City of Arcadia (City) is located in Los Angeles County approximately 13 miles from downtown Los Angeles. The City is considered part of the San Gabriel Valley subregion of the greater Los Angeles metropolitan area. The City is approximately 11 square miles (7,040 acres) (City of Arcadia 2010). Nearby regional points of interest such as Los Angeles County Arboretum and Botanical Gardens and Santa Anita Park (live horse racing) are located near the Project site and within the City limits. The City of Sierra Madre is located to the north; the City of Monrovia is located to the east; the City of Temple City is located to the south; and the City of Pasadena and the unincorporated communities of East Pasadena and East San Gabriel are located to the west of the City.

The Project site is located at 150 North Santa Anita Avenue. Figure 2-1, Regional Location and Vicinity Map, provides a regional location map and the Project boundaries on an aerial photograph to depict the context of the immediately surrounding community. Regional access to the Project site is provided by the eastbound/westbound Foothill Freeway (Interstate [I-] 210) to the north, with the Santa Anita Avenue freeway access ramps located approximately 0.35-mile from the Project site. The I-210 freeway connects the San Gabriel Valley to the Crescenta and San Fernando Valleys to the north/northwest and Pomona Valley to the east. In addition, the I-210 freeway connects to the northbound-southbound San Gabriel River Freeway (I-605), which is located approximately 4 miles east of the Project site.

The Project site is located approximately 360 feet to the southwest of the Los Angeles County Metropolitan Transportation Authority (Metro) L Line (formerly Gold Line) Arcadia Station, which is located near the intersection of Santa Clara Street and First Avenue. Direct access to the Project site is currently provided via Santa Clara Street on the north, Santa Anita Avenue on the west, and Wheeler Avenue on the south.

2.2.2 Surrounding Land Uses

The City contains a diverse mix of land uses, including a mixture of single- and multi-family residential neighborhoods, regional commercial, and office land uses. Figure 2-2, Surrounding and Nearby Land Uses, provides an overview of nearby land uses. Figure 2-3, Project Site General Plan Designation, and Figure 2-4, Project Site Zoning, show the Project site's and surrounding land uses' existing zoning and general plan designations, respectively. The Project site is surrounded by a variety of land uses, as follows:

- **Land Uses to the North**: North of the Project site across Santa Clara Street is a commercial use (REI store) and associated surface parking lot. To the northeast is the Metro L Line Station and associated parking garage. To the northwest is surface parking and commercial land uses. The nearest multi-family residential land use is approximately 0.20-mile to the north and the nearest single-family residential land use is located approximately 0.15-mile to the northwest of the Project site. Current zoning north of the Project site includes Downtown Mixed Use (DMU), General Commercial (C-G), and Commercial Manufacturing (C-M).
- **Land Uses to the East:** Land uses immediately east include a United States Postal Service building and associated surface parking, followed by multi-family residential and commercial uses approximately 200 feet to the east of the Project site. Current zoning east of the Project site includes DMU.
- **Land Uses to the South:** Immediately south of the Project site is a City-owned surface parking lot across Wheeler Avenue, and a medical office complex to the southeast of the Project site. Further south includes various retail and restaurant uses located along Huntington Drive. The nearest multi-family residential land use is located approximately 0.12-mile to the south of the Project site. The Arcadia County Park followed by the Santa Anita Golf Course are located to the southwest of the Project site. Current zoning south of the Project site includes DMU, Central Business District (CBD), and High-Density Residential (HDR).
- **Land Uses to the West:** The Project site is bordered by Santa Anita Avenue to the west. A car dealership, retail, and office land uses, accompanied by surface parking lots, are located across Santa Anita Avenue. Farther east are single-family residences. Current zoning east of the Project site include Regional Commercial (R-C), General Commercial (C-G), Downtown Mixed Use (DMU), and Low Density Residential (R-1).

2.3 Existing Conditions

2.3.1 General Plan and Zoning

Figure 2-3 and Figure 2-4 show the Project site's existing zoning and general plan designations, respectively. As shown in Figure 2-3, the City's General Plan identifies the site as Downtown Mixed Use (DMU). According to the City's General Plan, the DMU designation allows for service and retail uses, commercial businesses, professional offices, and residential uses within the City's downtown, at a maximum floor area ratio (FAR) of 1.0 and a maximum unit density of up to 80 dwelling units per acre (City of Arcadia 2010). The maximum building height allowed within the H8 Height Overlay is 95 feet.

As shown in Figure 2-4, the zoning for the Project site is also DMU (City of Arcadia 2021). City Development Code Section 9102.05.010(C) states that the DMU zone is intended to provide opportunities for complementary service and retail commercial businesses, professional offices, and residential uses located within the City's downtown. A wide range of commercial and residential uses are appropriate, oriented towards pedestrians to encourage shared use of parking, public open space, and interaction of uses within the zone. Residential uses are permitted above ground floor commercial or adjacent to a commercial development. Both uses must be located on the same lot or on the same project site. This zone implements the General Plan Downtown Mixed-Use designation.

2.3.2 Regional Conditions

The site is located in the north-central San Gabriel Valley, approximately 1.0 mile south of the southern flank of the San Gabriel Mountains. The San Gabriel Valley is an alluvium-filled valley bounded by the Sierra Madre Fault Zone and San Gabriel Mountains on the north, by the Puente Hills on the south, by the Covina and Indian Hills on the east, and by the Raymond Basin on the west. The site is not within a state-designated Alquist-Priolo Earthquake Fault Zone. The nearest active earthquake fault is the Raymond Fault, located approximately 0.6 mile to the northwest of the site (Appendix E-1). The site is underlain by artificial fill materials to approximately 4-foot depth below ground surface, with Holocene-age alluvium beneath, comprised of alluvial channel and outwash deposits consisting of silt, sand, and gravel (Appendix E-1). The Project site is not located within a zone of required investigation for either earthquake-induced landslides or for liquefaction (Appendix E-1).

The Project site is at an elevation of approximately 495 feet above mean sea level (amsl). The closest surface body of water is the Santa Anita Wash (0.3-mile east of the Project site), which is a tributary to the Rio Hondo River, which is located approximately 3 miles south of the Project site (Appendix F-1). The historically highest groundwater level in the immediate area is approximately 100 to 150 feet beneath the ground surface (Appendix F-1). The most recent depth to groundwater information from the nearest groundwater well (St. Joseph Well 02 #1N11W27F01) is from May 1, 2019 when groundwater was measured at a depth of 295 feet (Appendix F-1).

2.3.3 Project Site

Built Structures

As shown in Table 2-1, Existing Land Use Summary, the Project site encompasses 128,510 square feet (sf), or 2.95 acres, and consists of four parcels located in the eastern portion of the City of Arcadia. The Project site is bound by

Santa Clara Street to the north, an alley and existing commercial uses to the east, Wheeler Avenue to the south, and Santa Anita Avenue to the west.

Adjacent to the southwest portion of the Project site is APN 5773-006-029 at 100 N. Santa Anita Avenue, which is an approximately 1,500 sf 1-story occupied medical office building. This off-site property is not a part of the proposed Project and would not be altered by the proposed Project.

Table 2-1 identifies the current development on the Project site, parcel size, and identifies the uses that would be demolished as a part of the proposed Project.

Table 2-1. Existing Land Use Summary

Assessor Parcel Numbers (APN)	APN Size (Square Feet)	Description	Address	Building Area (Square Feet)	Project Action
5773-006-036	94,503	Bank of America occupied office building and drive-thru (1-story)	150 - 180 N Santa Anita Avenue	6,534	No Change
		Occupied office building (8-stories)		75,133	Interior renovation for relocation of Café from lobby to southeast corner
		Occupied office building (1-story)		1,586	No Change
5773-006-010	16,003	Occupied office space (2-stories)	30 E Santa Clara Street	9,000	Demolish
5773-006-004	8,002	Occupied commercial/retail space (1-story)	25 Wheeler Avenue	4,591	Demolish
5773-006-005	8,002	Occupied commercial/retail space (1-story)	33 Wheeler Avenue	3,733	Demolish
Alley	2,000	Provides access to parking for 25 Wheeler Ave.	N/A	N/A	Demolish
Surface Parking/Other	N/A	N/A	N/A	N/A	Demolish
Total	128,510	—	—	—	—

Source: Appendix G

150 & 180 N Santa Anita Avenue (APN 5773-006-036)

This parcel is 2.17-acres with three interconnected commercial office buildings addressed 150 North Santa Anita Avenue and 180 North Santa Anita Avenue. The rest of this parcel is mainly paved parking with landscaping. The 8-story concrete building and interconnected 1-story building was occupied by multiple small businesses, including law offices, an electrical equipment supplier office, a holistic medical practice office, an insurance agency office and also includes multiple vacant office spaces. There is a coffee station on the ground floor of the 8-story building that will be removed as part of the Project. Verizon wireless owns and operates a cell tower that is located on the roof of the 150 North Santa Anita building. The building located at 180 North Santa Anita Avenue is a single-story brick building with a basement and is occupied by Bank of America (Appendix F-1).

30 E Santa Clara Street (APN 5773-006-010)

This parcel is 0.37-acre with a 2-story concrete building office building fronting Santa Clara Street. The remainder of the parcel in the rear of the building is paved parking and the property contains a few mature trees near the parking lot. The building is occupied by multiple commercial office spaces, including a software company office, hospice care offices, travel agency offices, home health care / health insurance offices, and a vacant office space (Appendix F-1).

25 Wheeler Avenue (APN 5773-006-004)

This parcel is 0.18-acre parcel with a 1-story commercial/retail building fronting Wheeler Avenue and paved parking to the rear of the building. The building is a 1-story stucco and block building occupied with small business office spaces including a certified public accountant office, an alternative care office, an insurance office, a gift boutique, a security system office, and vacant office spaces. Parking for this building is accessed via the alley to the east, through an additional 2,008 square foot alley on the Project site (Appendix F-1).

33 Wheeler Avenue (APN 5773-006-005)

This parcel is a 0.18-acre parcel lot with a 1-story commercial/retail building fronting Wheeler Avenue and paved parking at the rear of the building. The building is a single tenant space for a former doctor/medical practice office. Parking for this building is accessed via the alley to the east (Appendix F-1).

The parking areas on the Project site are generally paved with asphalt or concrete with small planter areas.

As described in Chapter 3, Project Description, three existing buildings, an alley that provides access to parking for 25 Wheeler Avenue, and all associated surface parking would be demolished to allow for development of the proposed Project, and the existing buildings associated with the Bank of America would remain on-site.

Other Site Conditions

The topography at the site and in the general site vicinity slopes gently downward towards the south. Surface water drainage at the Project site appears to be by sheet flow along the existing ground contours to the adjacent streets. No natural vegetation communities, riparian habitat, or jurisdictional waters (wetland or other), occur on the Project site. A total of 36 trees were surveyed, including 27 on the Project site and 9 directly adjacent street trees in the public right-of-way. Of the 27 on-site trees, 6 qualify as “protected trees” in accordance with the Tree Preservation Ordinance, including 3 lemon bottle brush, 1 carrotwood, 1 southern live oak, and 1 Chinese elm.

2.4 Public Services and Utilities

2.4.1 Public Transit and Bicycle Routes

Public transit that operates in the vicinity of the Project site includes the Metro L Line (formerly Gold Line) and multiple bus lines. The Metro L Line is a light rail line running between the cities of the San Gabriel Valley and East Los Angeles. The line runs northwest/southeast northeast of the Project site with the closest station (Arcadia Station) at Santa Clara Street and First Street approximately 350 feet, measured from the northeast corner of the Project site. There are three Metro bus lines that run in the vicinity of the Project site and one Foothill Transit line.

Metro Line 489 provides regional service between Downtown Los Angeles and the City of El Monte and runs along Santa Anita Avenue. Metro Line 287 provides regional service between downtown Arcadia and Montebello. Metro Line 79 provides local service between the City of Arcadia and Downtown Los Angeles and it runs along Santa Clara Street north of the Project site. Foothill Transit Line 187 provides regional service between Pasadena and Azusa (LA Metro 2021, Foothill Transit 2021).

Included within the City's General Plan Circulation and Infrastructure Element, the City has identified bicycle routes to accommodate a future bicycle plan which will link to regional routes such as the Rio Hondo bike path system, south of the Project site (City of Arcadia 2010). The proposed Bicycle Plan includes routes planned around the Project site. For example, a Class I bike path is planned along Santa Anita Avenue and a Class III bike lane is planned along First Avenue. Under existing conditions, a Class I bike lane runs along Santa Clara Street to the north of the Project site and connects to the aforementioned Metro L Line Arcadia Station.

Transit Priority Area

Senate Bill (SB) 743 [Public Resources Code (PRC) §21099(d)] sets forth new guidelines for evaluating project transportation impacts under CEQA, as follows: "Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area (TPA) shall not be considered significant impacts on the environment." PRC Section 21099 defines a "transit priority area" as an area within 0.5-mile of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." PRC Section 21064.3 defines "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." PRC Section 21099 defines an "infill site" as a lot located within an urban area that has been previously developed, or on a vacant site where at least 75% of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses. This state law supersedes the aesthetic impact thresholds in the 2019 CEQA Guidelines, including those established for aesthetics, obstruction of views, shading, and nighttime illumination.

All development on the Project site is within a TPA due to its proximity to the Metro L Line Stop, as well as the intersection of the Metro and Foothill Transit bus routes, which have a frequency service interval of 15 minutes or less during the morning and afternoon peak commute periods. Additionally, the proposed Project site meets the definition of an 'infill site' per PRC Section 21099. Given the above, the proposed Project's impacts on aesthetic and parking impacts would not be considered significant impacts pursuant to PRC Section 21099(d).

2.4.2 Public Services

Fire protection services are provided by the Arcadia Fire Department, which has three stations. Fire Station No. 105 is located at 710 South Santa Anita Avenue, which is 0.6-mile from the Project site. Fire Station No. 106 is located at 630 South Baldwin Avenue, which is 1.45 miles from the Project site. Fire Station No. 107 is located at 79 West Orange Grove, which is 1 mile from the Project site. The provision of water for fire suppression is provided by several off-site fire hydrants.

Police services are provided by the Arcadia Police Department which is located at 250 W. Huntington Drive.

The Arcadia Unified School District provides academic services to most City residents, with portions of neighborhoods along the east and south City boundaries lying within the Pasadena Unified, Temple City Unified, El Monte City, El Monte High School, and Monrovia Unified school districts. The Project site is within the service area of Holly Avenue Elementary (grades K–5), First Avenue Jr. High School (grades 6–8), and Arcadia High School (grades 9–12).

The Arcadia Public Library provides library services to the City and is located at 20 W. Duarte Road.

The proposed Project's public service providers and the potential for the Project to generate environmental impacts associated with these public services, is discussed in Section 4.12, Public Services and Recreation, of this Draft EIR.

2.4.3 Utilities

The City is a retail water supplier to both residential and commercial customers. The City uses both potable and recycled water. The City's water supply sources include local groundwater and imported water supplies. Potable water pipelines are located in Santa Clara Street, Wheeler Street, and Santa Anita Avenue (Appendix G).

Sewer/wastewater collection is provided by the City and the Los Angeles County Sanitation District. All existing sanitary sewer lines in the streets surrounding the Project site are owned by the City, which connect to a County sewer main along First Avenue. Sewer laterals are currently available within the developed portions of the site and sewer lines are in streets surrounding the Project site, including Wheeler Avenue (Appendix G).

Natural gas is provided by Southern California Gas Company and is currently available within the developed portions of the site and in streets surrounding the Project site, including Santa Clara Street, Wheeler Street, and Santa Anita Avenue (Appendix G).

Electric power is provided by Southern California Edison to the Project site through an existing pole mounted transformer unit on the east side of the site (Appendix G).

Cable and telecommunication services for the Project site would be provided by AT&T and Charter. Various communications service providers exist through existing off-site conduits within South Hill Street and Ninth Street (Appendix G).

Solid waste disposal is provided by the City of Arcadia Waste Management for collection and County Sanitation District for landfill (Appendix G).

The proposed Project's utility providers and the potential for the Project to generate environmental impacts associated with the utility infrastructure is discussed in Section 4.15, Utilities and Service Systems, of this Draft EIR.

2.5 Cumulative Projects

The CEQA Guidelines Section 15130 requires that a project's cumulative impacts be discussed when the incremental effect is cumulatively considerable. According to CEQA Guidelines Section 15065(a)(3), the term cumulatively considerable means "that the incremental effects of an individual project are significant when viewed

in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." Specifically, CEQA Guidelines Section 15355 defines cumulative impacts as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. When addressing cumulative impacts, CEQA Guidelines Section 15130(b) notes that the elements necessary to provide an adequate discussion of significant cumulative impacts encompass either:

a) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or

b) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

The cumulative impact analyses under each environmental issue in Chapter 4, Impact Analysis, of this Draft EIR uses both methods.

Section 15130(b)(3) of the State CEQA Guidelines states that "lead agencies shall define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used." Unless otherwise indicated in the analysis in Chapter 4 of this Draft EIR, the geographic scope used in the cumulative analysis includes the City of Arcadia. However, there are environmental issues whose relevant geographic scope for purposes of cumulative impact analysis may be larger or smaller than this area, and may be defined by local, regional, or state agency jurisdiction or by other environmental factors. One example is the geographic scope of cumulative air quality impacts, defined by the South Coast Air Quality Management District to encompass the South Coast Air Basin. The basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. Conversely, the geographic scope of cumulative aesthetic impacts is limited to anticipated growth and development in immediately adjacent areas that share a viewshed or line-of-sight with the Project site. Therefore, consideration of proposed developments near the Project site would provide a more relevant discussion of the cumulative aesthetic impacts of the proposed Project.

Table 2-2 describes the geographic scope of cumulative impact analysis for each environmental resource category, as well as the method of evaluation for each category.

Table 2-2. Geographic Scope and Method of Evaluation for Cumulative Impacts

Environmental Resource		Geographic Area	Method of Evaluation
Aesthetics		Immediate Vicinity	List
Air Quality	Toxic Air Contaminants; Odors	Immediate Vicinity	List and Projections
	Construction/Mobile Sources	South Coast Air Basin	
Cultural Resources		Regional and Local	List and Projections
Energy		State	Projections
Geology and Soils		Regional	List and Projections
Greenhouse Gas Emissions		South Coast Air Basin	Projections
Hazards and Hazardous Materials		Immediate vicinity	List

Table 2-2. Geographic Scope and Method of Evaluation for Cumulative Impacts

Environmental Resource		Geographic Area	Method of Evaluation
Hydrology and Water Quality		Sub-Watershed	List and Projections
		Groundwater Basin	
Land Use and Planning		Regional and Local	Projections
Noise	On-Site Construction Noise	Immediate Vicinity	List and Projections
	Off-Site Truck Noise	Immediate Vicinity	
Population and Housing		Regional	Projections
Public Services and Recreation		Local	Projections
Transportation		Regional	List and Projections
Tribal Cultural Resources		Regional	List and Projections
Utilities and Service Systems		Local	Projections

The analysis in Sections 4.1 through 4.15 of this Draft EIR addresses whether, after adoption of Project-specific mitigation, the residual impacts of the proposed Project would (1) contribute considerably to an existing/anticipated (without the Project) cumulatively significant effect or (2) cause a new cumulatively significant impact. A cumulative impact is not considered significant if the impact can be mitigated to below the level of significance through mitigation. If necessary, the Draft EIR examines "reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project" (14 CCR 15130[a][3] and 15130[b][5]).

Figure 2-5, Cumulative Project Location Map, provides the locations of the list of cumulative projects considered in this Draft EIR, and listed in Table 2-3.

Table 2-3. List of Cumulative Projects

Location ID	Cumulative Project Location	Within City Limits	Land Use/ Project Type	Unit	Size	Status
1	405 South 1st Avenue (Mixed Use Building)	Yes	Residential	4	DU	Permits Issued
			Commercial	585	SF	
2	420 South 1st Avenue (Mixed Use Building)	Yes	Residential	11	DU	Planning Review
			Commercial	1,020	SF	
3	25 N Santa Anita Ave (Huntington Parkview Mixed Use)	Yes	Residential	157	DU	Planning Review
			Commercial	14,690	SF	
4	205 North Santa Anita Avenue (Santa Anita Mixed Use)	Yes	Residential	22	DU	May be withdrawn but almost complete for public hearing
			Commercial	1,240	SF	
5	117 East Huntington Drive (Huntington Plaza/Mixed Use)	Yes	Residential	139	DU	Plan Check
			Commercial	10,200	SF	
6	288 North Santa Anita Avenue (Medical Office/Retail Building)	Yes	Office/Retail	31,160	SF	Under Construction
7	130 West Huntington Drive (Le Meridien Hotel/Condos/Retail)	Yes	Hotel	233	Rooms	Hotel Complete/ Condos
			Condo	96	DU	
			Retail	6,640	SF	
			Spa	3,960	SF	

Table 2-3. List of Cumulative Projects

Location ID	Cumulative Project Location	Within City Limits	Land Use/ Project Type	Unit	Size	Status
						Under Construction
8	125 W Huntington Drive (Hotel Indigo)	Yes	Hotel	175	Rooms	Plan Check Complete
			Restaurant and Spa	4,300	SF	
9	230 California Street	Yes	Condos	5	DU	Under Construction
10	116 Bonita Street	Yes	Condos	3	DU	Under Construction
11	157 Genoa Street	Yes	Condos	4	DU	Plan Check Complete
12	135 El Dorado Street	Yes	Condos	3	DU	Under Construction
13	314 California Street	Yes	Condos	5	DU	Under Construction
14	147 Alice Street	Yes	Condos	3	DU	Plan Check
15	125 California Street	Yes	Condos	3	DU	Under Construction
16	416 Genoa Street	Yes	Condos	8	DU	Under Construction
17	414 S 2nd Avenue	Yes	Condos	6	DU	Plan Check
18	43 Genoa Street	Yes	Condos	4	DU	Planning Review
19	920 North Santa Anita Avenue	Yes	Condos	6	DU	Planning Review
20	141 Fano Street	Yes	Condos	3	DU	Planning Review
21	200 South 2nd Avenue	Yes	Condos	4	DU	Planning Review

Source: Appendix K2
Notes: DU = dwelling unit; SF = thousand square feet

2.6 References

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SOURCE: ESRI World Imagery Basemap 2014

DUDEK

0 500 1,000 Feet

FIGURE 2-1

Regional Location and Vicinity Map

Alexan Mixed-Use Development Project

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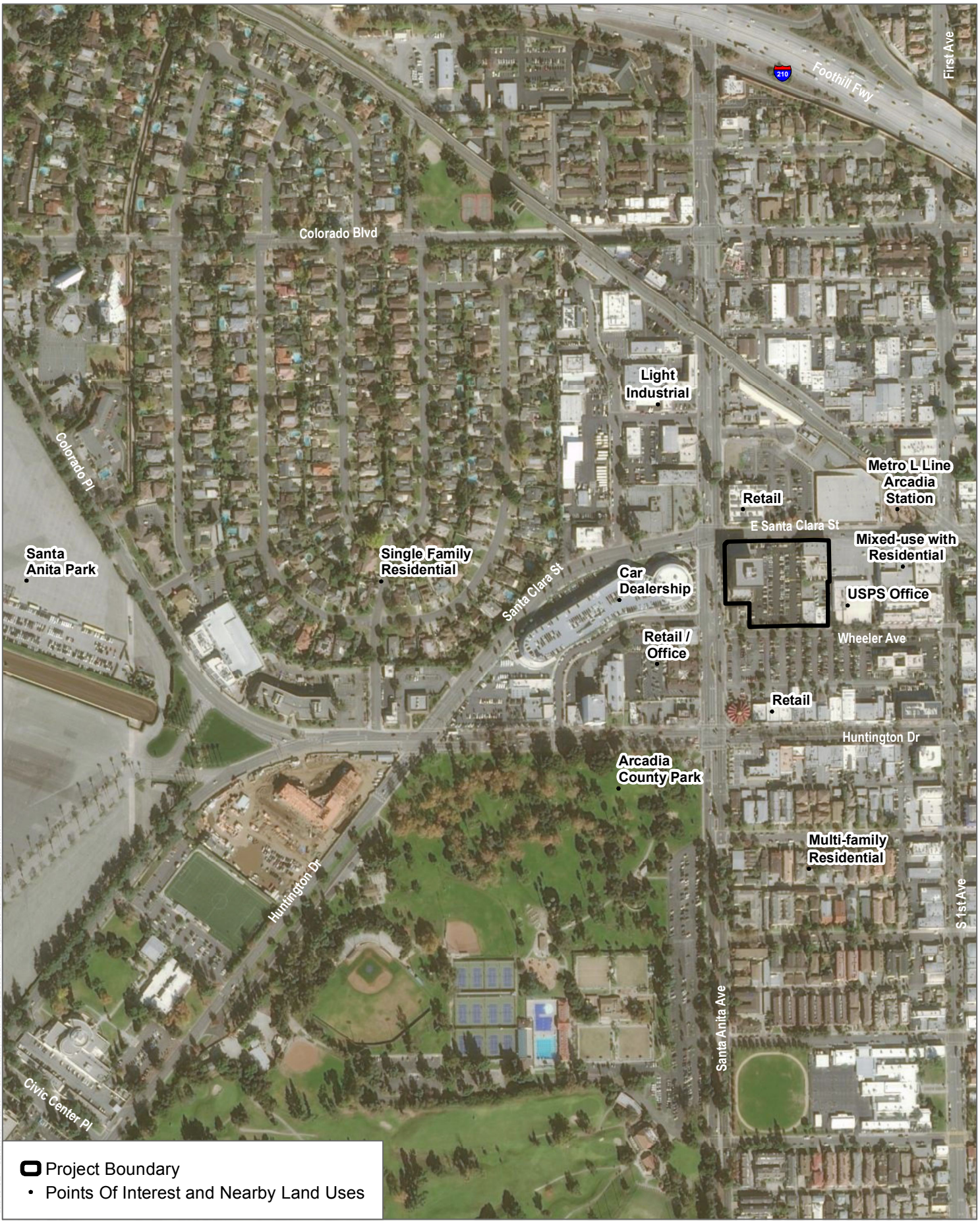

SOURCE: ESRI World Imagery Basemap 2014

DUDEK

0 250 500 Feet

FIGURE 2-2

Surrounding and Nearby Land Uses

Alexan Mixed-Use Development Project

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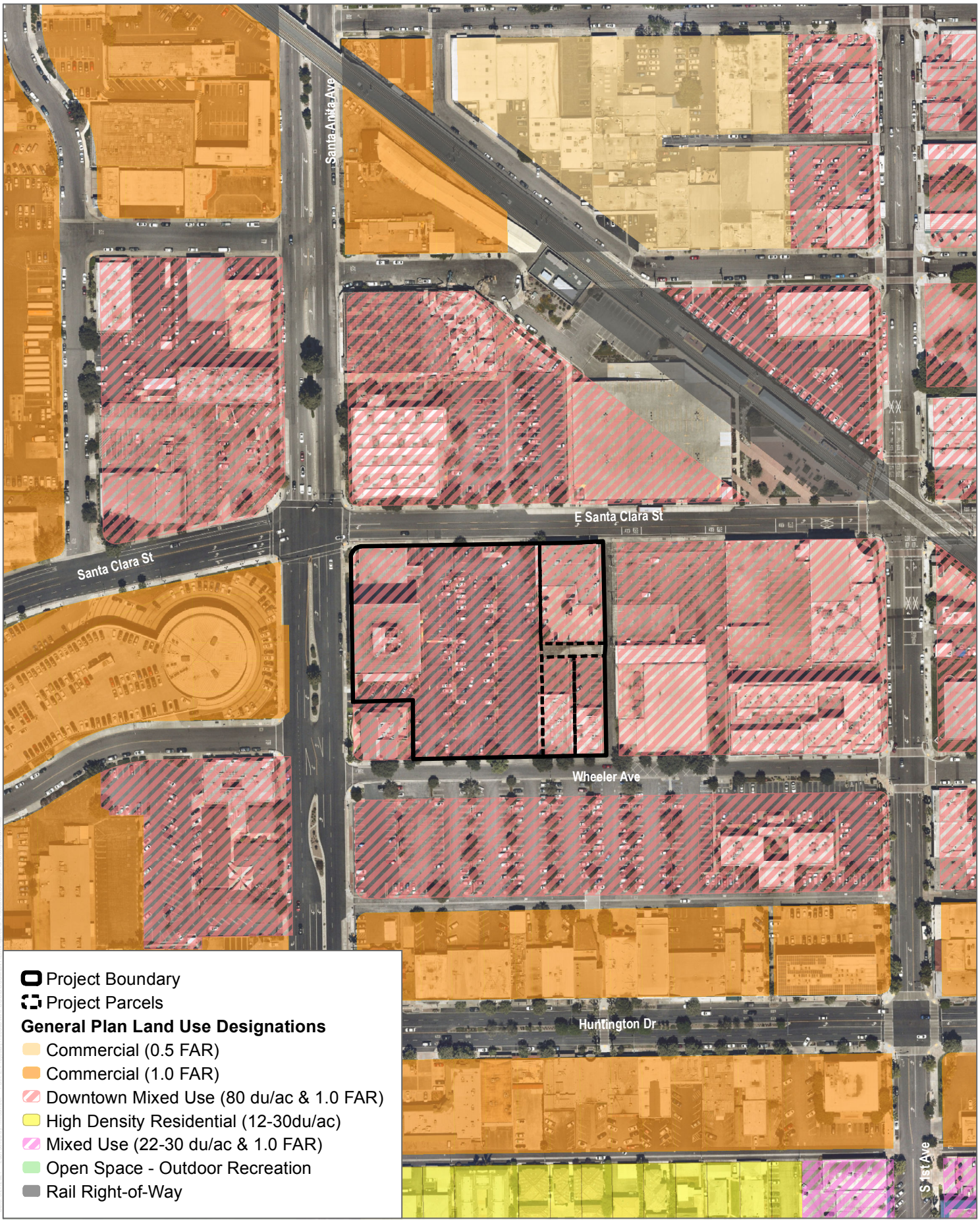

SOURCE: City of Arcadia 2021, NearMap 2021

DUDEK

0 100 200 Feet

FIGURE 2-3

Project Site General Plan Designation

Alexan Mixed-Use Development Project

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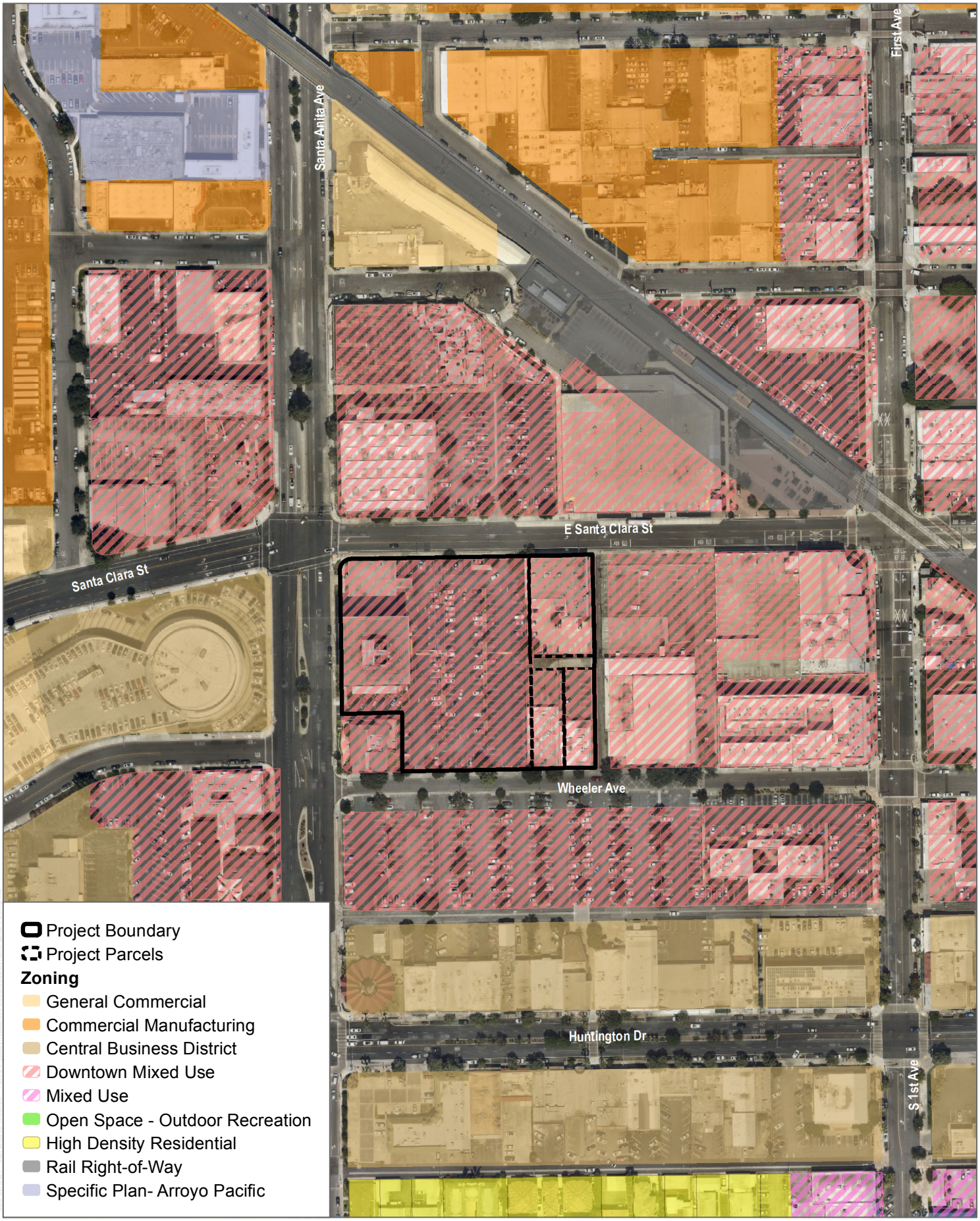

SOURCE: City of Arcadia 2021, NearMap 2021

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FIGURE 2-4

Zoning

Alexan Mixed-Use Development Project

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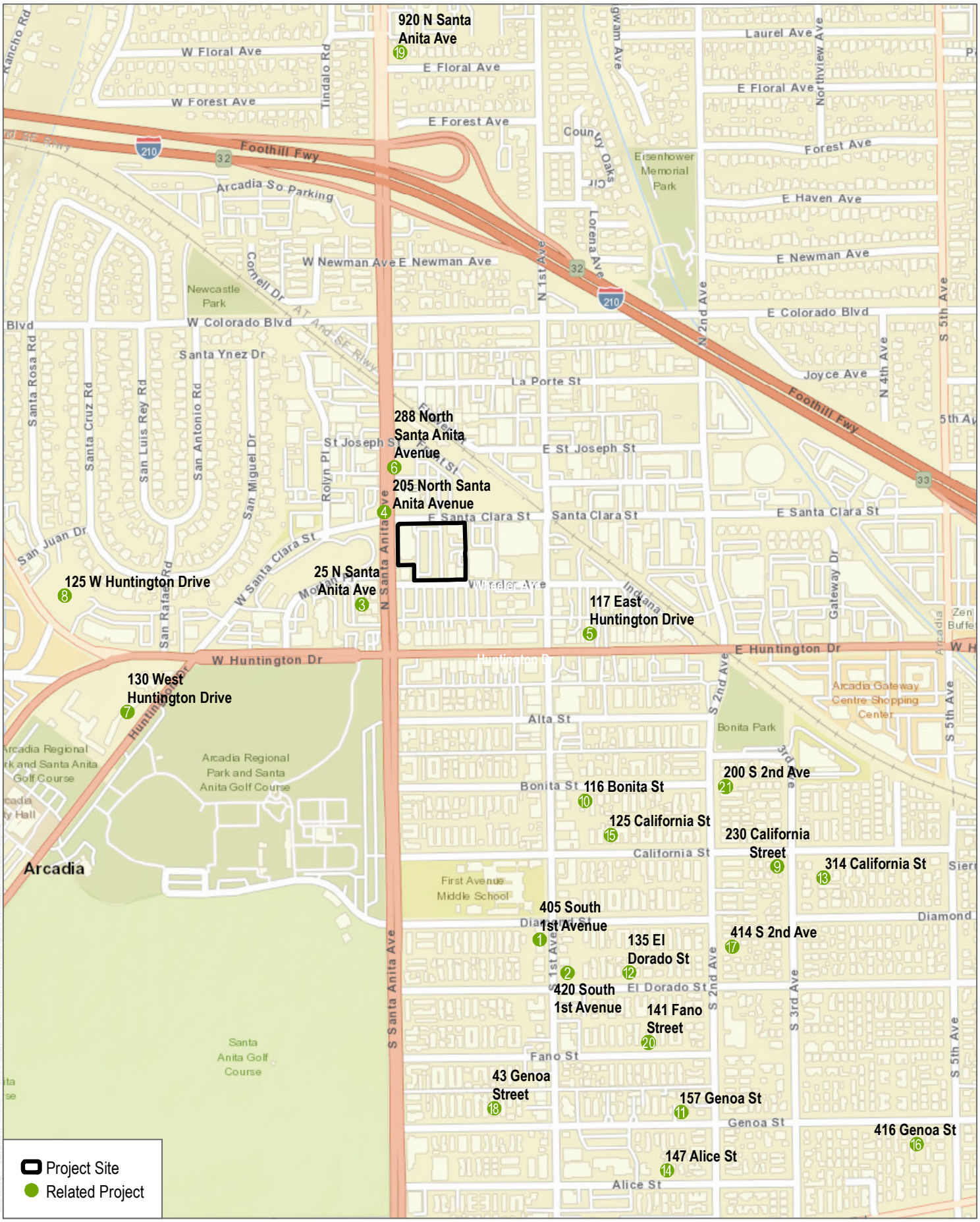

SOURCE: World Open Street Maps 2021

FIGURE 2-5

Cummulative Project Location Map

Alexan Mixed-Use Development Project

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3 Project Description

Chapter 3 of this Draft Environmental Impact Report (EIR) provides a description of the Alexan Mixed-Use Development Project (Project). The purpose of this chapter is to describe the proposed Project in a manner that will be meaningful for review by the public, reviewing agencies, and decision-makers in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Sections 21000 et seq., and the State CEQA Guidelines (14 CCR 15000 et seq.). Per the requirements of Section 15124 of the State CEQA Guidelines, a complete project description must contain the following information:

> (a) the precise location and boundaries of the proposed Project, shown on a detailed map, along with a regional map of the project's location (see Section 3.1);
>
> (b) a statement of the objectives sought by the proposed Project, which should include the underlying purpose of the project (see Section 3.4);
>
> (c) a general description of the Project's technical, economic, and environmental characteristics, considering the principal engineering documentation and supporting public service facilities (see Section 3.2); and
>
> (d) a statement briefly describing the intended uses of the EIR, including a list of the agencies that are expected to use the EIR in their decision making, a list of permits or other approvals required to implement the project, and a list of related environmental review and consultation requirements imposed by federal, state, or local laws, regulations, or policies (see Sections 3.5 and 3.6).

In accordance with Section 15124, the description of a project "should not supply extensive detail beyond that needed for evaluation and review of environmental impacts." This chapter of the Draft EIR includes the required information, as listed above, and information needed to evaluate and review environmental impacts of the Project.

As stated in Section 15126.2 of the State CEQA Guidelines, an EIR must identify and focus on the significant effects of a project on the environment. In assessing the impacts of a proposed project, the lead agency "should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published." The approval and implementation of the proposed Project would result in physical changes to the environment, which are analyzed in this Draft EIR.

3.1 Project Summary

The Project site, which totals approximately 2.95 acres, is located in the City of Arcadia (City) within Los Angeles County, approximately 13 miles east of downtown Los Angeles. The regional points of interest such as Los Angeles County Arboretum and Botanical Gardens and Santa Anita Park (live horse racing) are located near the Project site within the City limits. The City of Sierra Madre is located just north of the City and the City of Monrovia to the east. The City of Temple City is located directly south, and the City of Pasadena and the unincorporated communities of East Pasadena and East San Gabriel are located to the west of the City.

The Project site is located at 150 North Santa Anita Avenue. Regional access to the Project site is provided by the eastbound/westbound Foothill Freeway (Interstate [I-] 210) to the north, with freeway access ramps via Santa Anita Avenue located approximately 0.35-mile from the Project site. The Project site is located approximately 350 feet to the

southwest of the Los Angeles County Metropolitan Transportation Authority (Metro) L Line (formerly Gold Line) Arcadia Station, which is located near the intersection of Santa Clara Street and First Avenue. Direct access to the Project site is currently provided by Santa Clara Street on the north, Santa Anita Avenue on the west, and Wheeler Avenue on the south. Figure 2-1, Regional Location and Vicinity Map, included in Chapter 2, Environmental Setting, of this Draft EIR, provides the Project boundaries in the context of the surrounding community and jurisdictions.

Figure 3-1, Conceptual Site Plan, identifies the Project site's existing conditions with the proposed development overlaid. Under existing conditions, commercial and office space as well as associated surface parking occupy the Project site. The proposed Project would demolish a 2-story office building, demolish two single-story commercial buildings, and demolish the existing surface parking on site to construct a 7-story multi-family residential building with 319 units. The existing 8-story office building, an associated single-story brick building, as well as the single-story bank drive through would remain in place. An interior renovation is planned within the existing 8-story office building to accommodate an approximately 750 square feet conversion of the southern building footprint from a lobby to a café. Currently, there is a coffee station in the lobby of the 8-story building, which would be removed. The construction of the proposed 7-story multi-family residential building would result in a mixed-use development on the Project site. As such, the proposed Project is consistent and permitted by the site's General Plan land use designation of "Downtown Mixed Use" and a zoning designation of Downtown Mixed Use (DMU). The environmental impact assessments contained in Section 4.1 through Section 4.15 of this Draft EIR are focused on the environmental impacts associated with redevelopment of the Project site and off-site components required to implement the Project.

Table 3-1. Floor Area of Proposed Project Including Existing Buildings to Remain

Description	Proposed Project *(Square Feet)*			
	Residential Units	*Residential*	*Commercial*	*Office*
Bank of America occupied office building and drive-thru (1-story) - Existing	—	—	6,534	—
Occupied office building (8-stories) - Existing	—	—	—	75,133
Occupied office building (1-story) - Existing	—	—	—	1,586
Residential Building (7-stories) – Proposed *(311 units and 8 live/work units)*	319	258,341	—	9,281[1]
Subtotals		*258,341*	*6,534*	*86,000*
Total Floor Area	**350,875**			
Non-Residential Total Floor Area	**92,534**			
Total Ground Level Area *(Square Feet)*	***128,510***			
Proposed Project FAR	***0.72***			

Source: Studio One Eleven 2021

Note:

[1] 15,145 square feet are proposed of live-work units. Approximately 9,281 square feet (61%) is designated for "work" and 5,864 square feet (39%) is designated for "live".

As shown in Table 3-1, the Project site's total floor area would be 350,875 square feet, consisting of the proposed seven story residential building and three existing buildings to be preserved on-site.

Floor area ratio (FAR) is calculated by dividing the net maximum development capacity by the developable parcel square footage. The City's General Plan Downtown Mixed Use (DMU) land use designation allows for a maximum

FAR of 1.0; however, only commercial square footage is considered in the calculation of the FAR. With an existing 83,253 square feet of commercial uses and an additional 9,281 square feet of "work" uses[1] from the proposed live-work units, the total non-residential square footage on site would be 92,534 square feet. As such, the Project's FAR is 0.72[2], which is consistent with the DMU restrictions.

3.2 Project Characteristics

The proposed Project would demolish existing structures and a paved surface parking to construct a 7-story multi-family residential building, further detailed below in Section 3.2.1. Implementation of the proposed Project would result in a mixed-use development on the Project site with access to nearby open space, commercial and office uses. Further detailed in Section 3.6, below, a Tentative Parcel Map is proposed to merge four of the Project site's lots into two legal lots and a portion of a small alley that bisects the eastern portion of the Project site would be vacated to accommodate this Project. Lot 1 would include the existing single-story bank building, single-story attached brick building, and the 8-story office building. Lot 2 would consist of the new residential building and outdoor community open space. Project approval would require several discretionary actions: a Minor Use Permit is required for the development of multi-family dwellings and live-work units; an Architectural Design Review is required for the appropriate review of development projects; a Certification of Demolition is required to demolish some of the existing structures on site; and the existing alley on the Project site is required to be vacated.

3.2.1 Residential Development

The Project would construct a new 7-story multi-family residential building, consisting of 319 dwelling units, parking garage, and accessory space. Under the City's DMU zoning, the Project site has an allowable base density of 80 units per acre, allowing for a total of 236 dwelling units. As further detailed below, the Project requests a density bonus to increase the number of units on site. The proposed unit mix would consist of 64 studios, 168 one-bedroom units, 79 two-bedroom units, and 8 live-work units. Residential units would be constructed on Levels 2 through 7 of the proposed 7-story building, while the 8 live-work units would be constructed as two-floor units with mezzanine along Wheeler Avenue. The average square footage of each unit type would be 540 square feet for the studios, 744 square feet for the one-bedroom units, 1,278 square feet for the two-bedroom units, and 1,893 square feet for the live/work. Figure 3-1, Conceptual Site Plan, provides an illustrative overview of the Project components.

The Project site is located within the H Special Height Overlay Zone, specifically within the Zone H8 height district, which allows for a maximum development height of 96 feet. The proposed 7-story structure would be constructed to 84 feet and 11 inches to parapet in height. Figure 3-2, Overall Elevations, illustrates the proposed building elevations.

Density Bonus

Senate Bill (SB) 1818 amended the State Density Bonus program (Government Code 65915). The program offers incentives for the development of affordable housing for low-income, moderate-income, and senior citizen households. The Arcadia Development Code Section 9103.15, Density Bonuses for Affordable and Senior Housing, codifies the requirements of Government Code Sections 65915 through 65918. As such, the Project applicant proposes to utilize the density bonus program under State and local law to increase the allowable

[1] 15,145 square feet is proposed of live-work units. Approximately 9,281 square feet (61%) is designated for "work" (i.e., Office) and 5,864 square feet (39%) is designated for "live" (i.e., Residential).

[2] The total of 83,253 square feet of existing commercial/office uses + 9,281 square feet of "live" space = 92,534 square feet. The Project site has a total lot area of 128,510 square feet. Therefore, 92,534/128,510 = 0.72 FAR

dwelling unit count from 236 to 319 units. In order to comply with SB 1818, the Project would be required to include 35% affordability or 26 dwelling units. Thus, the final unit mix would consist of 293 market rate units and 26 affordable units. All dwelling units would be made available as rental units. Table 3-2 details the proposed unit mix for the Project.

Table 3-2. Residential Unit Summary

Residential Component	Calculation	Number of Units
Base Density[1]	80 du/ac	236
Base Unit Count Before (SB 1818)[2]	35%	319
Housing Type		
Market Rate Unit Count	—	293
Affordable Unit Count	11% Very Low Income	26
Unit Type		
Live-Work Loft	2.5%	8
One Bedroom	52.7%	168
Studio	20.1%	64
Two Bedroom	24.8%	79
Total Residential Units	**—**	**319**

Source: Studio One Eleven 2021
Notes:
— = not applicable
du/ac = dwelling unit per acre
1 Downtown Mixed Use (DMU) zone allows for 80 du/ac on a 2.95-acre site. 2.95 x 80 = 236
2 SB 1818 Bonus Density Added Units Rounded Down

Amenities

Various amenities would be constructed throughout the residential building and Project site. Such amenities include an outdoor pool area, fire pit, barbeque dining area, game lounge, and a lawn/grassy area, as well as an outdoor passive court located in the middle of the building within Level 3. Within the building, the residential amenities fronting Santa Clara Street would include a fitness gym, mail room, leasing offices, reception area, and lobbies. Figures 3-3b, c, and d show top-down views of Levels one (1) through seven (7), as well as an overview the roof layout. As shown in Figure 3-3b, Levels 1 and 2 of the building, and would include a two-story fitness gym, package/mail room, lounge, leasing offices, a reception area, and lobbies. Figure 3-3c, Level-3 and Levels-4/5/6, shows the locations of the interior courtyards and recreational amenities for the Project's residents on Level-3. Level-3 would include an outdoor pool area, fire pit, barbeque dining area, game lounge, a lawn/grassy area, and an outdoor passive courtyard located in the central portion of the building. Levels 4, 5, and 6 would consist solely of residential units. As depicted in Figure 3-3d, Level-7 and Roof, Level-7 would contain a community room and roof deck as well as residential units. Finally, Figures 3-4 and 3-5 depict the location of the overlook roof deck in the southwest corner, which would include firepits, lounge furniture, a green roof tray system, and would provide views of Downtown Arcadia. The roof would also support mechanical equipment and provide several solar-ready zones for solar panels, the locations of which are depicted in Figure 3-3d. Additional residential amenities would be constructed along the Project's frontage with Santa Clara Street.

An outdoor plaza would be constructed between the 8-story office tower and the residential building, consisting of outdoor lounge areas with benches and other seating. The alleyway adjacent to the eastern boundary of the Project site would be converted into a pedestrian paseo, further described in Section 3.2.4.

Parking

The proposed Project would redevelop an existing site containing surface parking. As a result, a total of 183 existing surface lot parking spaces would be replaced with the proposed development, with 6 surface level spaces to remain for the existing office building. Implementation of the proposed Project would include a total of 551 parking spaces. The Project would construct two above-ground parking areas, within Levels 1 and 2 of the building, and up to two subterranean parking levels. Figure 3.3a, Elevation Cross Section, depicts the 1.5-levels of subterranean parking and 2 levels of above ground parking. At ground level the live-work units would face Wheeler Ave to the south and the residential amenity spaces would face Santa Clara Street to the north. As shown in Figure 3-3b, Level-1 and Level-2, the above-ground portion of the parking garage would be surrounded by the live-work units and the amenity spaces, such that the parking garage would be shielded from view and would not be facing either Santa Clara Street or Wheeler Avenue. Tables 3-3 and 3-4 breaks down the existing and proposed parking for the proposed Project.

Table 3-3. Parking Spaces by Use

Land Use	Size	Spaces Required [a]
Non-Residential to be Replaced		
8-Story Office Building, Single-story Brick Building, Café, and Single-story Bank Drive-Through	84,128 square feet	183
Required Residential		
Residential	319 units	160
	Total Spaces Required	**343**
	Total Spaces Provided	**551**

Source: Dudek 2021.

Note:

a. The City's Code requires 1.5 spaces per unit and 1 guest space for every 3 units. However, State Density Bonus Law provides that a City may not require more than 0.5 spaces per unit, including guest and disability parking, for a development that includes at least 11% very low income units, is within ½ mile of a major transit stop, and has unobstructed access to that stop. Accordingly, the required residential parking is 160 spaces. In addition to the 160 spaces, the Applicant will provide an additional 193 spaces for a total of 353 spaces. Of those 353 spaces, 6 will be accessible spaces and 2 will be van accessible spaces. 35 will be electric vehicle spaces.

Table 3-4. Vehicle-Type Parking Summary

Provided Parking Breakdown							
Level	*Standard*	*ADA*	*ADA Van*	*Clean Air*	*EV*	*EV Van*	*Total*
P2	98	0	0	0	0	0	98
P1	191	0	0	0	0	0	191
1	109	5	2	6	8	1	131
2	88	6	1	0	34	2	131
Total	**486**	**11**	**3**	**6**	**42**	**3**	**551**

Source:

— = not applicable

1 The total office parking includes 6 surface level parking spaces which will remain on the existing office site. Additionally, residential guest parking would be shared with office parking.

The Arcadia Development Code generally requires 1.5 spaces per unit and 1 guest space for every 3 units (Section 9103.07.050, Table 3-3). However, Assembly Bill (AB) 2345 amended Density Bonus Law to require cities to not

require more than 0.5 spaces per unit, including guest and disability parking, for developments that include at least 11% very low income units, are within 0.5 mile from a major transit stop, and have unobstructed access to that transit stop [Government Code Section 65915(p)(1)(c)(2)]. Accordingly, given the proposed Project's provision of affordable housing and proximity to a major transit stop, 160 spaces are required for the Project's 319 units[3]. As detailed in Table 3-3, the Project applicant would provide an additional 57 spaces for a total of 551 spaces. In accordance with the California Building Code and California Green Building Code, of the 551 residential parking spaces, 14 accessible spaces and 51 electric vehicle spaces are provided, as shown in Table 3-4.

Bike storage located on Level 1, on the southern edge of the above-ground parking structure level and adjacent to the southwest garage entrance and southeast lobby entrance. Table 3-5, below, details the required and provided bicycle parking.

Table 3-5. Bike Parking Summary

Bike Parking Type	Calculation	Number of Stalls
Total Required Residential Bike Parking	0.2 square feet per unit	64
Total Required Non-Residential Bike Parking	—	
Office Short Term Parking	5% of 171 Office Parking	9
Office Long Term Parking	5% of 171 Office Parking	9
	Total Bike Parking Required	**82**
	Total Bike Parking Provided	**82**

Source:
— = not applicable
Note: Requirements per Arcadia Development Code 9103.07.150

3.2.2 Café

An interior renovation is planned within the existing 8-story office building to accommodate and serve the Project site. Construction would involve renovation of an existing space within the ground floor of the existing 8-story building for a café. Approximately 750 square feet of the first floor would be converted from lobby to a café. The café would be accessible from the proposed outdoor plaza between the 8-story office tower and the residential building. Currently, there is a coffee station in the lobby of the 8-story building, which would be removed.

3.2.3 Landscaping and Pedestrian Improvements

The proposed Project would be supported by new landscaping, open space uses, and pedestrian improvements to create a mixed-use community within the City's Downtown. As shown in the Arborist Report (Appendix B), the Project proposes to remove 28 existing trees, including 27 on-site trees and one (1) off-site street tree. According to Appendix B, six (6) on-site trees [three (3) lemon bottle brush (Callistemon citrinus), one (1) carrotwood (Cupaniopsis anacardioides), one (1) southern live oak (Quercus virginiana), and one (1) Chinese elm (Ulmus parvifolia)], planned for removal, have protected status under the City's Tree Preservation Ordinance (Division 10, Section 9110.01 of the Development Code), which requires the planting of replacement trees if a protected tree is removed. As such, the Project proposes to plant two (2) new trees (2:1 ratio) for each protected tree approved for removal for a total

[3] AB 2345 requires no more than 0.5 spaces per unit. 319 x 0.5 = 159.5 (160)

of 12 on-site replacement trees.[4] The removal of one (1) off-site street tree [crepe myrtle (Lagerstroemia indica)], although not subject to the requirements of the Tree Preservation ordinance, is regulated under Division IX, Chapter 8, Comprehensive Tree Management Program, of the City's Municipal Code, and would also be replaced at a 2:1 ratio, subject to further review by the City's Public Works Department. The 21 on-site, non-regulated trees planned for removal would not be subject to any replacement requirements. However, in addition to the 14 replacement trees required per City regulation, the Arborist Report (Appendix B) recommends planting an additional 21 trees to reduce the impact of the non-regulated tree removals, resulting in a total of 35 required or recommended replacement trees.

As shown in Figure 3-4, Landscaping and Open Space, the proposed Project would plant a total of 56 trees, which goes beyond both the City's requirements and the Arborist Report recommendations. A variety of species are planned to be included, such as Strawberry tree (Arbutus marina), Howard Mcminn manzanita (Arctostaphylos densiflora), Australian willow (Geijera parvifolia), and Date palm. Lastly, eight (8) trees identified as off-site, protected status street trees, located on Wheeler Avenue, would be retained. [5]

According to Figure 3-4, Landscaping and Open Space, approximately 7,848 square feet for shrubs and groundcover, 863 square feet for the Project's green roof tray system, and 2,015 square feet of turf are proposed on site. Landscaping is also proposed throughout the Project site, along Santa Clara Street, Wheeler Avenue, adjacent to the alleyway (Figures 3-4 and 3-5), the proposed courtyards on Level 3 (Figure 3-3c, 3-4 and 3-5), and the proposed roof deck on Level 7 (Figures 3-4 and 3-5).

Common Recreational Facilities/Open Space and Private Open Space

As shown on Figure 3-5, Open Space Plan, the open space is proposed on site both as community open space and as private open space. Consistent with the Project's objective to promote pedestrian connectivity with the City's Downtown, the Project would include on-site improvements to facilitate circulation (further detailed in Section 3.2.4) and community cohesion within the existing environment.

The Project would redevelop the space between the existing office building and the proposed residential building with a new paseo and outdoor plaza. This community open space area would include on-site wayfinding features, minimized vehicular access, flexible pedestrian space, trees and enhanced plantings, lighting, and bicycle parking. The proposed paseo would provide concrete paving and enhanced concrete paving with fixed furniture. Additionally, the Project would repurpose an existing alley on the eastern edge of the Project site to support new wayfinding, screen planting, artistic vertical screens, raised planters with trees, and asphalt paving.

Along the Project site's northern and southern boundaries, Santa Clara Street and Wheeler Avenue, wayfinding signage, street trees and parkway planting, and seating are proposed. The existing trees on Wheeler Avenue would remain in place with planned improvements consisting of decomposed granite surrounding the trees.

Within the proposed residential building are community open space features on Level 3 (Figures 3-3c, 3-4 and 3- 5) consisting of an Active Court and a Passive Court. The Active Court, located on the northside, would include a pool

[4] The City's Tree Preservation Ordinance requires that every protected tree that is approved to be removed must be replaced by two (2) new 24" box trees. The Project landscape plans propose to plant 56 new replacement trees including 24", 36", and 48" box trees, as well as six (6) 12' cubit date palms (Phoenix dactylifera).

[5] As described in the Arborist Report (Appendix B), the eight (8) existing street trees along Wheeler Avenue have been identified as southern live oaks (Quercus virginiana), which have protected status under the City's Tree Preservation ordinance. While these trees are anticipated to be preserved, the Project would likely encroach into the dripline, which would require a permit for Encroachment into a Protected Zone of a Protected Tree, per Section 9110.01.070 of the City's Development Code.

and spa, transparent pool fencing, cabanas and other seating, outdoor kitchen and dining, fire pits and lounge furniture, entertainment walls, gaming tables, synthetic turf, security fencing and a gate, and pool restrooms with a green roof features. Adjacent to the Active Court space would be residences' private patios, which would have views, but no direct access. The proposed Passive Court, located to the south of the Active Court, would support flexible turf panel, fire pits and lounge furniture, outdoor kitchen and dining, arboretum inspired gardens, connectivity to private patios. A community room is proposed between the two courtyards on Level 3. A Roof Deck is planned on Level 7, which would include fire pits, a green roof, and lounge furniture. On the ground level, the 8 live-work units would include patios fronting Wheeler Avenue.

As previously discussed, Levels 1 and 2 of the proposed building would include other recreational amenities on site. The Project's northeast lobby and lounge would include dining spaces outside on Level 1. Additionally, the ground level would also include a fitness gym and an outdoor fitness area, located on the northwest side of the building. Both would be enclosed with a fence fronting Santa Clara Street. The southeastern lobby entrance is accessible via the alley and Wheeler Avenue. The Project's leasing office is proposed to be adjacent to the northern lobby. Level 2 is proposed to include an on-site business center and game room.

Table 3-6, below, details the proposed Project's required and provided open space calculations.

Table 3-6. Open Space Summary

Open Space Type	Calculation	Open Space (square feet)
Open Space Required		
Total Open Space Required	100 square feet per unit	31,900
Open Space Provided		
Interior Courtyard	—	5,845
Pool Courtyard	—	10,862
Private Balcony	—	23,957
Roof Deck	—	691
	Total Private Open Space	**23,957**
	Total Public Open Space	**17,398**
	Total Open Space Provided	**41,355**

Source:
— = not applicable
Note:
[1] 319 units x 100 sf/unit = 31,900 sf

3.2.4 Circulation Plan

The proposed Project would support vehicular, bicycle, and pedestrian circulation throughout the Project site and the surrounding environment. As mentioned above, the Project would include both vehicular and bicycle parking as well as include on-site improvements to support pedestrian connectivity with the City's Downtown.

Vehicular Circulation

Vehicular circulation to the Project site and parking structure is proposed with two-directional access points as well as two exit-only locations. Vehicular access to the Project site would be available from the alley on the eastern edge

of the Project site from Santa Clara Street. An entrance and exit point to the parking structure is proposed along the alleyway on the east side of the Project site. Two sets of approximately 10 removable bollards are proposed within the eastern alley's right-of-way. As such, vehicles can only access the garage via Santa Clara Street. Vehicles would be able to exit the proposed parking structure via an exit-only garage to an exit-only driveway onto Santa Clara Street on the northwestern corner of the proposed building, adjacent to the existing office building.

The other vehicular entrance to the Project site is available on the southwest corner via Wheeler Avenue. Vehicles would enter and exit the parking structure at this point. However, vehicles exiting the Project site would be only allowed to exit onto Santa Anita Avenue, south of the existing office building. This drive aisle currently exists and is proposed to remain.

Non-Vehicular Circulation

As further described in Chapter 2, Environmental Setting, the Project site is supported by existing pedestrian infrastructure in the form of sidewalks along Santa Clara Street, Wheeler Avenue, and Santa Anita Avenue, as well as bicycle lanes on Santa Clara Street. Sidewalks exist along Santa Clara Street and Wheeler Avenue. A sidewalk is proposed within a 5-foot easement within the existing off-site alley, which would be provided along eastern edge of the residential building and would connect Santa Clara Avenue to Wheeler Avenue.

As mentioned previously, an outdoor plaza would be constructed between the 8-story office tower and the residential building. Access to the plaza would be available from stairway #2, serving access to Level P2 through Level 7, and stairway #5, providing access to Level P1 only for office parking only. Bicycle parking as well as wayfinding signage would both be provided adjacent and to the west of the proposed stairs.

The alleyway adjacent to the eastern boundary of the Project site would be converted into a pedestrian paseo, as further described in Section 3.2.3, and would facilitate connectivity between the Metro L Line (previously Gold Line) station and City's downtown amenities. Stairs and a ramp would be installed on the Project site's southwest side between the residential building and existing office tower, which would create an entrance to the paseo to the north from Wheeler Avenue. Pedestrian access is also proposed to provide access to the paseo from the garage. The northern lobby would be accessible via the alley and Santa Clara Street, and the southern lobby would be accessible via the alley and Wheeler Avenue.

3.2.5 Utilities and Infrastructure

The proposed Project would require upgrades to utility infrastructure on the Project site. All infrastructure would be constructed in accordance with the standards of the City and in accordance with applicable building codes. The Project site is currently served by existing utilities infrastructure as the site supports existing and occupied uses, see Chapter 2, Environmental Setting, for more details. The proposed Project's utility providers and the potential for the Project to generate environmental impacts associated with the utility infrastructure is discussed in Section 4.15, Utilities and Service Systems, of this Draft EIR.

3.2.6 Off-Site Improvements

As mentioned under Section 3.2.4, proposed removable bollards would be installed to limit vehicular access to the alleyway adjacent to the eastern boundary of the Project site. As such, only pedestrian access would be available on the southern portion of the alley. Additionally, eight (8) existing trees along Wheeler Avenue would remain in

place as part of the proposed Project. However, these off-site street trees would be subject to the provisions of Chapter 8, Comprehensive Tree Management Program, of the City's Municipal Code, further discussed in Section 3.2.3, above. No other off-site improvements are proposed.

3.3 Project Construction

As shown in Table 2-1, Existing Land Use Summary in Section 2, Environmental Setting, approximately 17,324 square feet of existing buildings are proposed for demolition. Additionally, the Project site would redevelop an existing surface parking lot with the construction of a new residential building, including the two levels of underground parking.

Site grading would require a combination of "cut and fill" earthwork to create a building/parking structure pad and to accommodate two levels of subterranean parking. Grading is estimated to result in approximately 57,000 cubic yards of excavation/export (or "cut") and 200 cubic yards of import fill for site rebalancing. Final grading plans would be approved by the City Engineer before the City issues grading permits.

It is currently anticipated that these phases will be completed within approximately 2 years after construction begins. However, this Draft EIR assumes an overlap of construction phases, which is possible depending on market conditions and provides a more conservative analysis of short-term air quality, greenhouse gas, noise, and transportation impacts. Construction of the Project is anticipated to begin in June 2023 and anticipated to end in August 2025, spanning approximately 26 months. Construction activities would include demolition, site preparation, grading, building construction, paving, and architectural coating (see Table 3-7).

Table 3-7. Estimated Construction Schedule

Construction Phases	Start Date	End Date
Demolition (24 days)	6/22/2023	7/19/2023
Site Preparation (3 days)	7/20/2023	7/23/2023
Grading (26 days)	7/20/2023	8/18/2023
Building Construction (520 days)	8/19/2023	4/16/2025
Paving (12 days)	4/1/2025	4/14/2025
Architectural Coating (100 days)	4/14/2025	8/11/2025

3.4 Project Objectives

CEQA Guidelines Section 15124 requires an EIR to include a statement of objectives sought by the Project. The objectives assist the City in developing a reasonable range of alternatives to be evaluated in the EIR. The Project objectives also aid decision makers in preparing Findings of Fact and a Statement of Overriding Considerations, if necessary. The statement of objectives also is to include the purpose of a project and may discuss a project's benefits. The Project's specific objectives are as follows:

1. To efficiently develop currently under-utilized property within a Transit Priority Area into a mixed-use, high-density, urban development that provides convenient access to alternative forms of transportation, including bicycling, bus lines and the Metro L (Gold) Line light-rail station.
2. To provide new multifamily residential housing, including affordable housing, that helps meet the City's Regional Housing Needs Allocation (RHNA) requirements.
3. To provide compact, mixed-use development in Downtown Arcadia within an established Land Use Focus Area to further facilitate the City as "a destination stop on the L (Gold) Line".
4. To facilitate development that is consistent with the existing Downtown Mixed-Use zoning and land use designation.
5. To promote pedestrian connectivity within the Downton Mixed-Use area and to the Metro L (Gold) Line Station by integrating plazas, paseos, and attractive landscaping into Project design.
6. To encourage building design that creates a cohesive, vibrant look in Downtown Arcadia and that minimizes the appearance of expansive parking lots on major commercial corridors.
7. To provide an adequate amount of on-site parking stalls that satisfy the City's Municipal Code Parking Requirements

3.5 Intended Uses of this EIR

In compliance with CEQA, this Draft EIR has been prepared to analyze the potential environmental impacts that may result from implementation of the Project. This Draft EIR also identifies feasible mitigation measures and/or alternatives that would minimize or eliminate the potential significant impacts associated with the Project. Lead agencies, such as the City, are charged with the duty to substantially lessen or avoid significant environmental effects where feasible (State CEQA Guidelines Sections 15002[a][3] and 15021[a][2]). Where a lead agency identifies unavoidable adverse environmental effects of a Project, State CEQA Guidelines Section 15093 authorizes the agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable adverse environmental effects when determining whether to approve a project. If the specific economic, legal, social, technological, or other benefits outweigh the unavoidable adverse environmental effects, these effects may be deemed acceptable by the agency as substantiated in a statement of overriding considerations.

This Draft EIR evaluates potential environmental impacts associated with implementation of the Project and provides information regarding short-term, long-term, direct, indirect, and cumulative environmental effects of the Project. The Draft EIR must allow the City, responsible agencies, and other interested parties, to evaluate the environmental impacts of Project implementation and the environmental consequences of Project implementation, thereby enabling them to make informed decisions regarding the requested entitlements, as described below.

3.6 Discretionary Actions

3.6.1 City of Arcadia

The City of Arcadia, as lead agency for the Project, has the responsibility for reviewing, processing, and approving the proposed Project. If development is proposed that results in environmental impacts not assumed within this Draft EIR or covered under the impact analyses and mitigation measures set forth in this Draft EIR, or if substantial changes to the

circumstances under which the Project is undertaken and/or new information of substantial importance becomes available after the certification of this Draft EIR, the City will evaluate the need for supplemental environmental documentation per Sections 15162 to 15164 of the State CEQA Guidelines.

The following is a summary of discretionary actions the City of Arcadia will consider:

- Certification of Environmental Impact Report
- Minor Use Permit No. MUP 21-08
- Architectural Design Review No. 21-12
- Tentative Parcel Map No. TPM 21-02
- Certification of Demolition No. COD 21-22
- Street Vacation of an Alley

3.6.2 Responsible Agencies

A public agency, other than the lead agency, that has discretionary approval over a project is known as a "responsible agency," as defined by State CEQA Guidelines (14 CCR 15000 et seq.). There are no other public agencies that have discretionary authority over the proposed Project.

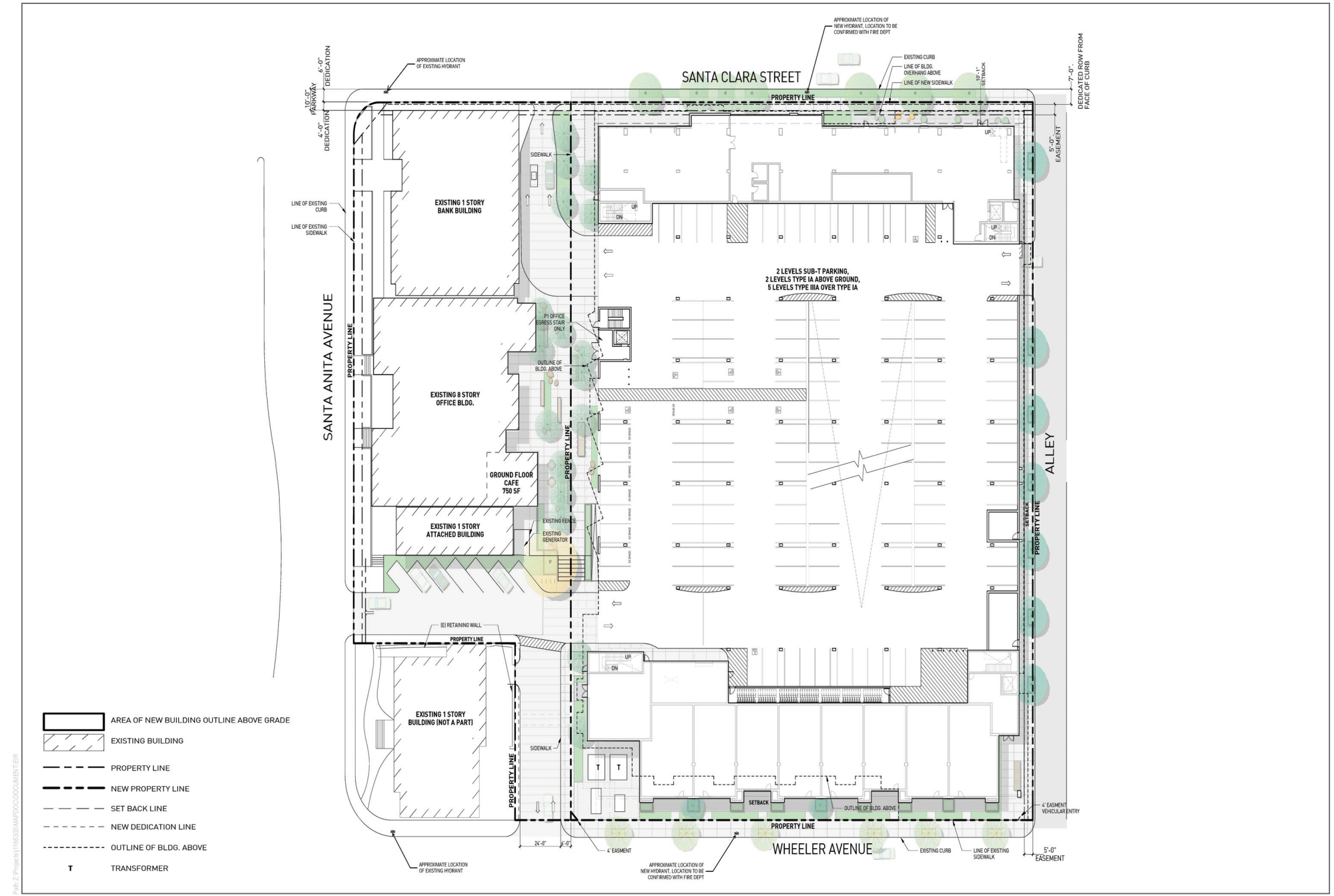
3.6.3 Other Permits and Approvals

Other permits and approvals are required for Project implementation that are not subject to discretionary review, but nevertheless require actions by the applicant and/or the City to obtain the necessary approvals to implement the proposed Project. Other permits and approvals required, and their respective agency administrators, are listed below:

- **City of Arcadia**
  - Modification to reduce the required parking in conformance with State Density Bonus law
  - Tree Permit
  - Grading/Building permits
- **California Department of Transportation, District 7**
  - Oversized Vehicle Permit
- **California Water Resources Control Board**
  - Coverage under National Pollutant Discharge Elimination System Permit No. CAS000002, General Construction Activity Storm Water Permit and Stormwater Pollution Prevention Plan

3.7 Reference

Studio One Eleven. 2021. "Alexan Arcadia Mixed-Use/Multi-Family Housing Project, 150 N. Santa Anita Ave. Arcadia, CA 91006." Entitlement Resubmittal #3. September 22, 2021.



SOURCE: Studioneleven 2021

FIGURE 3-1

Conceptual Site Plan

Alexan Mixed-Use Development Project

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SOUTH ELEVATION | 1
1/16" = 1'-0"

NORTH ELEVATION | 1
1/16" = 1'-0"

WEST ELEVATION | 2
1/16" = 1'-0"

EAST ELEVATION | 2
1/16" = 1'-0"

SOURCE: Studioneleven 2021

FIGURE 3-2

Overall Elevations

Alexan Mixed-Use Development Project

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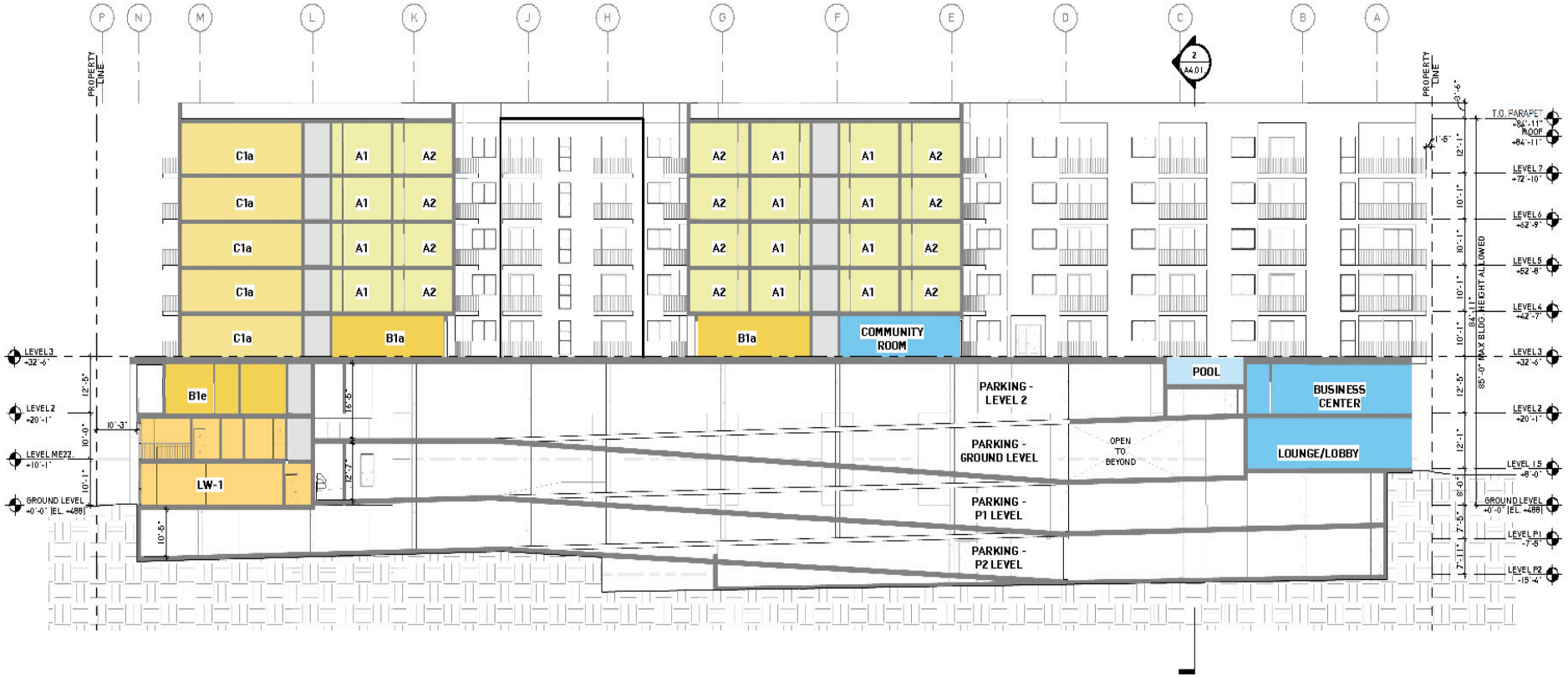

GRAPHICS LEGEND

- STUDIO
- 1 BEDROOM
- 2 BEDROOM
- LIVE/WORK
- AMENITY
- CIRCULATION
- UTILITY

SOURCE: Studioneleven 2021

FIGURE 3-3a

Elevation Cross Section

Alexan Mixed-Use Development Project

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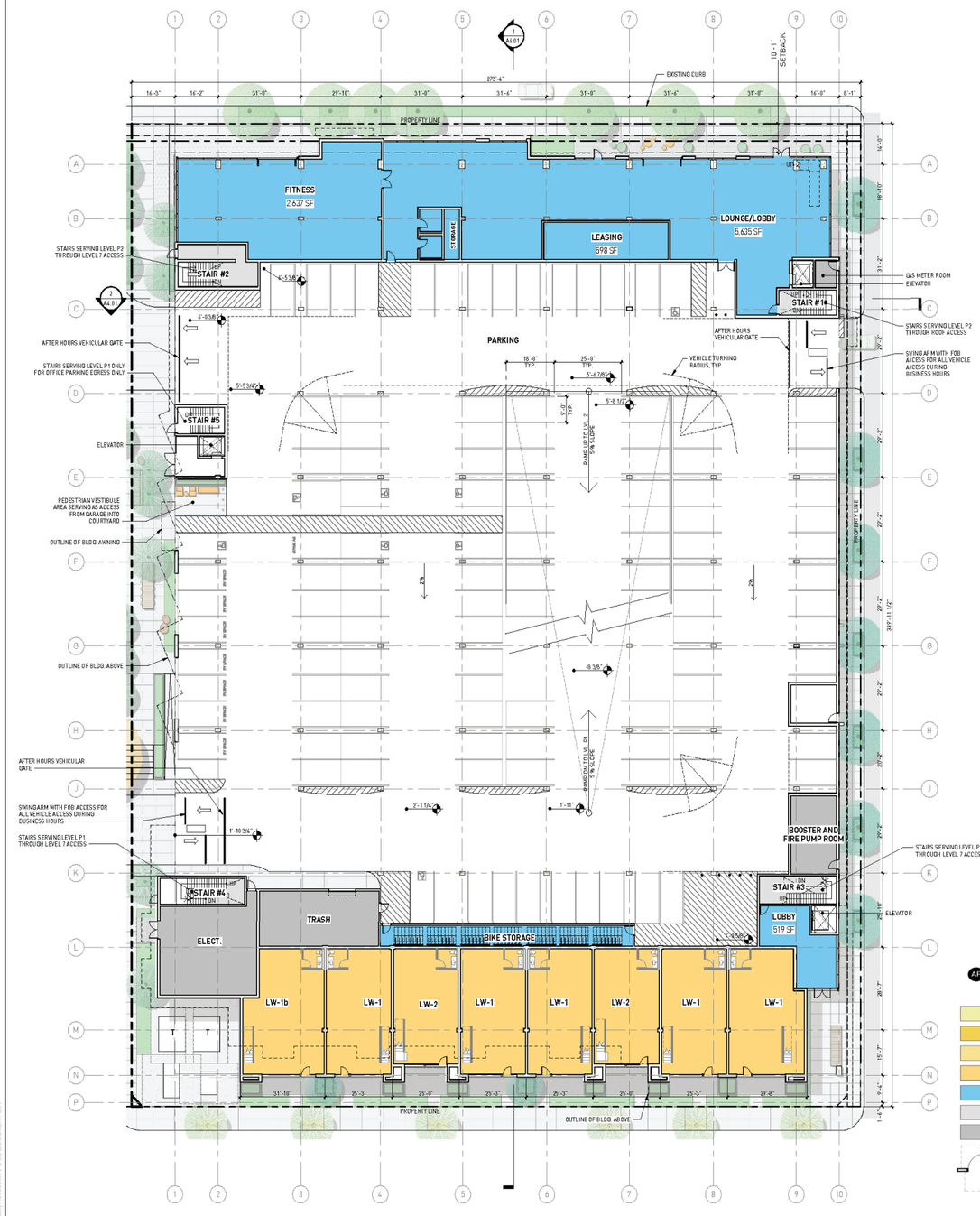
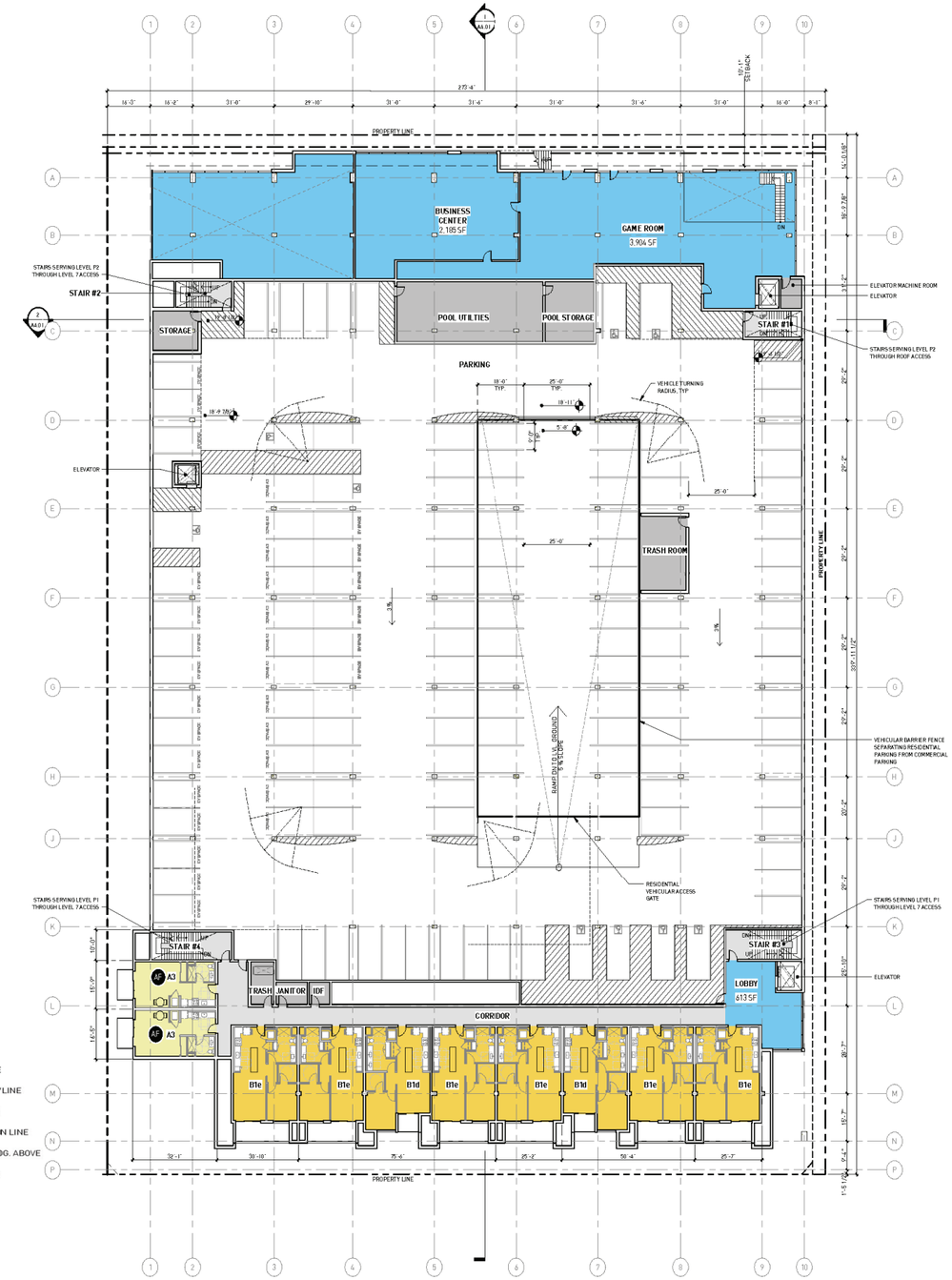


LEVEL 1 FLOOR PLAN | 1
1/16" = 1'-0"



LEVEL 2 FLOOR PLAN | 1
1/16" = 1'-0"

SOURCE: Studioneleven 2021

FIGURE 3-3b

Level-1 and Level-2

Alexan Mixed-Use Development Project

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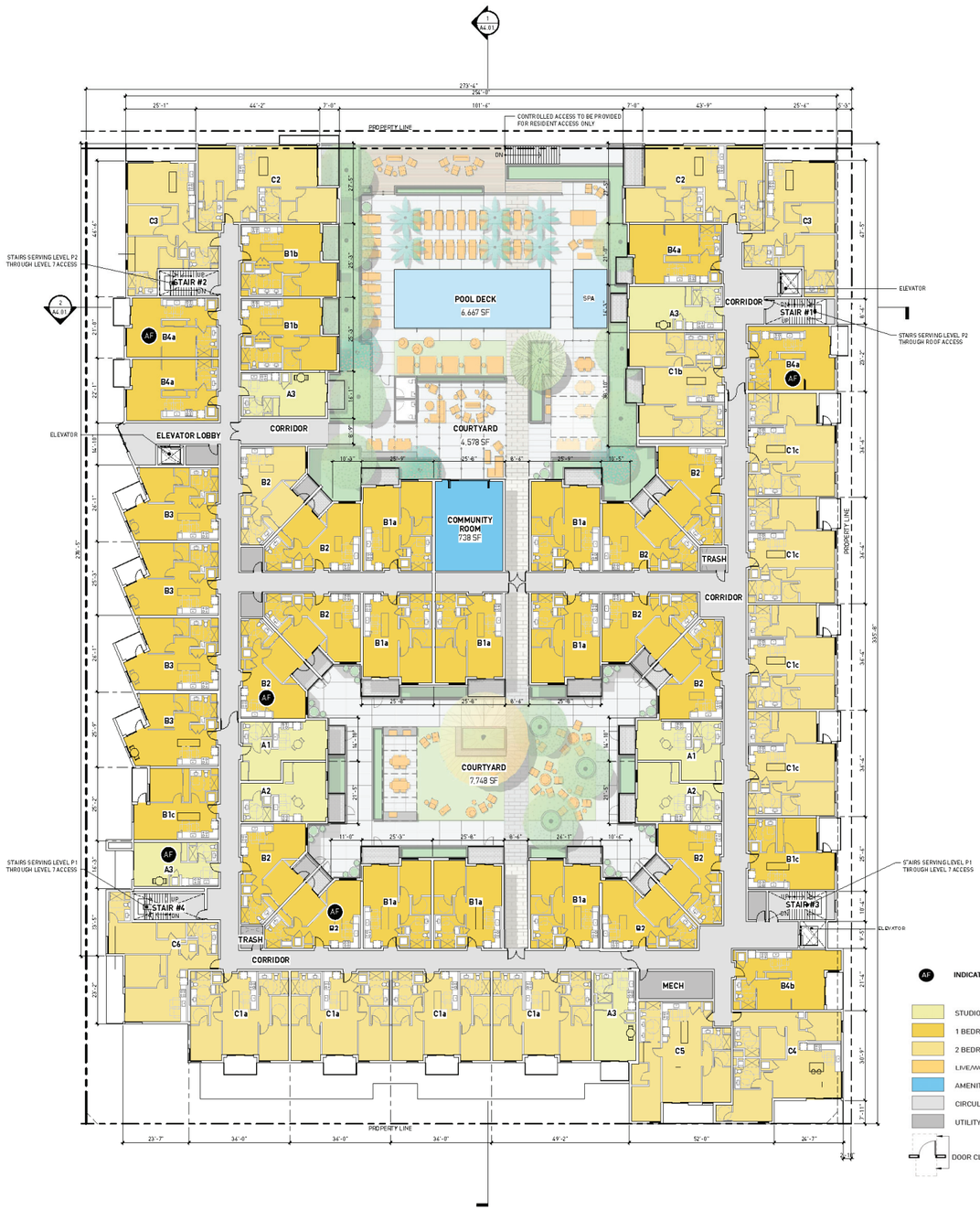
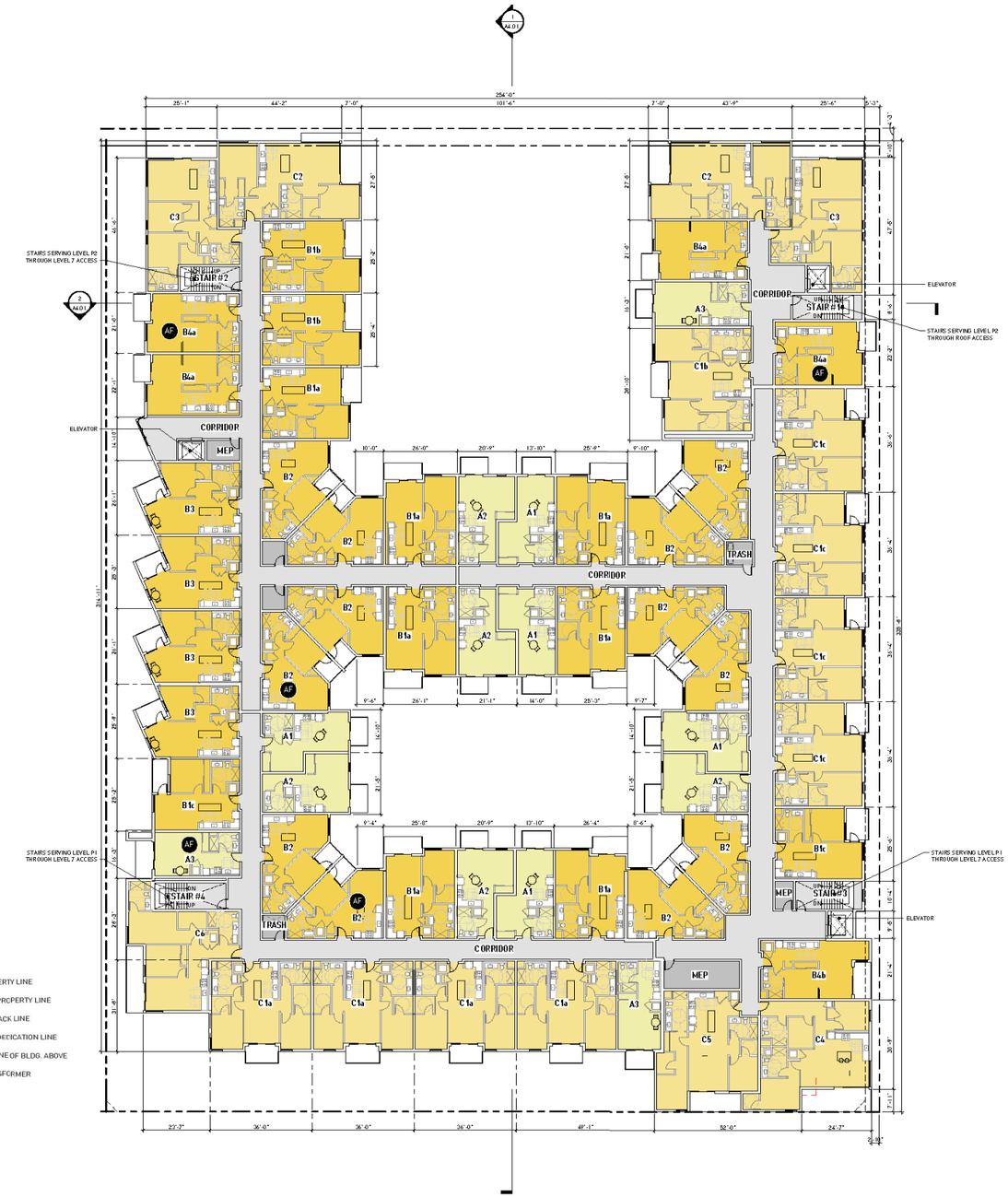


LEVEL 3 FLOOR PLAN | 1
1/16" = 1'-0"



LEVEL 4 FLOOR PLAN | 1
1/16" = 1'-0"

SOURCE: Studioneleven 2021

FIGURE 3-3c

Level-3 and Levels -4/5/6

Alexan Mixed-Use Development Project

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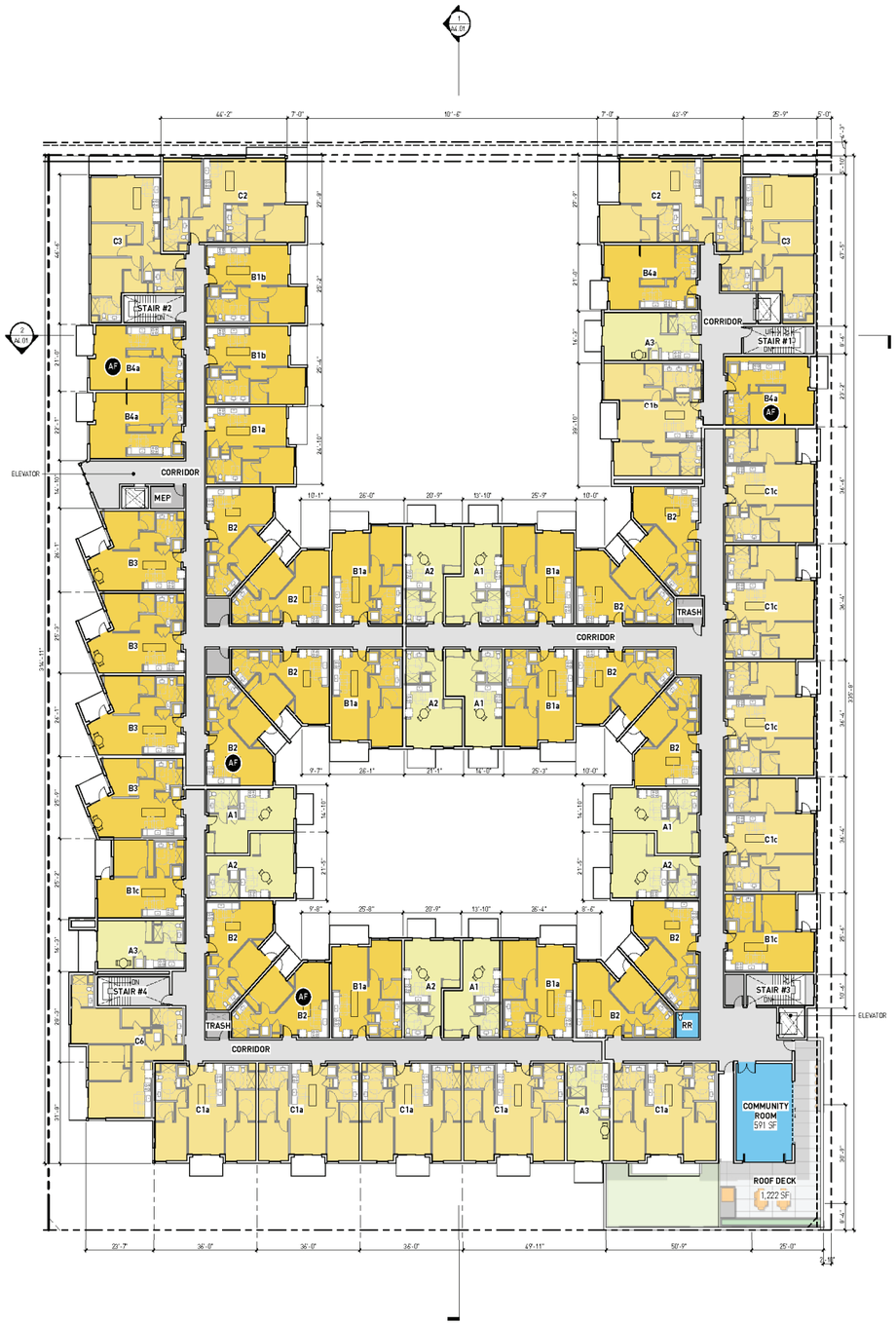
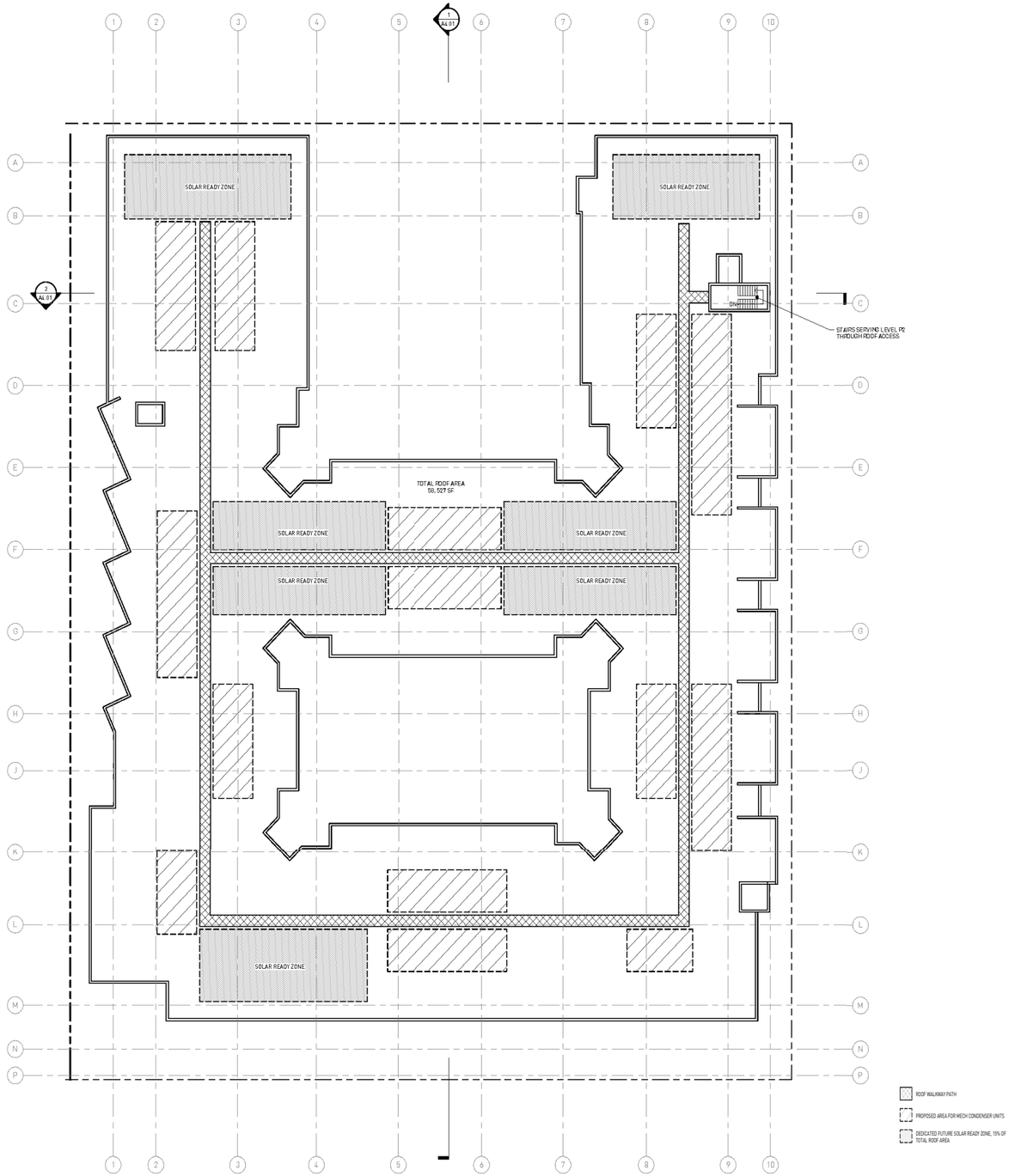


LEVEL 7 FLOOR PLAN! 1
1/16" = 1'-0"



ROOF PLAN 1
1/16" = 1'-0"

SOURCE: Studioneleven 2021

FIGURE 3-3d

Level-7 and Roof

Alexan Mixed-Use Development Project

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Legend

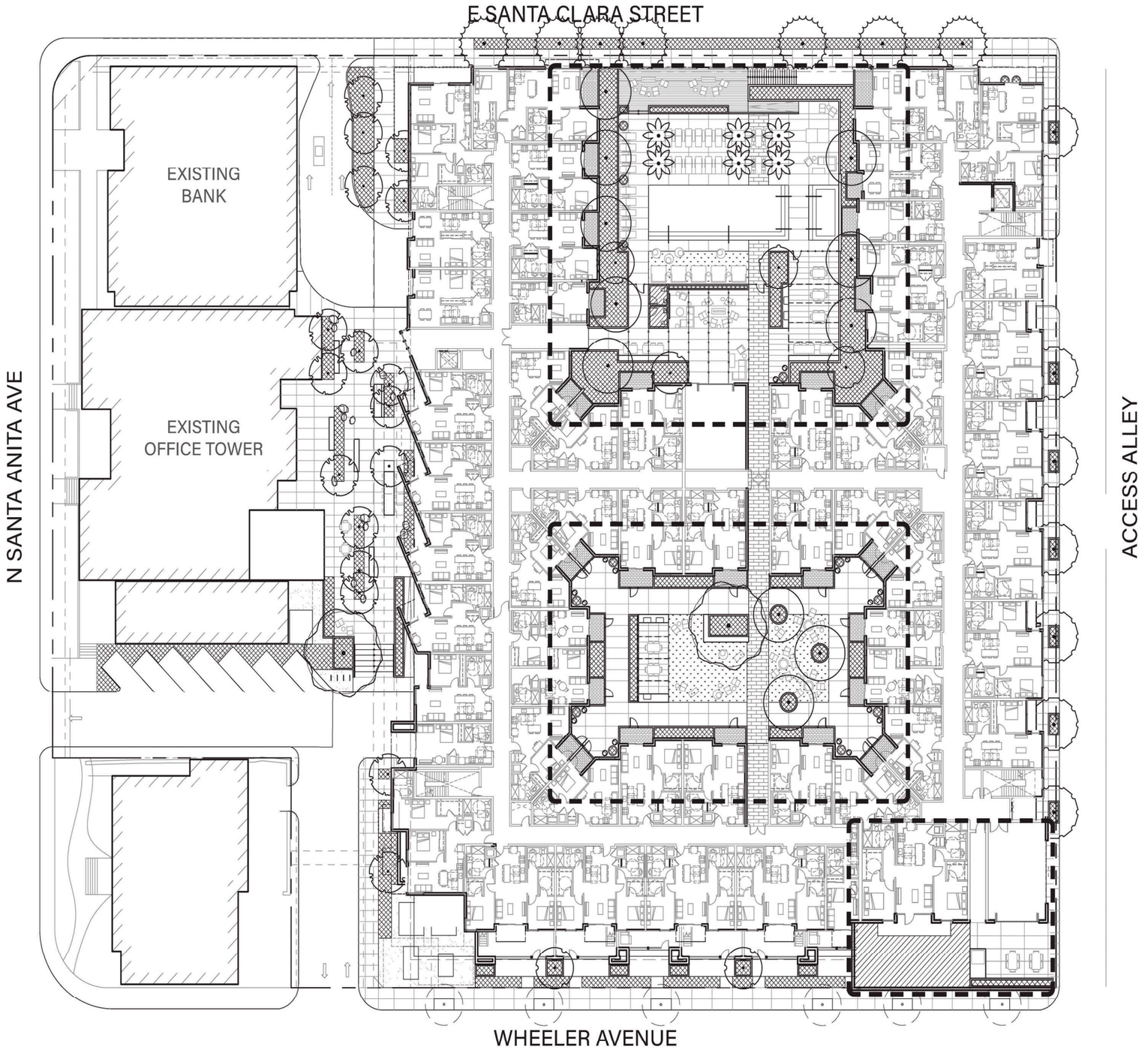
PLANTING LEGEND: Trees				
SYMBOL	NAME	WATER REQ.*	SIZE	QTY
	EXISTING TREE TO REMAIN	-	-	6
	ARBUTUS 'MARINA' STRAWBERRY TREE	MED	24" BOX	5
	ARCTOSTAPHYLOS DENSIFLORA 'HOWARD MCMINN' HOWARD MCMINN MANZANITA	LOW	24" BOX	1
	GEIJERA PARVIFOLIA AUSTRALIAN WILLOW	MED	24" BOX	4
			36" BOX	7
	PHOENIX DACTYLIFERA DATE PALM	LOW	12' CBT	6
	PINUS HALEPENSIS ALEPPO PINE	LOW	24" BOX	7
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE	MED	48" BOX	2
	PODOCARPUS GRACILIOR YEW PINE	MED	24" BOX	7
	QUERCUS SUBER CORK OAK	LOW	24" BOX	9
			36" BOX	8

PLANTING LEGEND: Shrubs & Groundcover				
SYMBOL	NAME	WATER REQ.*	SIZE	QTY
	ACHILLEA 'MOONSHINE' YARROW	LOW	50% 15 GAL. @ 48" OC	7,848 SF
	ARCTOSTAPHYLOS 'PACIFIC MIST' PACIFIC MIST MANZANITA	LOW	35% 5 GAL. 30" OC	
	ARCTOSTAPHYLOS H. 'MONTEREY CARPET' MONTEREY CARPET MANZANITA	LOW		
	BACCHARIS 'CENTENNIAL' COYOTE BRUSH	LOW	15% 1 GAL. @ 18" OC	
	BERBERIS REPENS CREEPING MAHONIA	LOW		
	CAREX DIVULA BERKELEY SEDGE	LOW		
	DIANELLA 'CASSA BLUE' BLUE FLAX LILY	MED		
	DIANELLA 'LITTLE REV' LITTLE REV FLAX LILY	LOW		
	ERIOGONUM GRANDE 'RUBESCENS' BUCKWHEAT	LOW		
	FESTUCA GLAUCA 'ELIJAH BLUE' BLUE FESCUE	MED		
	GREVILLEA 'MOONLIGHT' GREVILLEA	LOW		
	GREVILLEA 'WATTLEBIRD YELLOW' GREVILLEA	LOW		
	HESPERALOE PARVIFOLIA 'YELLOW' YELLOW YUCCA	LOW		
	JUNCUS PATENS 'ELK BLUE' CALIFORNIA GRAY RUSH	LOW		
	LIRIOPE 'GIGANTEA' GIANT LILY TURF	MED		
	LOMANDRA LONGIFOLIA 'BREEZE' DWARF MAT RUSH	MED		
	LOMANDRA LONGIFOLIA 'NYALLA' NYALLA MAT RUSH	MED		
	MUHLENBERGIA C. 'WHITE CLOUD' WHITE MUHLY	LOW		
	PHLOMIS FRUTICOSA 'GRANDE VERDE' JERUSALEM SAGE	LOW		
	PHLOMIS RUSSELIANA TURKISH SAGE	MED		
	PITTOSPORUM C. 'COMPACTUM' COMPACT MOCK ORANGE	MED		
	SESLERIA AUTUMNALIS AUTUMN MOOR GRASS	MED		

	GREEN ROOF TRAY SYSTEM: PLANTING SPECIES T.B.D.	LOW	4" TRAYS	863 SF

PLANTING LEGEND: Turf				
SYMBOL	NAME	WATER REQ.*	SIZE	QTY
	SYNTHETIC TURF	N/A	-	2,015 SF

*WATER REQUIREMENT PLANT FACTOR IS BASED ON WUCOLS DATABASE AND CAN BE FOUND ONLINE AT: http://ucanr.eduedu/sites/WUCOLS/



SOURCE: Studioneleven 2021

FIGURE 3-4

Landscaping and Open Space

Alexan Mixed-Use Development Project

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Legend

1 Chantry Flats (Paseo)
- Identity and Wayfinding
- Minimized Vehicular Access
- Flexible Pedestrian Space
- Trees and Enhanced Plantings
- Enhanced Paving
- Lighting
- Bicycle Parking

2 South Pacific Corridor (Alley)
- Identity and Wayfinding
- Screen Planting
- Artistic Vertical Screens

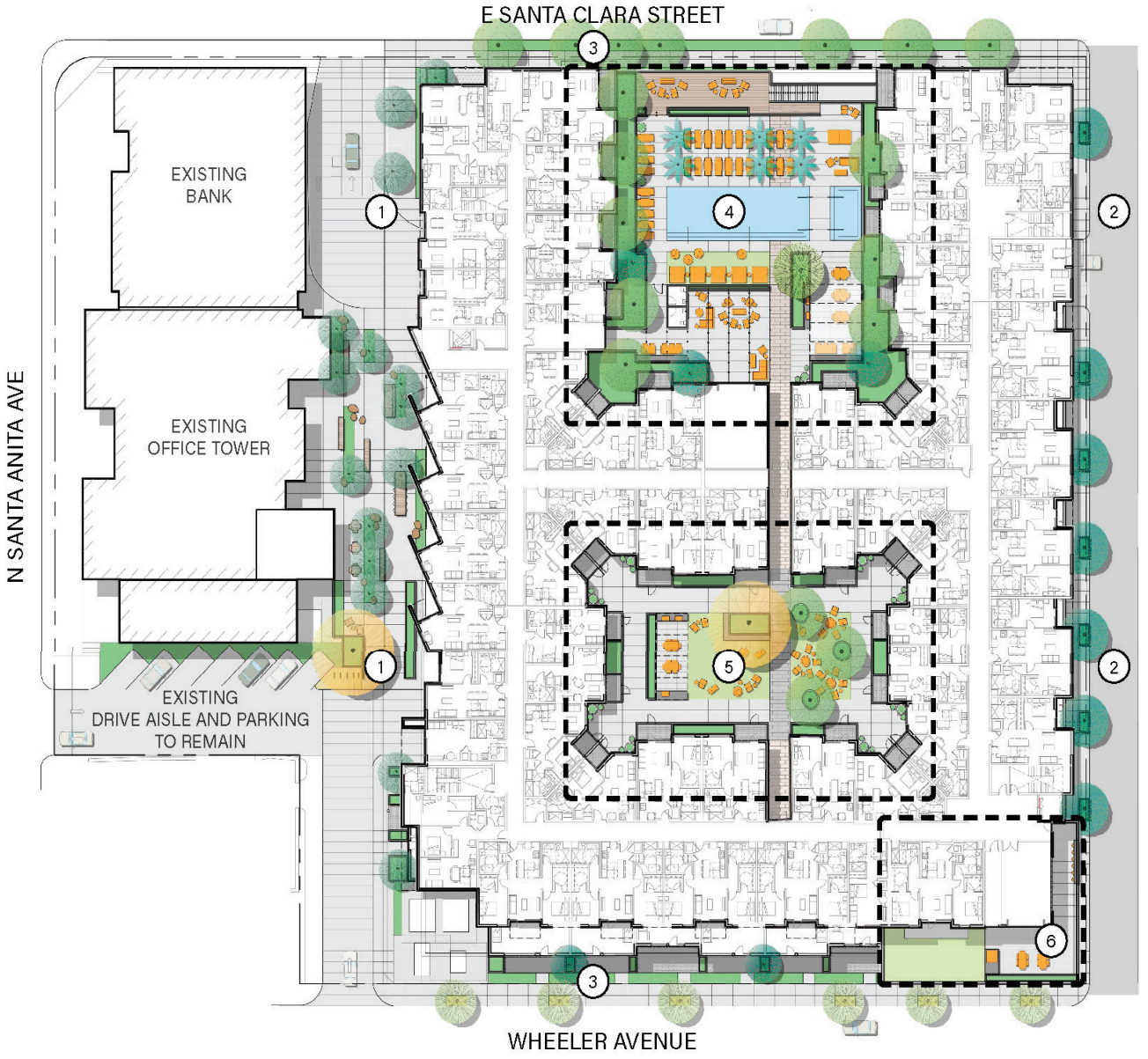
3 Oakwood Promenades
- Identity and Wayfinding
- Street Trees and Parkway Planting (Santa Clara St.)
- Existing Trees in Decomposed Granite (Wheeler Ave.)
- Seating

4 The Springs (Active Court)
- Pool and Spa
- Transparent Pool Fencing
- Cabanas + Variety of Seating
- Outdoor Kitchen & Dining
- Fire Pits & Lounge Furniture
- Entertainment Walls
- Gaming Tables
- Views to Foothills

5 The Meadows (Passive Court)
- Flexible Turf Panel
- Fire Pits & Lounge Furniture
- Outdoor Kitchen & Dining
- Arboretum Inspired Gardens
- Connectivity to Patios

6 The Overlook (Roof Deck)
- Fire Pits & Lounge Furniture
- Views to Downtown Arcadia

NOTE: Refer to L200 sheet for Planting Plan Information



SOURCE: Studioneleven 2021

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FIGURE 3-5

Open Space Plan

Alexan Mixed-Use Development Project

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4 Introduction to Environmental Analysis

The following sections contain an analysis, by issue area, of the potentially significant environmental effects of the proposed Alexan Mixed-Use Development Project (proposed Project). The environmental issue areas analyzed in this section are as follows:

- Aesthetics (Section 4.1)
- Air Quality (Section 4.2)
- Cultural Resources (Section 4.3)
- Energy (Section 4.4)
- Geology and Soils (Section 4.5)
- Greenhouse Gas Emissions (Section 4.6)
- Hazards and Hazardous Materials (Section 4.7)
- Hydrology and Water Quality (Section 4.8)
- Land Use and Planning (Section 4.9)
- Noise (Section 4.10)
- Population and Housing (Section 4.11)
- Public Services and Recreation (Section 4.12)
- Transportation (Section 4.13)
- Tribal Cultural Resources (Section 4.14)
- Utilities and Service Systems (Section 4.15)

The discussions of each environmental issue area include the following subsections:

- Existing Conditions
- Relevant Plans, Policies, and Ordinances
- Thresholds of Significance
- Impacts Analysis
- Cumulative Impact Analysis
- Mitigation Measures
- Level of Significance after Mitigation
- References

As stated in the Notice of Preparation (see Appendix A-1), it was found that the proposed Project would have either no impact or a less than significant impact relative to the following environmental issue areas. As such, these issue areas are not included as stand-alone sections in this Draft EIR, but are discussed in Section 5.5, Effects Found Not to be Significant.

- Agriculture and Forestry Resources
- Biological Resources
- Mineral Resources
- Wildfire

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4.1 Aesthetics

This section describes the existing visual and aesthetic conditions of the Alexan Mixed-Use Development Project (Project) site and vicinity and identifies associated regulatory requirements and thresholds of significance. It also contains an impact analysis and a cumulative impacts analysis. Information contained in this section is based on Project site reconnaissance, satellite imagery from the Google Earth computer program, the City of Arcadia (City) General Plan, the City Municipal and Development Code, the California Department of Transportation (Caltrans) Scenic Highway System, and conceptual site plans prepared by the Project applicant. Other sources consulted are listed in Section 4.1.8, References.

4.1.1 Existing Conditions

This section describes the existing conditions in the Project area and identifies the resources that could be affected by the proposed Project.

Regional Conditions and Land Uses

Figure 2-1, Project Regional Location and Vicinity Map, provides the Project boundaries in the context of the surrounding community. The proposed Project site is located in the City of Arcadia (City) within the County of Los Angeles, and in the northwestern portion of the San Gabriel Valley, approximately 13 miles northeast from downtown Los Angeles. The San Gabriel Valley is an approximately 400-square-mile area at the eastern portion of Los Angeles County bound on the north by the San Gabriel Mountains, on the west by the Repetto and Merced Hills, on the south by the Puente Hills, and on the east by the San Jose Hills (City of Arcadia General Plan, 2010). The City sits at the foot of the San Gabriel Mountains and touches the San Gabriel River at its southeastern boundary. The City of Sierra Madre is located to the north of the City; the City of Monrovia and an area of unincorporated Los Angeles County are located to the east of the City; Temple City and an area of unincorporated Los Angeles County are located to the south of the City, and the City of Pasadena, as well as an area of unincorporated LA County are located to the west of the City.

The Project site is bound by Santa Clara Street to the north, an alleyway and the U.S. Postal Service building to the east, Wheeler Avenue to the south, and Santa Anita Avenue to the west. Regional access to the Project site is via Interstate (I) 210 to Santa Anita Avenue.

As noted in the City's General Plan, Arcadia is highly urbanized and is developed with a mix of low to medium density land uses. High density housing is located primarily in the western section of the City's Downtown area, while commercial uses are concentrated in the central section of the City and on major streets and corridors. Lower density and single-family residential uses are more commonly located near the foothills in the northern sections of the City. The City's single and multifamily residential neighborhoods are sited as contributing to the City's identity as a "Community of Homes" (City of Arcadia 2010). For a more information on existing regional conditions and land uses, please refer to Chapter 2, Environmental Settings.

Despite being densely developed, there are a number of scenic resources in the broader San Gabriel Valley as well as in the City itself, including mountains, foothills, ridgelines, parks, open spaces, and sports venues such as the local public golf courses and the historic Santa Anita Park racetrack. The General Plan cites unobstructed views of the Racetrack and the San Gabriel Mountains as important contributors to its aesthetic character (City of Arcadia 2010).

Surrounding Land Uses

The Project site is surrounded to the north, east, and south by Downtown Mixed Use (DMU), and to the west, by Commercial land use and/or zoning designations. The DMU zone is intended to provide opportunities for complementary service and retail commercial businesses, professional offices, and residential uses located within the City's downtown. A wide range of commercial and residential uses are appropriate, oriented towards pedestrians to encourage shared use of parking, public open space, and interaction of uses within the zone(s). A more detailed discussion of surrounding land uses, as well as complimentary visual aids and overviews, including Figure 2-2, Surrounding and Nearby Land Uses, can be found in Chapter 2, Environmental Setting.

Project Site

The proposed Project includes the construction of a multi-family residential development within 2.95 acres of land located at 150 North Santa Anita Avenue within the City of Arcadia. The Project site has a General Plan land use designation of "Downtown Mixed Use," and has a zoning designation of DMU. The proposed Project would demolish a 2-story office building, demolish two single-story commercial buildings, and redevelop the existing surface parking on site with a 7-story multi-family residential building with 319 units. The existing 8-story office building, an associated single-story brick building, as well as the single-story bank drive through would remain in place. An interior renovation is planned within the existing 8-story office building to accommodate an approximately 750 square feet conversion of the southern building footprint from a lobby to a café. Currently, there is a coffee station in the lobby of the 8-story building, which would be removed. The Figures 4.1-1 and 4.1-2, Existing Conditions Photographs, provide images of the existing Project site and structures.

Dwelling unit mix would consist of 64 studios, 168 one-bedroom units, 79 two-bedroom units, and 8 live-work units. Of the 319 total units, 26 units would be dedicated for affordable housing. Various residential amenities would be constructed throughout the residential building and Project site. Such amenities include an outdoor pool area, fire pit, barbeque dining area, game lounge, and a lawn/grassy area, as well as an outdoor passive court located in the middle of the building within Level 3. Within Level 7, residential amenities would be constructed that include an outdoor fire pit courtyard, barbeque dining area, and a roof deck. Additional residential amenities would be constructed along the Project's frontage with Santa Clara Street within Levels 1 and 2 of the building, and would include a two-story fitness gym, package/mail room, coffee bar/lounge, leasing offices, a reception area, and lobbies. An outdoor plaza would be constructed between the 8-story office tower and the residential building and would include outdoor lounge areas with benches and seating. The alleyway adjacent to the eastern boundary of the Project site would be converted into a pedestrian paseo. A more detailed discussion of the Project site, including the proposed development and existing conditions, can be found in Chapter 3, Project Description.

Scenic Vistas

Landforms and varied topography such as mountain ranges, coastlines, and hills within Los Angeles County allow for a variety of long-range views that define the aesthetically diverse communities in Los Angeles County. These landforms not only create scenic backdrops against developed communities, but also provide environmental and public benefits to residents. While existing scenic resources in Los Angeles County are recognized for their importance as they contrast against developed urban areas, the County of Los Angeles General Plan does not identify any officially designated scenic vistas (County of Los Angeles 2014). Likewise, the City's General Plan does not identify any officially designated scenic vistas within City boundaries, although they do indicate that unobstructed views of the historic Santa Anita Racetrack and the San Gabriel Mountains are particularly important to the City's aesthetic character and should be favored for preservation (City of Arcadia 2010). The views from the

Project site include, most predominantly, the elevated terrain of the San Gabriel Mountains to the north, and, somewhat less pronounced, the northeast corner of Arcadia County Park to the southwest.

Scenic Highways

According to Caltrans, the County of Los Angeles has two officially designated state scenic highways and 11 eligible scenic highways (Caltrans 2019). Route 2 and Route 27, the County of Los Angeles's two designated scenic highways, are 9 miles northwest and 30 miles west of the Project site, respectively. Caltrans classifies the I-210 as an Eligible State Scenic Highway, but not officially designated, where it traverses the City (Caltrans 2019). The I-210 is visible from the existing 8-story office building on the project site, and likewise, the building is visible from the highway. However, none of Los Angeles County's *officially* designated state scenic highways are visible from the Project site, nor is the Project site visible from the officially designated highways. Further, there are no state designated scenic highways within City boundaries (Caltrans 2019).

Light and Glare

The Project site is located in a highly developed area in the City's "core" Downtown area, which contains commercial businesses that produce light sources from interior and exterior lighting, and glare from signage and glass windows. The urbanized nature of the Project site and surrounding area includes an abundance of existing sources of light and glare, such as streetlights, signs, security lighting in parking lots and along walkways, and ambient light emitted from the interiors of buildings. Buildings and structures with glass, metal, and polished exterior or roofing materials also contribute to localized sources of glare. For example, surrounding buildings in the Project area, including the reflective mirrored-glass office building on the western side of the Project site, the glass rotunda from the car dealership on the western side of Santa Anita Avenue, and interior and exterior signage from nearby commercial retailers, are all contributing sources of light and glare. Furthermore, there are a number of safety lights in the existing Project site parking lot and in parking lots to the north and south, as well as arched light posts illuminating the roadways and sidewalks of the adjacent Santa Anita Avenue, Wheeler Avenue, and East Santa Clara Street.

Landscaping & Trees

The existing Project site has limited landscaping, as it predominantly paved over to support a large ground level parking lot and other existing structures. Existing landscaping and/or foliage within or directly adjacent to the Project site boundaries consists of mature street trees along Wheeler Avenue and East Santa Clara Street, small shrubs and/or clumped grasses along North Santa Anita Avenue and within the parking lot medians, and some scattered shrubs, grasses and matures trees surrounding the existing building in the northeast Project site corner.

According to a site survey conducted in August 2021, there are 36 existing trees within the Project site area, which includes on-site trees and off-site street trees located adjacent to the Project site boundaries along Wheeler Avenue and Santa Clara Avenue. Six (6) trees on-site are subject to regulation under Division 10, Section 9110.01, Tree Preservation, of the City's Development Code (Tree Preservation Ordinance), adopted April 2021. These six (6) trees meet the definition of "protected trees" as defined in the City's Development Code, including three (3) lemon bottle brush (*Callistemon citrinus*) trees, one (1) carrotwood (*Cupaniopsis anacardioides*), one (1) southern live oak (*Quercus virginiana*), and one (1) Chinese elm (*Ulmus parvifolia*).

Nine (9) trees are identified as off-site street trees adjacent to the Project site area and are subject to regulation under Chapter 8, Comprehensive Tree Management Program, of the City Municipal Code, including seven (7) Southern live oak trees (*Quercus virginiana*), one (1) cork oak (*Quercus suber*), and one (1) crape myrtle

(*Laegerstroemia indica*) tree. The remaining 21 on-site trees are not subject to regulation under the City's Tree Preservation Ordinance or Tree Management Program. The inventoried tree locations are depicted in Appendix B, Arborist Report.

4.1.2 Relevant Plans, Policies, and Ordinances

Federal

There are no federal regulations pertaining to aesthetics and scenic resources that would apply to the proposed Project.

State

California Scenic Highway System

Created by the California State Legislature in 1963, the California Scenic Highway Program includes highways designated by Caltrans as scenic. The purpose of the program is to protect the scenic beauty of California highways and adjacent corridors through conservation and land use regulation.

California Code of Regulations

Title 24 – California Building Standards Code

Title 24, 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:

Title 24, Part 1 – California Building Code / Title 24, Part 3 – California Electrical Code

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

Title 24, Part 6 – California Energy Code

The California Energy Code (Title 24, Part 6) stipulates allowances for lighting power and provides lighting control requirements for various lighting systems, with the aim of reducing energy consumption through efficient and effective use of lighting equipment. Section 130.2 sets forth requirements for outdoor lighting controls and luminaire cutoff requirements. All outdoor luminaires rated above 150 watts shall comply with the backlight, up light, and glare (BUG) ratings in accordance with IES TM-15-11, Addendum A, and shall be provided with a minimum of 40% dimming capability activated to full on by motion sensor or other automatic control. This requirement does not apply to streetlights for the public right of way, signs, or building facade lighting.

Section 140.7 establishes outdoor lighting power density allowances in terms of watts per area for lighting sources other than signage. The lighting allowances are provided by the Lighting Zone, as defined in Section 10-114 of the California Energy Code. Under Section 10-114, all urban areas within California are designated as Lighting Zone 3. Additional allowances are provided for Building Entrances or Exits, Outdoor Sales Frontage, Hardscape Ornamental Lighting, Building Facade Lighting, Canopies, Outdoor Dining, and Special Security Lighting for Retail Parking and Pedestrian Hardscape.

Section 130.3 stipulates that sign lighting controls with any outdoor sign that is on during both day and nighttime hours must include a minimum 65% dimming at night. Section 140.8 of the California Energy Code sets forth lighting power density restrictions for signs.

California Vehicle Code

Chapter 2, Article 3 of the California Vehicle Code stipulates limits to the location of light sources that may cause glare and impair the vision of drivers.

Article 3, Offenses Relating to Traffic Devices (21450–21468) (Article 3 enacted by Stats. 1959, Ch. 3.), Section 21466.5. Stipulates that no person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway.

Regional and Local

City of Arcadia General Plan

The City of Arcadia adopted its General Plan in 2010 and conducted an update in 2013. The General Plan is intended to provide direction for future development of the City. It represents a formal expression of community goals and desires, provides guidelines for decision making about the City's development, and fulfills the requirements of California Government Code Section 65302 requiring local preparation and adoption of General Plans. Goals and policies related to aesthetics and scenic resources in the City's General Plan that may be applicable to the Project are identified below (City of Arcadia 2010).

Land Use & Community Design Element

Policy LU-1.2
Promote new uses of land that provide diverse economic, social, and cultural opportunities, and that reinforce the characteristics that make Arcadia a desirable place to live.

Policy LU-2.1

Ensure that trees planned in the public right-of-way continue to be well maintained where they exist, are planted in areas where they are currently lacking, and encourage replacement of undesirable tree species in public rights-of-way.

Policy LU-2.6

Ensure the aesthetic quality and pedestrian orientation of the City's commercial corridors by implementing the recommendations of the Community Design section, as well as the Architectural Design Guidelines for commercial and industrial properties.

Policy LU-6.4:

Encourage design approaches that create a cohesive, vibrant look and that minimize the appearance of expansive parking lots on major commercial corridors for new or redeveloped uses.

Policy LU-6.6:

Develop landscaping that is compatible with the City's water efficient landscape ordinance and façade standards for commercial properties and require all new development to adhere to them. Encourage the improvement of rundown buildings by offering entitlement incentives.

Policy LU-6.11:

Provide mature street trees, continuous landscaping (that includes drought-tolerant plants), and pedestrian amenities along corridors and within districts to create a more visually pleasing and cohesive streetscape.

City of Arcadia Municipal and/or Development Code

The California Building Code, 2019 edition, published at Title 24, Part 2, of the California Code of Regulations, including relevant Appendices, is adopted by reference pursuant to Article VIII, Chapter 1, Section 8110 of the City of Arcadia Municipal Code.

Tree Preservation and Management

According to Division 10, Section 9110.01, Tree Preservation, of the City's Development Code, a permit is required prior to removal of any protected tree, as well as prior to any encroachment into the protected zone of any protected tree. Exceptions are provided for in Section 9110.01.060, and include allowances for combined permits, visual barriers, and emergency situations, among others. Section 9110.01 also provides explicit lists of protected tree species, as well as unprotected tree species (Section 9110.01.040), and gives guidance on the application processes and applicable fees (Section 9110.01.070), required protective measures (9110.01.090), and enforcement and liability protocols (9110.01.100/110).

Additionally, Article IX, Chapter 8, Comprehensive Tree Management Program, of the City's Municipal Code governs the planting, maintenance, removal and replacement of City-owned trees on public property. City-issued permits are not required for removal of tree limbs or pruning or trimming branches of street trees in conjunction with construction activities; however, the City requires that pruning or trimming be completed in accordance with the industry standards as set forth by the International Society of Arboriculture or the American National Standards Institute (ANSI), and in consultation with a Certified Arborist. Section 9812, Tree Planting and Maintenance Regulations, of Chapter 8 also mandates that the owner of property adjacent to a parkway or public right-of-way shall have the responsibility to maintain in good condition all street trees in the parkway or public right-of-way. Such maintenance shall include, but is not limited to, consistent deep watering to help train roots to grow down and away from other sources of moisture (e.g., water/sewer laterals and irrigation systems) and to prevent roots from surfacing, causing hardscape damage.

Article IX, Chapter 1, Development Code

The City of Arcadia Development Code (Development Code) is intended to regulate the use and development of land within the City consistent with the City of Arcadia General Plan. It is also the intent of the Development Code to promote orderly development; protect the public health, safety, and general welfare; protect the City of Arcadia character, social diversity, and economic vitality of neighborhoods and business districts; and ensure that new uses and development benefit the City.

Section 9103.01.120, Exterior Lighting

This Section establish exterior lighting standards that are intended to balance safety and security needs for lighting with efforts to guard against adverse light trespass (spill light), light pollution, and glare onto surrounding properties. Unless specifically exempted, Section 9103.01.120 applies to any exterior lighting that is not within a fully enclosed building or structure.

Section 9103.11.070, Permanent Signs by Zone, Locations and Allowed Sign Area

This Section provides regulations for permanent signs by designated zoning areas. Any encroachment of any awning, blade, or marquee sign into a public right-of-way shall be subject to review and approval by the City Engineer and shall comply with any conditions imposed to permit such encroachment. Regulation of sign types specific to the Downtown Mixed Use (DMU) Zone, and therefore applicable to the proposed Project, are found in Table 3-13 (Regulation of Sign Types) of Section 9103.11.070.

Section 9107.19, Site Plan and Design Review

This Section, and subsections contained therein, provide a process for the appropriate review of development projects, and mandate that no one shall construct any structure, or relocate, rebuild, or significantly enlarge or modify any existing structure or site until a Site Plan and Design Review has been approved. In accordance with Section 9107.19.020 (Applicability), the proposed Project would be required to comply with the City's multifamily, commercial, and/or mixed-use Design Guidelines to ensure that the proposed structure(s) compliment the City's design aesthetics and community character. Applicable guidance also includes the recently updated 2019 City of Arcadia Commercial and Mixed-Use Design Guidelines. In addition, Project plans would be subject to the City's Site Plan and Design Review.

For a complete discussion of all plans, policies, and ordinances applicable to the proposed Project (both unrelated to and including aesthetics) please refer to Section 4.9.2 Relevant Plans, Policies and Ordinances, in Chapter 4.9, Land Use and Planning.

4.1.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to aesthetics are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to aesthetics would occur if the Project 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, conflict with applicable zoning and other regulations governing scenic quality.

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

4.1.4 Impacts Analysis

Prior to discussion of aesthetic impacts, cumulative or otherwise, it is necessary to include a discussion of Senate Bill (SB) 743 [Public Resources Code (PRC) Section 21099(d)] as it relates to the proposed Project and applicable CEQA review requirements. PRC Section 21099 sets forth new guidelines for evaluating project impacts under CEQA, as follows: "Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within transportation priority area (TPA) shall not be considered significant impacts on the environment." PRC Section 21099 defines a "transit priority area" as an area within 0.5 mile of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." PRC Section 21064.3 defines "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." PRC Section 21099 defines an "infill site" as a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

The proposed Project is mixed-use project and PRC Section 21099 applies to the Project. The property is a previously developed "infill" site located approximately 250 feet from the Metro L Line Station; as such, the Project meets the criteria established by SB 743. Therefore, the Project's aesthetic effects cannot be considered a significant impact. The analysis in this EIR is for informational purposes only and not for determining whether the Project will result in a significant impact on the environment. As such, nothing in the aesthetic impact discussion in this EIR shall trigger the need for any CEQA findings, CEQA analysis, or CEQA mitigation measures.

Threshold 4.1a Would the project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The Project site is currently developed and located within a highly urbanized, relatively flat portion of the City, as such, immediate views of and from adjacent and nearby parcels are not particularly scenic. The County of Los Angeles General Plan does not identify any officially designated scenic vistas (County of Los Angeles 2014). Likewise, the City's General Plan does not identify any officially designated scenic vistas within City boundaries, although they do indicate that unobstructed views of the historic Santa Anita Park Racetrack and the San Gabriel Mountains are particularly important to the City's aesthetic character and should be favored for preservation (City of Arcadia 2010).

The views from the Project site include, most predominantly, the elevated terrain of the San Gabriel Mountains to the north, and, somewhat less pronounced, the northeast corner of Arcadia County Park to the southwest. The Project site contains an existing 8-story office building, which would remain in place. The proposed Project additions would be limited to 7-stories, and as such would be consistent with both the dimensions and urban aesthetics of the existing development(s) directly on and within the downtown vicinity of the Project site. Mountain views as seen from the adjacent City-owned parking lot(s) immediately south of the Project site would be interrupted but not be substantively impacted by the proposed multistory development because views are currently obscured by commercial development and existing mature trees along Wheeler Avenue. The proposed Project would include a north-south pedestrian corridor (i.e. Chantry flats Paseo) that would allow for mountain views, as shown in Figure 3-5, Open Space Plan, and the existing alley that run north-south adjacent to the eastern edge of the Project site would also be maintained and a pedestrian connection to the Metro L Line and view to the mountains to the north. (This view corridor is also illustrated in Rendering 3, as shown in Figure 4.1-3b, discussed below.)

In addition, while open space at the northeast corner of Arcadia County Park could provide some valued viewshed within the proximity of the Project, the intervening commercial development—most noticeably, the existing 8-story office building on the western side of the Project site, and an existing 2-story windmill on the southwest corner of Santa Anita Avenue and Huntington Drive—prevent extensive views of the park for public corridors and public spaces immediately north of the Project site.

In summary, while the proposed Project would result in visual changes on the Project site due to increased intensity of use, these changes would not adversely affect a scenic vista. Due to the urban, developed character of the existing viewshed, the presence and proximity of existing developments, and existing topography in the area, the proposed Project would not have a substantial adverse impact to existing scenic vistas, designated or otherwise. Finally, as stated in the introduction to Section 4.1.4, the proposed Project is within a Transit Priority Area (TPA) and, as such, the proposed Project's impacts on aesthetics would not be considered significant impacts pursuant to PRC Section 21099(d).

Threshold 4.1b Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The proposed Project is not within the immediate vicinity of a state designated scenic highway. According to Caltrans, the County of Los Angeles has two officially designated state scenic highways and 11 eligible scenic highways (Caltrans 2019). Route 2 and Route 27, the County of Los Angeles's two designated scenic highways, are 9 miles northwest and 30 miles west of the Project site, respectively. Caltrans classifies the I-210 as an Eligible State Scenic Highway, but not officially designated, where it traverses the City (Caltrans 2019), and portions of the highway are visible to the north and northeast from the upper floors of the existing 8-story office building. Likewise, the existing office building located on the Project site is visible from portions of the highway. However, because the I-210 has not been officially designated, this review is not obligated to consider any impacts to scenic resources within its viewshed, significant or otherwise. In addition, the Project site does not contain any rock outcroppings or historic buildings.

The Project site includes 27 on-site trees, as well as nine (9) off-site street-trees. All 27 on-site trees—including six (6) on-site protected species—and one (1) City owned street tree along Santa Clara Street would be removed as a result of Project implementation. Eight (8) City owned trees within the public right-of-way along Wheeler Avenue would be encroached upon. According to Division 10, Section 9110.01, Tree Preservation, of the City's Development Code, a permit is required prior to removal of any protected tree, as well as prior to any encroachment into the protected zone of any protected tree. As required by Section 9110.01.080, for every protected tree that was approved to be removed, it shall be replaced with a minimum of two (2) new 24-inch box trees (2:1 ratio). Although not protected under the Tree Preservation Ordinance, per Section 9806 of the City's Municipal Code, removal of the City-owned tree on Santa Clara Street, would require issuance of a permit from the City's Public Works Department. Further details regarding the permit fee and specific replacement requirements—including the species and replacement ratio—would be determined by the Director of Public Works at such a time that the application for street tree removal was received. As discussed in Appendix B, Arborist Report, Dudek further recommends replacement of non-regulates tree species as a ratio of 1:1, resulting in 14 protected replacement trees, and 21 non-regulated replacement trees. As such, the Project would be consistent with all Tree Preservation and Management Program provisions.

None of the trees identified in Appendix B, Arborist Report, are visible from the eligible highway. Additionally, as stated in Section 4.1.4, the proposed Project is within a TPA and, as such, the proposed Project's impacts on aesthetics would not be considered significant impacts pursuant to PRC Section 21099(d). In summary, the proposed Project would have no impact on any scenic resources within a state scenic highway. No mitigation is required.

Threshold 4.1c **In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

Less Than Significant Impact. California Public Resources Code Section 21071 defines an "urbanized area" as "(a) an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons, or (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons." As further discussed in Section 4.11, Population and Housing, there were an estimated 56,681 residents in the City in 2020 (U.S. Census Bureau 2021). The Southern California Association of Governments (SCAG) forecasts 62,200 residents in the City by 2045 (SCAG 2020). However, the City is adjacent to the City of Pasadena to the west. The combined population of the City of Arcadia and Pasadena is well over 100,000 persons[1]. Therefore, the following analysis considers whether the proposed Project would conflict with applicable zoning or other regulations governing scenic quality.

The City has adopted an update to the Design Guidelines for various development types, which was finalized in October 2019. The Commercial and Mixed-Use Design Guidelines provide direction to project applicants about site planning and building placement; public and private open spaces; pedestrian and vehicular access; and massing and scale. Other topics addressed include guidelines related to architectural style, awnings, rooflines, articulation, windows/doors, colors/materials, landscaping, equipment and service areas, site furnishing, lighting, and public art. The guidelines are intended as a reference point for a common understanding of the minimum qualitative design expectations within the City.

The Project site is located within the H Special Height Overlay Zone, specifically within the Zone H8 height district, which allows for a maximum development height of 96 feet. The 7-story structure would be constructed to 80 feet in height. Figure 3-2, Overall Elevations in Section 3, Project Description, provides a visual illustration of the proposed building elevations as viewed from the north, south, east and west. Figure 3-3a, Elevation Cross Section, depicts the interior composition of the proposed structure as viewed form the western elevation, including the 1.5-levels of subterranean parking and 2 levels of above ground parking. At ground level, the live-work units would face Wheeler Ave to the south, and the residential amenity spaces would face Santa Clara Street to the north.

As previously noted, the existing 8-story office building located on the west end of the Project site would remain intact. At a maximum height of 7-stories, the proposed Project building would not exceed the height of the existing adjacent office building and is therefore consistent with existing structures in regard to building height. As noted above, the Project is also subject to Massing and Scale guidance included in the 2019 Commercial and Mixed-Use Design Guidelines document.

Figure 3-5, Open Space Plan in Section 3, Project Description, depicts the Project's proposed landscaping features and pedestrian improvements. The first Paseo corridor area would include new paving, lighting, trees, and plantings in order to provide an enhanced pedestrian experience that would link the existing buildings together with the new proposed Project building. The second Corridor Alleyway is an existing alley for vehicular travel, but the Project would provide for pedestrian connectivity through the alley as well as signage for wayfinding and screen plantings or other artistic vertical screens at the parking garage. The third area includes street trees and new parkway plantings, as

[1] The U.S. Census Bureau estimated that the residential population of Pasadena in 2019 was 141,029, resulting in a combined population of 198,968 (using 2019 population estimates) (U.S. Census 2021).

well as seating along Wheeler Avenue and Santa Clara Street. Lastly, the fourth, fifth, and sixth areas include the recreational amenities for the residents.

Figure 3-4, Landscaping and Open Space in Section 3, Project Description, provides further detail of the proposed landscape plan, including proposed plant species. The Project proposes landscaping throughout the exterior ground level, the Level 3 north and south courtyards (further illustrated in Figure 3-3c, Level-3 and Levels-4/5/6), as well as the Level 7 roof deck. The landscape plan would include the planting of approximately 56 new ornamental trees with low to medium water requirements (including cork oak, yew pine, California sycamore, and Australian willow), approximately 7,848 square feet (sf) of shrubs and ground cover with low to medium water requirements (including various species of manzanita, Turkish sage, yellow yucca, and autumn moor grass), and the installation of approximately 2,015 sf of artificial turf. Additionally, Figure 3-4 depicts the location of an approximately 863 sf "green roof" tray system on the southeast corner of the roof desk.

The General Plan policies specific to the aesthetic character and quality of development within the City, as well as the applicable City Municipal and/or Development Code requirements that affect aesthetic character, are listed and analyzed in Table 4.1, Aesthetics Consistency Analysis, below.

Table 4.1-1. Aesthetics Consistency Analysis

Applicable Policy/Regulation	Consistency Analysis
General Plan	
Policy LU-1.2: Promote new uses of land that provide diverse economic, social, and cultural opportunities, and that reinforce the characteristics that make Arcadia a desirable place to live.	**Consistent.** The proposed Project is a mixed-use residential/office/commercial project with a live/work component, which, upon completion, would bring 319 households into close proximity to the central business district, benefiting local businesses and facilitating a walkable community. A key Project objective is to design a distinctive building that has a coherent architectural concept and provides a high-quality urban addition to the City's Downton Core. The Project would be required to comply with the City's Commercial and Mixed-Use Design Guidelines to ensure the structures compliment the City's design aesthetics and community character.
Policy LU-2.1: Ensure that trees planned in the public right-of-way continue to be well maintained where they exist, are planted in areas where they are currently lacking, and encourage replacement of undesirable tree species in public right-of-ways.	**Consistent.** The proposed Project would include planting approximately 56 new trees throughout the Project site. The Project would adhere to the requirements of Section 9110.01, Tree Preservation of the City's Development Code, which recognizes oaks, sycamores, and mature trees as significant aesthetic and ecological resources that benefit current and future residents of the City. The proposed Project would require the removal of 28 trees but would preserve and protect eight (8) City trees located adjacent to the Project site. The eight (8) City trees would continue to be maintained by the Project site landowners, pursuant to Section 9812, Tree Planting and Maintenance Regulations, of the City's Municipal Code. The proposed landscape plan would be subject to City review and approval.
Policy LU-2.6: Ensure the aesthetic quality and pedestrian orientation of the City's commercial corridors by implementing the recommendations of this Community Design section, as well as the Architectural Design Guidelines for commercial and industrial properties.	**Consistent.** The proposed Project would create a new pedestrian-oriented space by forming a plaza between the new building and the existing commercial development, providing a new north-south pedestrian connection in the block. The Project would also: (1) Utilize building setbacks to create wide, pedestrian friendly walkways, (2) orient the main lobby towards the light rail station to encourage transit usage, and (3) place a secondary lobby along Wheeler Street to provide

Table 4.1-1. Aesthetics Consistency Analysis

Applicable Policy/Regulation	Consistency Analysis
	residents with convenient pedestrian access to the Downtown area. In addition, the proposed Project would be required to comply with the City's Commercial/Mixed Use Design Guidelines, and Project plans would be subject to the City's site plan and design review.
Policy LU-6.4: Encourage design approaches that create a cohesive, vibrant look and that minimize the appearance of expansive parking lots on major commercial corridors for new or redeveloped uses.	**Consistent.** The proposed Project would replace an existing, expansive surface parking lot in the Downtown with a transit oriented, mixed-use residential complex, bringing vibrancy to an existing, exclusively commercial development. While the Project design includes two above-ground parking areas, they would remain concealed from the adjacent roadways within Levels 1 and 2 of the main building. The two addition parking levels would be subterranean. As such, views of the proposed parking would be minimized.
Policy LU-6.6: Develop landscaping that is compatible with the City's water efficient landscape ordinance and façade standards for commercial properties and require all new development to adhere to them. Encourage the improvement of rundown buildings by offering entitlement incentives.	**Consistent.** The proposed Project would include the planting of approximately 7,848 sf of shrubs and ground cover with low to medium water requirements (including various species of manzanita, Turkish sage, yellow yucca, and autumn moor grass), and installing 2,015 sf of artificial turf. Approximately 56 new trees would be planted throughout the Project site, all with low to medium water requirements. The Project would adhere to the requirements of Section 9110.01, Tree Preservation, of the City's Development Code, which recognizes oaks, sycamores, and mature trees as significant aesthetic and ecological resources that benefit current and future residents of the City. The project would also adhere to Article IX, Chapter 8, Comprehensive Tree Management Program, of the City's Municipal Code governing the planting, maintenance, removal and replacement of City-owned trees on public property. The proposed Project would require the removal of 27 on-site trees—Including six (6) protected species—and one (1) off-site City owned tree but would preserve and protect eight (8) City trees located adjacent to the project site along Wheeler Avenue. Additionally, the proposed landscape plan would be subject to City review and approval. The proposed Project would result in a net increase in landscaping, thereby resulting in improvements to the current condition.
Policy LU-6.11: Provide mature street trees, continuous landscaping (that includes drought-tolerant plants), and pedestrian amenities along corridors and within districts to create a more visually pleasing and cohesive streetscape.	**Consistent**. The Project would adhere to the requirements of Section 9110.01, Tree Preservation of the City's Development Code as well as Article IX, Chapter 8, Comprehensive Tree Management Program, of the City's Municipal Code. Eight (8) of the project adjacent street trees would be preserved, protected, and maintained in accordance with Chapter 8. The proposed pedestrian paseo, as well as the exterior street-facing ground level landscaping, would include drought tolerant trees, shrubs and groundcover. New trees and landscaping would be planted in accordance with the City's Water Efficient Landscaping Ordinance.
Municipal Code	
Article IX, Chapter 8, Comprehensive Tree Management Program	**Consistent.** The Comprehensive Tree Management Program governs the planting, maintenance, removal and replacement of City-owned trees on public property. City-issued permits are not required for removal of tree limbs or pruning or trimming branches of street trees in conjunction with construction activities; however, the City requires that pruning or trimming be completed in accordance with the industry standards as set forth by the International Society of Arboriculture or the American

Table 4.1-1. Aesthetics Consistency Analysis

Applicable Policy/Regulation	Consistency Analysis
	National Standards Institute (ANSI), and in consultation with a Certified Arborist. All nine (9) of the adjacent street trees would be preserved, protected and maintained in accordance with Chapter 8 requirements. Further details are included in Appendix B, Arborist Report, of this Draft EIR
Development Code	
Section 9103.01.120, Exterior Lighting	**Consistent.** The proposed Project would be required to comply with the City's exterior lighting standards to balance safety and security needs for lighting that also avoids light trespass (spill light), light pollution, and glare onto surrounding properties.
Section 9103.11.070, Permanent Signs by Zone – Locations and Allowed Sign Area.	**Consistent.** The proposed Project would be required to comply with the City's regulations for signage within the DMU zone. The Project would be also required to comply with the City's Commercial/Mixed Use Design Guidelines to ensure the structures compliment the City's design aesthetics and community character.
Section 9103.09.040 (C), Landscape Requirements for Commercial, Mixed Use, and Industrial Zones	**Consistent.** The Project proposes landscaping throughout the exterior ground level, the Level 3 north and south courtyards, as well as the Level 7 roof deck. This would include the planting of approximately 56 new trees (including cork oak, yew pine, California sycamore, and Australian willow), 7,848 square feet (sf) of shrubs and ground cover with low to medium water requirements (including various species of manzanita, Turkish sage, yellow yucca, and autumn moor grass), and installing 2,015 sf of artificial turf throughout setbacks, open areas, and a paseo that are visible from various public vantage points. The proposed landscape plan would be subject to City review and approval.
Section 9107.19, Site Plan and Design Review	**Consistent.** The Project would be also required to comply with the City's Commercial and Mixed-Use Design Guidelines to ensure the structures compliment the City's design aesthetics and community character. Project plans would be subject to the City's Site Plan and Design Review.
Section 9110.01, Tree Preservation	**Consistent.** The Project site includes 27 on-site trees, as well as nine (9) off-site street-trees adjacent to the Project's northern and southern boundary lines. All 27 on-site trees—including six (6) on-site protected species—and one (1) City owned street tree would be removed as a result of Project implementation. Eight (8) City owned trees within the public right-of-way along Wheeler Avenue would be encroached upon. According to Division 10, Section 9110.01, Tree Preservation, of the City's Development Code, a permit is required prior to removal of any protected tree, as well as prior to any encroachment into the protected zone of any protected tree. As required by Section 9110.01.080, for every protected tree that was approved to be removed, it shall be replaced with a minimum of two (2) new 24-inch box trees (2:1 ratio). Although not protected under the Tree Preservation Ordinance, per Section 9806 of the City's Municipal Code, removal of the City-owned tree on Santa Clara Street, would require issuance of a permit from the City's Public Works Department. Further details regarding the permit fee and specific replacement requirements—including the species and replacement ratio—would be determined by the Director of Public Works at such a time that the application for street tree removal was received. The 21 on-site, non-regulated trees planned for removal would not be subject to any replacement requirements. However, in addition to the 14

Table 4.1-1. Aesthetics Consistency Analysis

Applicable Policy/Regulation	Consistency Analysis
	replacement trees required per City regulation, the Arborist Report (Appendix B) recommends planting an additional 21 trees to reduce the impact of the non-regulated tree removals, resulting in a total of 35 required or recommended replacement trees. The Project would be consistent with all Tree Preservation provisions.

As described above in Table 4.1-1, the proposed Project would be consistent with the City's General Plan policies, Development Code, and Municipal Code Sections that pertain to the preservation of the aesthetic character of the City (for a more complete consistency analysis regarding land use policies unrelated to and including aesthetics, please refer to Table 4.9-2. General Plan Consistency Analysis, in Chapter 4.9, Land Use and Planning). The proposed Project would be in visual agreement with the land uses of the surrounding area and consistent with the City's land use and zoning designations. Furthermore, when compared to existing conditions, the proposed Project design would add architectural and landscape features that would improve the visual quality of the Project site and the surrounding Project area. Figure 4.1-3a, Architectural Renderings (East Santa Clara Street, and Figure 4.1-3b (Wheeler Avenue) depict a conceptual visual of the proposed Project's exterior aesthetic qualities, including an updated mid-century modern look with clean lines, the integration of neutral colors and building materials, and a cohesive design scheme throughout the Project site. Finally, as stated in Section 4.1.4, the proposed Project is within a transit priority area and, as such, the proposed Project's impacts on aesthetics would not be considered significant impacts pursuant to PRC Section 21099(d). For these reasons, the proposed Project would not conflict with applicable zoning and/or other regulations governing scenic quality, and impacts would be less than significant.

Threshold 4.1d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. Lighting is of most concern when it may spill over or trespass from a Project site onto sensitive surrounding land uses, such as residential properties, resulting in a potential nuisance. The proposed Project is located within the Downtown area and is surrounded by existing mixed use and/or commercial development. Existing sources of daytime and nighttime light include streetlights, business identification signs and lit windows from commercial and mixed-use residential developments. Given the urban nature of the site vicinity and existing sources of interior and exterior lighting and glare, any incremental increases from the proposed Project would be less than significant. Any lighting that would be implemented as part of the proposed Project would adhere to the City's Development Code, Section 9103.01.120, which establishes the standards for exterior lighting in the City. In summary, the standards require: lighting be shielded or recessed so that glare is contained within the property boundaries; lighting be directed downward away from adjoining properties; lighting must be appropriate in scale, intensity, and height; lighting cannot be blinking/flashing or have high-intensity brightness; and fixtures must be full-cutoff fixtures to avoid glare and up-light.

Similarly, extraneous glare associated with the use of highly reflective building materials (glass, steel etc.) could result in nuisance to surrounding land uses. The proposed Project would include reflective building materials such as glass and steel; however, these materials would be utilized in a manner consistent with Development Code Section 9103.10.070, which requires that any proposed land use or activity producing glare be shielded so that glare is not perceptible beyond the property line. Additionally, as stated in Section 4.1.4, the proposed Project is within a transit priority area and, therefore, the proposed Project's impacts on aesthetics would not be considered significant impacts pursuant to PRC Section 21099(d). As such, and in compliance with City regulations, the

proposed Project would have a less than significant impact regarding the creation of a new source of substantial light or glare, which would adversely affect day or nighttime views in the area. Finally, as stated in Section 4.1.4, the proposed Project is within a transit priority area and, as such, the proposed Project's impacts on aesthetics would not be considered significant impacts pursuant to PRC Section 21099(d). For these reasons, the proposed Project would not result in significant impacts related to adverse effects on day or nighttime views, and impacts would be less than significant.

4.1.5 Cumulative Impact Analysis

Scenic Vistas/Scenic Quality

Despite being heavily built out, there are a number of scenic resources in the broader San Gabriel Valley as well as in the City itself, including mountains, foothills, ridgelines, parks, open spaces, and sports venues such as the local public golf courses and the historic Santa Anita Racetrack. The City General Plan sites unobstructed views of the Racetrack and the San Gabriel Mountains as important contributors to its aesthetic character (City of Arcadia General Plan, 2010). However, due to the existing urban, developed character of the City, the proposed Project site, and surrounding Project site area, as well as the specific design protocols (Commercial and Mixed-Use Design Guidelines, 2019) applicable to the proposed Project, the Project would not have a substantial adverse effect on existing scenic views of the San Gabriel Mountains. The proposed Project site cannot be viewed from the Santa Anita Park Racetrack, nor can the racetrack be viewed from the Project site, and modest views of and from the northeast corner Arcadia County Park would not be further degraded due to existing obstructions form mature trees and other urban, commercial, and mixed-use development.

Due to the built-out nature of the City, cumulative projects within the surrounding Project area would be considered infill development. As these projects are implemented, a more dense and urban character would occur within the Downtown Core and broader Downtown area. Land use intensification at these sites would not substantially degrade the scenic quality of the viewshed. Further, these projects would be required to comply with the development standards of the City Arcadia Development Code that include setbacks and height limits and may similarly be subject to the City's Site Plan and Design Review.

As detailed in Table 4.1-1, the proposed Project would be consistent with applicable City goals and policies concerning scenic quality, and similar to the Project, future projects in the cumulative study area would be required to demonstrate compliance with applicable scenic quality regulations. If non-compliance with a particular regulation would result in a significant impact, mitigation would be required to reduce impacts to the extent feasible. Therefore, impacts would be less than significant, and the Project would not result in a cumulatively considerable impact related to scenic vistas or conflicts with scenic quality regulations. No mitigation is required.

Light or Glare

The existing urbanized Project setting supports numerous nighttime lighting sources and contains buildings and facilities constructed of potentially reflective materials, including metal paneling and glass. The Project would have the potential to result in an incremental increase in light associated with the new development. However, the surrounding area is largely developed in nature and located in an urban environment. Thus, it currently includes sources of interior and exterior lighting and glare, and any incremental increases from the proposed Project would be less than significant. In addition, any lighting that would be implemented as part of the proposed Project and cumulative projects would adhere to the City's Development Code, Section 9103.01.120, In summary, due to the

existing urban conditions, and the less than significant impacts of the proposed Project, it would not result in a cumulatively considerable impact related to light and glare. No mitigation is required.

4.1.6 Mitigation Measures

No mitigation measures are required.

4.1.7 Level of Significance After Mitigation

Impacts would be less than significant.

4.1.8 References

Caltrans (California Department of Transportation). 2019. List of Eligible and Officially Designated State Scenic Highways (XLSX). Accessed April 22, 2021. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

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Photo 1:Southwestern view of the single-story bank, eight-story office building, and off-site commercial building from the northwest corner of N. Santa Anita Ave. and Santa Clara St.

Photo 2: Southwestern view of the two-story commercial building from the north side of Santa Clara St.

Photo 3: Northwestern view of the off-site and on-site alleys, as well as the backside of the two-story commercial building from the off-site alley.

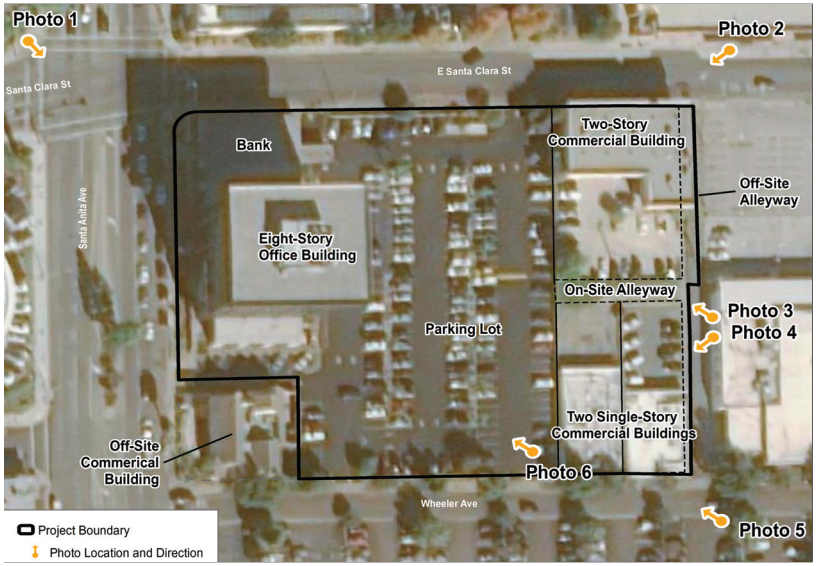

Photo Key

SOURCE: Esri Basemap

FIGURE 4.1-1

Existing Conditions Photographs

Aracdia Mixed-Use Project

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Photo 4: Southwestern view of the two single-story office buildings from the off-site alley.

Photo 5: Northwestern view of the two single-story office buildings from the south side of Wheeler Ave.

Photo 6: Northwestern view of the main parking lot and backside of the eight-storry office building.

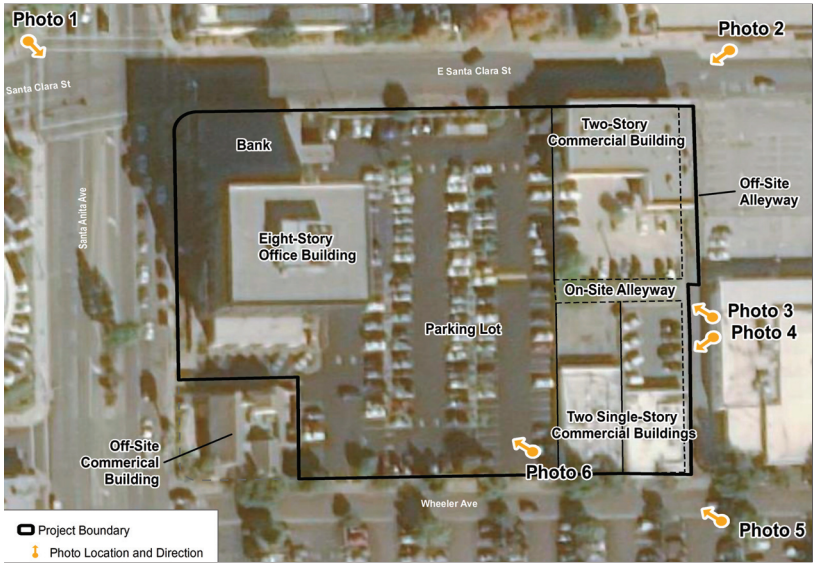

Photo Key

SOURCE: Esri Basemap

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FIGURE 4.1-2

Existing Conditions Photographs

Aracdia Mixed-Use Project

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Rendering 1. View from East Santa Clara Street looking southwest towards Santa Anita Avenue

Rendering 2. View from East Santa Clara Street looking southeast

SOURCE: Studioneleven 2021

FIGURE 4.1-3a

Architectural Renderings (East Santa Clara Street)

Alexan Mixed-Use Development Project

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Rendering 3. View from Project site looking north into the pedestrian corridor

Rendering 4. View from Wheeler Avenue looking northwest towards Santa Anita Avenue

SOURCE: Studioneleven 2021

FIGURE 4.1-3b

Architectural Renderings (Wheeler Avenue)

Alexan Mixed-Use Development Project

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4.2 Air Quality

This section describes the existing air quality conditions of the Alexan Mixed-Use Development Project (Project) site and vicinity, project design features, and identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, level of significance, and references. Information contained in this section is based on the latest version of California Emissions Estimator Model (CalEEMod), Version 2020.4.0, to estimate the proposed Project's criteria air pollutant emissions from both construction and operation and existing land use operation. For the relevant data, refer to the following appendix:

Appendix C-1 CalEEMod Outputs, prepared by Dudek

Appendix C-2 Health Risk Assessment Outputs, prepared by Dudek

Other documentation used in this analysis includes the Transportation Impact Analysis, included as Appendix I, SCAQMD CEQA Handbook, the SCAQMD 2016 Final Air Quality Management Plan, and the SCAQMD Final Localized Significance Threshold Methodology. Other sources consulted are listed in Section 4.2.8, References.

Comments received in response to the Notice of Preparation (NOP) are summarized in Table 1-1, Notice of Preparation and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft Environmental Impact Report (EIR). A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR.

4.2.1 Existing Conditions

The Project site is located in the City of Arcadia (City) within the South Coast Air Basin (SCAB). The SCAB is a 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 SCAB's air pollution problems are a consequence of the combination of emissions from the nation's second-largest urban area, meteorological conditions that hinder dispersion of those emissions, and mountainous terrain surrounding the SCAB that traps pollutants as they are pushed inland with the sea breeze (SCAQMD 2017). Meteorological and topographical factors that affect air quality in the SCAB are described below.[1]

Climate and Meteorology

The SCAB generally lies in the semi-permanent, high-pressure zone of the eastern Pacific. As a result, the climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the SCAB is a function of the area's natural physical characteristics (e.g., weather and topography) as well as of human influences (e.g., development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and/or dispersion of pollutants throughout the SCAB.

Moderate temperatures, comfortable humidity, and limited precipitation characterize the climate in the SCAB. The average annual temperature varies little throughout the basin, averaging 75 degrees Fahrenheit (°F). However, with a less pronounced oceanic influence, the eastern inland portions of the basin show greater variability in annual

[1] The discussion of meteorological and topographical conditions of the SCAB is based on information provided in the Final 2016 Air Quality Management Plan (SCAQMD 2017).

minimum and maximum temperatures. All portions of the SCAB have recorded temperatures over 100°F in recent years. Although the SCAB has a semiarid climate, the air near the surface is moist because of the presence of a shallow marine layer. Except for infrequent periods when dry air is brought into the basin by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. Annual average relative humidity is 70% at the coast and 57% in the eastern part of the basin. Precipitation in the SCAB is typically 9 to 14 inches annually and is rarely in the form of snow or hail, due to typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of the basin.

The City's climate is characterized by relatively low rainfall, with warm summers and mild winters. Average temperatures range from a high of 89°F in August to a low of 43°F in January. Precipitation averages about 0.08 to 4.54 inches, falling mostly from December through March (WRCC 2016).[2]

Sunlight

The presence and intensity of sunlight are necessary prerequisites for the formation of photochemical smog. Under the influence of the ultraviolet radiation of sunlight, certain "primary" pollutants (mainly reactive hydrocarbons and oxides of nitrogen [NO_X][3]) react to form "secondary" pollutants (primarily oxidants). Since this process is time dependent, secondary pollutants can be formed many miles downwind of the emission sources. Southern California also has abundant sunshine, which drives the photochemical reactions that form pollutants such as ozone (O_3) and a substantial portion of fine particulate matter ($PM_{2.5}$, particles less than 2.5 microns in diameter). In the SCAB, high concentrations of O_3 are normally recorded during the late spring, summer, and early autumn months, when more intense sunlight drives enhanced photochemical reactions. Because of the prevailing daytime winds and time-delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of Southern California.

Temperature Inversions

Under ideal meteorological conditions and irrespective of topography, pollutants emitted into the air mix and disperse into the upper atmosphere. However, the Southern California region frequently experiences temperature inversions in which pollutants are trapped and accumulate close to the ground. The inversion, a layer of warm, dry air overlaying cool, moist marine air, is a normal condition in coastal Southern California. The cool, damp, and hazy sea air capped by coastal clouds is heavier than the warm, clear air, which acts as a lid through which the cooler marine layer cannot rise. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above mean sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet above mean sea level, the terrain prevents the pollutants from entering the upper atmosphere, resulting in the pollutants settling in the foothill communities. Below 1,200 feet above mean sea level, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the daylight hours.

Mixing heights for inversions are lower in the summer and inversions are more persistent, being partly responsible for the high levels of O_3 observed during summer months in the SCAB. Smog in Southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods, allowing them to form secondary pollutants by reacting in the presence of sunlight. The

[2] Local climate data for the City is based on the closest and most-representative station measured by the Western Regional Climate Center, which is the Pasadena, California (046719) climatological station.

[3] NO_x is a general term pertaining to compounds of nitric oxide (NO), nitrogen dioxide (NO_2) and other oxides of nitrogen.

basin has a limited ability to disperse these pollutants due to typically low wind speeds and the surrounding mountain ranges.

As with other cities within the SCAB, the City is susceptible to air inversions, which trap a layer of stagnant air near the ground where pollutants are further concentrated. These inversions produce haziness, which is caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces, and other sources. Elevated concentrations of particles less than 10 microns in diameter (PM_{10}) and of $PM_{2.5}$ can occur in the SCAB throughout the year, but they occur most frequently in fall and winter. Although there are some changes in emissions by day of the week and by season, the observed variations in pollutant concentrations are primarily the result of seasonal differences in weather conditions.

Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The national and California standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), PM_{10}, $PM_{2.5}$, and lead. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants. These pollutants, as well as TACs, are discussed in the following text.[4]

Ozone. O_3 is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors, such as hydrocarbons and NO_x. These precursors are mainly NO_x and volatile organic compounds (VOCs). The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists in the upper atmosphere ozone layer (stratospheric O_3) as well as at the Earth's surface in the troposphere (ground-level O_3). [5] The O_3 that the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. Ground-level ozone is a harmful air pollutant that causes numerous adverse health effect and is thus, considered "bad" ozone. Stratospheric ozone, or "good" ozone, occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the earth's atmosphere. Without the protection of the beneficial stratospheric ozone layer, plant and animal life would be seriously harmed.

O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes

[4] The descriptions of each of the criteria air pollutants and associated health effects are based on the U.S. Environmental Protection Agency's Criteria Air Pollutants (EPA 2018a) and the California Air Resources Board's Glossary of Air Pollutant Terms (CARB 2019a).

[5] The troposphere is the layer of the Earth's atmosphere nearest to the surface of the Earth. The troposphere extends outward about 5 miles at the poles and about 10 miles at the equator.

(EPA 2013). These health problems are particularly acute in sensitive receptors such as the sick, older adults, and young children.

Inhalation of O_3 causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms. Exposure to O_3 can reduce the volume of air that the lungs breathe in and cause shortness of breath. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O_3 exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O_3 exposure. While there are relatively few studies of O_3's effects on children, the available studies show that children are no more or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more susceptible to O_3 and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents and adults who exercise or work outdoors, where O_3 concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2019b).

Nitrogen Dioxide and Oxides of Nitrogen. NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide, which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

A large body of health science literature indicates that exposure to NO_2 can induce adverse health effects. The strongest health evidence, and the health basis for the ambient air quality standards for NO_2, results from controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological 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. Infants and children are particularly at risk because they have disproportionately higher exposure to NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO_2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher levels of exposure compared to children with lower exposure levels. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2019c).

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the Project location, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined

with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, light-headedness, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. 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 2019d).

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels.

Controlled human exposure and epidemiological studies show that 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 1-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 parts per million [ppm]) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. 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 2019e).

SO_2 is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in particulate matter (NRC 2005). People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO_2-induced increase in airflow resistance is greater than in healthy people, and it increases with the severity of their asthma. SO_2 is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Coarse particulate matter (PM_{10}) is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter ($PM_{2.5}$) is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport absorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also produce haze and reduce regional visibility and damage and discolor surfaces on which they settle.

A number of adverse health effects have been associated with exposure to both $PM_{2.5}$ and PM_{10}. For $PM_{2.5}$, short-term exposures (up to 24-hour duration) 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. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. In addition, of all of the common air pollutants, $PM_{2.5}$ is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and worldwide based on the World Health Organization's Global Burden of Disease Project. Short-term exposures to PM_{10} have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2017).

Long-term exposure (months to years) to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer (CARB 2017).

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Sulfates. Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere and can result in respiratory impairment, as well as reduced visibility.

Vinyl Chloride. Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term

exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

Hydrogen Sulfide. Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

Visibility-Reducing Particles. Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for $PM_{2.5}$ described above.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group.

Non-Criteria Air Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the state of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

Diesel Particulate Matter. Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More

than 90% of DPM is less than 1 micrometer in diameter (about 1/70th the diameter of a human hair), and thus is a subset of $PM_{2.5}$ (CARB 2016). DPM is typically composed of carbon particles ("soot," also called black carbon, or BC) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. The CARB classified "particulate emissions from diesel-fueled engines" (i.e., DPM) (17 CCR 93000) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000). Because it is part of $PM_{2.5}$, DPM also contributes to the same non-cancer health effects as $PM_{2.5}$ exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies. Those most vulnerable to non-cancer health effects are children whose lungs are still developing and older adults who often have chronic health problems.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005). The South Coast Air Quality Management District (SCAQMD) identifies sensitive receptors as residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993).

The closest off-site sensitive receptors to the proposed Project are single-family residences located approximately 900 feet to the west and 650 feet to the south and several nearby schools. The nearst schools to the proposed Project include: Excelsior School (41 West Santa Clara Street, Arcadia, CA 91007) approximately 630 feet to the west and Arroyo Pacific Academy (325 North Santa Anita Avenue, Arcadia, CA 91006) is located approximately 655 feet to the north. First Avenue Jr. High School (301 South 1st Avenue, Arcadia CA 91006) is located greater that 1,500 feet to the south of the Project site.

4.2.2 Relevant Plans, Policies, and Ordinances

Federal

Federal Clean Air Act

The federal Clean Air Act passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the Clean Air Act, including the setting of National Ambient Air Quality Standards (NAAQS; federal standards) for major air pollutants, hazardous air pollutant (HAP) standards, approval of state attainment plans, motor vehicle emission standards, stationary source emissions standards and permits, acid rain control measures, stratospheric O_3 protection, and enforcement

provisions. Federal standards are established for criteria pollutants under the Clean Air Act, which are O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The federal standards describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The federal standards (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. Federal standards for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the federal standards at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the federal standards must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the federal standards to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels.

Hazardous Air Pollutants

The 1977 federal Clean Air Act amendments required the EPA to identify national emission standards for HAPs to protect public health and welfare. HAPs include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 federal Clean Air Act Amendments, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

State

California Clean Air Act

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. As stated previously, an ambient air quality standard defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harm to the public's health. For each pollutant, concentrations must be below these relevant CAAQS before a basin can attain the corresponding CAAQS. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded.

California air districts have based their thresholds of significance for California Environmental Quality Act (CEQA) purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the NAAQS or CAAQS. Since an ambient air quality standard is based on maximum pollutant levels in outdoor air that would not harm the public’s health, and air district thresholds pertain to

attainment of the ambient air quality standard, this means that the thresholds established by air districts are also protective of human health.

The NAAQS and CAAQS are presented in Table 4.2-1, Ambient Air Quality Standards.

Table 4.2-1. Ambient Air Quality Standards

Pollutant	Average Time	California Standards[a]	Federal Standards[b]	
		Concentration[c]	*Primary[c,d]*	*Secondary[c,e]*
O_3	1 hour	0.09 ppm (180 µg/m³)	—	Same as primary standard
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 µg/m³)	0.100 ppm (188 µg/m³)	Same as primary standard
	Annual arithmetic mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m³)
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 µg/m³	150 µg/m³	Same as primary standard
	Annual arithmetic mean	20 µg/m³	—	
$PM_{2.5}$[i]	24 hours	No separate state standard	35 µg/m³	Same as primary standard
	Annual arithmetic mean	12 µg/m³	12.0 µg/m³	15.0 µg/m³
Pb[j,k]	30-day average	1.5 µg/m³	—	—
	Calendar quarter	—	1.5 µg/m³ (for certain areas)[j]	Same as primary standard
	Rolling 3-month average	—	0.15 µg/m³	
H_2S	1-hour	0.03 ppm (42 µg/m³)	—	—
Vinyl chloride[i]	24-hour	0.01 ppm (26 µg/m³)	—	—
SO_4	24-hour	25 µg/m³	—	—
Visibility-reducing particles	8-hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	—	—

Source: CARB 2016.

Notes:

O_3 = ozone; ppm= parts per million by volume; µg/m³ = micrograms per cubic meter; NO_2 = nitrogen dioxide; CO = carbon monoxide; mg/m³ = milligrams per cubic meter; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; Pb = lead; H_2S = hydrogen sulfide; SO_4 = sulfates; PST = Pacific standard time.

[a] State standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, and suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility-reducing particles—are values that are not to be exceeded. All others are not to be equaled or exceeded. The CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 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° Celsius (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] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

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

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

[g] 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 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb, whereas California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[h] In 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 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[i] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[j] CARB has identified Pb and vinyl chloride as TACs 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.

[j] The national standard for Pb was revised on October 15, 2008, to a rolling 3-month average. The 1978 Pb standard (1.5 µg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Toxic Air Contaminants

The state Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California TAC list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs. The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) seeks to identify and evaluate risk from air toxics sources; however, AB 2588 does not regulate air toxics emissions. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

In 2000, the CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). The regulation is anticipated to result in an 80% decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road

Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment Program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. Several Airborne Toxic Control Measures that reduce diesel emissions including In-Use Off-Road Diesel-Fueled Fleets (13 CCR Sections 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR Section 2025).

California Code of Regulations

The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended or repealed by state agencies pursuant to the Administrative Procedure Act. The CCR includes regulations that pertain to air quality emissions. Specifically, Section 2485 in Title 13 of the CCR states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to 5 minutes at any location. In addition, Section 93115 in Title 17 of the CCR states that operations of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emissions standards.

California Health and Safety Code Section 41700

Section 41700 of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

Regional and Local

South Coast Air Quality Management District

The SCAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the SCAB, where the Project site is located. The SCAQMD operates monitoring stations in the SCAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The SCAQMD's Air Quality Management Plans (AQMPs) include control measures and strategies to be implemented to attain state and federal ambient air quality standards in the SCAB. The SCAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment.

Air Quality Management Plan

The most-recently adopted AQMP is the 2016 AQMP (SCAQMD 2017), which was adopted by the SCAQMD governing board on March 3, 2017. The 2016 AQMP is a regional blueprint for achieving air quality standards and healthful air. The 2016 AQMP addresses criteria air pollutant emissions from ocean-going vessels, which are considered federal sources, and includes emissions associated with marine vessels and engines in the baseline year and future forecasts. The 2016 AQMP's overall control strategy is an integral approach relying on fair-share emission reductions from federal, state, and local levels. The 2016 AQMP is composed of stationary and mobile source emission reductions from traditional regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile source strategies, and reductions from federal sources (SCAQMD 2017). These control strategies are to be implemented in partnership with CARB and the EPA.

The previous AQMP was the 2012 AQMP, which was adopted in February 2013 (SCAQMD 2013). The 2012 AQMP proposed policies and measures to achieve national and California standards for improved air quality in the SCAB and those portions of the Salton Sea Air Basin (formerly named the Southeast Desert Air Basin) that are under SCAQMD jurisdiction. The 2012 AQMP is designed to meet applicable federal and state requirements for O_3 and particulate matter. The 2012 AQMP documents that attainment of the federal 24-hour $PM_{2.5}$ standard is impracticable by 2015 and the SCAB should be classified as a serious nonattainment area along with the appropriate federal requirements. The 2012 AQMP includes the planning requirements to meet the 1-hour O_3 standard. The 2012 AQMP demonstrates attainment of the federal 24-hour $PM_{2.5}$ standard by 2014 in the SCAB through adoption of all feasible measures. Finally, the 2012 AQMP updates the EPA-approved 8-hour O_3 control plan with new measures designed to reduce reliance on the Clean Air Act Section 182(e)(5) long-term measures for NO_x and VOC reductions. The 2012 AQMP reduction and control measures, which are outlined to mitigate emissions, are based on existing and projected land use and development. The EPA, with a final ruling on April 14, 2016, approved the Clean Air Act planning requirements for the 24-hour $PM_{2.5}$ standard portion and on September 3, 2014, approved the 1-hour O_3 Clean Air Act planning requirements.

Applicable Rules

Emissions that would result from stationary and area sources during operation under the Project may be subject to SCAQMD rules and regulations. The SCAQMD rules applicable to the Project may include the following:

Regulation IV – Prohibitions

- **Rule 401 – Visible Emissions:** This rule establishes the limit for visible emissions from stationary sources for a period or periods aggregating more than three minutes in any hour. This rule prohibits visible emissions dark or darker than Ringelmann No. 1 for periods greater than three minutes in any hour or such opacity which could obscure an observer's view to a degree equal or greater than does smoke.
- **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 PM_{10} 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), which may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers and/or ceasing all activities.
- **Rule 431.2 – Sulfur Content of Liquid Fuels:** The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose of reducing the formation of SO_x and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the SCAQMD. The rule also affects diesel fuel supplied for mobile sources.

Regulation XI – Source Specific Standards

- **Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines**: This rule applies to stationary and portable engines rated at greater than 50 horsepower (hp). The purpose of Rule 1110.2 is to reduce NO_x, VOCs, and CO emissions from engines. Emergency engines, including those powering standby generators, are generally exempt from the emissions and monitoring requirements of this rule because they have permit conditions that limit operation to 200 hours or less per year as determined by an elapsed operating time meter.
- **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 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.

Regulation XIV – Toxics and Other Non-Criteria Pollutants:

- **Rule 1403, Asbestos Emissions from Demolition/Renovation Activities:** This rule states that an owner or operator of any demolition or renovation activity is required to have an asbestos study performed prior to demolition and to provide notification to SCAQMD prior to commencing demolition activities.

SCAB Attainment Designation

Pursuant to the 1990 federal Clean Air Act amendments, the EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the NAAQS have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on CAAQS rather than the NAAQS. Table 4.2-2 depicts the current attainment status of the Project site with respect to the NAAQS and CAAQS.

Table 4.2-2. South Coast Air Basin Attainment Classification

Pollutant	Designation/Classification	
	Federal Standards	*California Standards*
Ozone (O_3), 1-Hour	No National Standard	**Nonattainment**
Ozone (O_3), 8-Hour	**Extreme Nonattainment**	**Nonattainment**

Table 4.2-2. South Coast Air Basin Attainment Classification

Pollutant	Designation/Classification	
	Federal Standards	*California Standards*
Nitrogen Dioxide (NO_2)	Unclassifiable/Attainment	Attainment
Carbon Monoxide (CO)	Attainment/Maintenance	Attainment
Sulfur Dioxide (SO_2)	Unclassifiable/Attainment	Attainment
Coarse Particulate Matter (PM_{10})	Attainment/Maintenance	**Nonattainment**
Fine Particulate Matter ($PM_{2.5}$)	**Serious Nonattainment**	**Nonattainment**
Lead (Pb)	Nonattainment	Attainment
Hydrogen Sulfide	No National Standard	Unclassified
Sulfates	No National Standard	Attainment
Visibility-Reducing Particles	No National Standard	Unclassified
Vinyl Chloride	No National Standard	No designation

Sources: EPA 2018b (national); CARB 2018 (California).
Notes: Bold text = not in attainment; Attainment = meets the standards; Attainment/Maintenance = achieves the standards after a nonattainment designation; Nonattainment = does not meet the standards; Unclassified or Unclassifiable = insufficient data to classify; Unclassifiable/Attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.

In summary, the SCAB is designated as a nonattainment area for federal and state O_3 standards and federal and state $PM_{2.5}$ standards. The SCAB is designated as a nonattainment area for state PM_{10} standards; however, it is designated as an attainment area for federal PM_{10} standards. The SCAB is designated as an attainment area for federal and state CO standards, federal and state NO_2 standards, and federal and state SO_2 standards. While the SCAB has been designated as nonattainment for the federal rolling 3-month average lead standard, it is designated attainment for the state lead standard (CARB 2018; EPA 2018b).

Despite the current nonattainment status, air quality within the SCAB has generally improved since the inception of air pollutant monitoring in 1976. This improvement is mainly a result of lower-polluting on-road motor vehicles, more stringent regulation of industrial sources, and the implementation of emission reduction strategies by the SCAQMD. This trend toward cleaner air has occurred in spite of continued population growth. Despite this growth, air quality has improved significantly over the years, primarily because of the impacts of the region's air quality control program. PM_{10} levels have declined almost 50% since 1990, and $PM_{2.5}$ levels have also declined 50% since measurements began in 1999 (SCAQMD 2013). Similar improvements are observed with O_3, although the rate of O_3 decline has slowed in recent years.

Local Ambient Air Quality

The Project area's local ambient air quality is monitored by SCAQMD and CARB. CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations.

The Pasadena Monitoring Station located at 752 S. Wilson Avenue, Pasadena, California, Azusa Monitoring Station at 803 N Loren Ave, Azusa, Califorint and Westchester monitoring station, located at 7201 West Westchester Parkway, Los Angeles, California, are the nearest air quality monitoring station to the Project site that together provide a complete set of ambient air data. The data collected at these three stations are considered representative of the air quality experienced in the Project vicinity. Air quality data from 2018 through 2020 are provided in Table 4.2-3. The number of days exceeding the ambient air quality standards is also shown in Table 4.2-3.

Table 4.2-3. Local Ambient Air Quality Data

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2018	*2019*	*2020*	*2018*	*2019*	*2020*
Ozone (O_3)										
Pasadena-S Wilson Avenue Monitoring Station	ppm	Maximum 1-hour concentration	California	0.09	0.112	0.120	0.163	8	11	41
	ppm	Maximum 8-hour concentration	California	0.070	0.091	0.098	0.116	20	29	61
			National	0.070	0.090	0.098	0.115	19	24	60
Nitrogen Dioxide (NO_2)										
Pasadena-S Wilson Avenue Monitoring Station	ppm	Maximum 1-hour concentration	California	0.18	0,068	0.059	0.061	0	0	0
			National	0.100	0.068	0.059	0.061	0	0	0
	ppm	Annual concentration	California	0.030	0.014	0.013	0.013	—	—	—
			National	0.053	—	—	—	—	—	—
Carbon Monoxide (CO)										
Pasadena-S Wilson Avenue Monitoring Station	ppm	Maximum 1-hour concentration	California	20	—	—	—	—	—	—
			National	35	2.0	1.5	2.6	0	0	0
	ppm	Maximum 8-hour concentration	California	9.0	—	—	—	—	—	—
			National	9	1.4	1.2	2.2	0	0	0
Sulfur Dioxide (SO_2)										
Westchester Monitoring Station	ppm	Maximum 1-hour concentration	National	0.075	0.012	0.0082	0.006	0	0	0
	ppm	Maximum 24-hour concentration	National	0.14	0.002	0.0011	0.0012	0	0	0
	ppm	Annual concentration	National	0.030	0.0005	0.0003	0.0003	0	0	0
Coarse Particulate Matter (PM_{10})[a]										
Azusa 803 N Loren Ave Monitoring Station	µg/m³	Maximum 24-hour concentration	California	50	78.3	80.3	149.1	10	4	9
			National	150	78.3	82.0	152.3	0	0	0
	µg/m³	Annual concentration	California	20	32	32	32	—	—	—
Fine Particulate Matter ($PM_{2.5}$)[a]										
	µg/m³	Maximum 24-hour concentration	National	35	32.5	41.8	67.7	0	1	2

Table 4.2-3. Local Ambient Air Quality Data

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2018	*2019*	*2020*	*2018*	*2019*	*2020*
Pasadena-S Wilson Avenue Monitoring Station	µg/m³	Annual concentration	California	12	10.2	9.1	11.9	—	—	—
			National	12.0	10.3	8.7	11.9	—	—	—

Sources: CARB 2021f; EPA 2021c.

Notes: ppm = parts per million by volume; ND = insufficient data available to determine the value; — = not available; µg/m³ = micrograms per cubic meter.
Data taken from CARB iADAM (http://www.arb.ca.gov/adam) and EPA AirData (http://www.epa.gov/airdata/) represent the highest concentrations experienced over a given year. Exceedances of national and California standards are only shown for O_3 and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed national or California standards during the years shown. There is no national standard for 1-hour ozone, annual PM_{10}, or 24-hour SO_2, nor is there a state 24-hour standard for $PM_{2.5}$.

[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the federally designated metropolitan planning organization for the Southern California region and is the largest metropolitan planning organization in the United States.

With respect to air quality planning and other regional issues, SCAG has prepared the 2008 Regional Comprehensive Plan: Helping Communities Achieve a Sustainable Future (2008 RCP) for the region (SCAG 2008). The 2008 RCP sets the policy context in which SCAG participates in and responds to the SCAQMD air quality plans and builds off the SCAQMD AQMP processes that are designed to meet health-based criteria pollutant standards in several ways (SCAG 2008). First, it complements AQMPs by providing guidance and incentives for public agencies to consider best practices that support the technology-based control measures in AQMPs. Second, the 2008 RCP emphasizes the need for local initiatives that can reduce the region's greenhouse gas (GHG) emissions that contribute to climate change, an issue that is largely outside the focus of local attainment plans. Third, the 2008 RCP emphasizes the need for better coordination of land use and transportation planning, which heavily influences the emissions inventory from the transportation sectors of the economy. This also minimizes land use conflicts, such as residential development near freeways, industrial areas, or other sources of air pollution.

On April 7, 2016, SCAG's Regional Council adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS). The 2016 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2016 RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The 2016 RTP/SCS was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. In June 2016, SCAG received its conformity determination from the Federal Highway Administration and the Federal Transit Administration indicating that all air quality conformity requirements for the 2016 RTP/SCS and associated 2015 Federal Transportation Improvement Program Consistency Amendment through Amendment 15-12 have been met (SCAG 2016). The SCAQMD 2016 AQMP applies the updated SCAG growth forecasts assumed in the 2016 RTP/SCS.

On May 7, 2020, SCAG's Regional Council adopted the Connect SoCal (2020–2045 RTP/SCS). The Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. Connect SoCal charts a path toward a more mobile, sustainable and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura (SCAG 2020).

City of Arcadia General Plan

The City of Arcadia General Plan (City of Arcadia 2010) includes various policies related to improving air quality (both directly and indirectly). Applicable goals and policies include the following:

Goal RS-1 Continued improvement in local and regional air quality.

Policy RS-1.1 Reduce local contributions of airborne pollutants to the air basin.

Policy RS-1.2 Limit, when feasible, locating sensitive receptors near pollutant emitting sources.

Policy RS-1.3 Continue to participate in regional efforts to meet state and federal air quality standards.

Policy RS-1.4 Lower the emissions caused by motor vehicles through Transportation Demand Management strategies and land use patterns that reduce vehicle miles traveled.

Policy RS-1.5 Promote the reduction of vehiclular traffic and improved efficiency of the City's circulation system (i.e. roadways) as a means to improving air quality.

Policy RS-1.6 Require projects that generat potentially significant levels of air pollutants to incorporate the most effective air quality mitigation into project design, as appropriate.

Policy RS-1.7 Promote energy-efficient building construction and operation practices that reduce emissions and improve air quality.

4.2.3 Thresholds of Significance

The significance criteria used to evaluate the Project's impacts to air quality are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to air quality would occur if the proposed Project 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.
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Air Quality Significance Thresholds

The SCAQMD has established Air Quality Significance Thresholds, as revised in April 2019, that set forth quantitative emission significance thresholds below which a project would not have a significant impact on ambient air quality under existing and cumulative conditions. The quantitative air quality analysis provided herein applies the SCAQMD thresholds identified in Table 4.2-4 to determine the potential for the proposed Project to result in a significant impact under CEQA.

Table 4.2-4. SCAQMD Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	*Construction (pounds per day)*	*Operation (pounds per day)*
VOCs	75	55

Table 4.2-4. SCAQMD Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	*Construction (pounds per day)*	*Operation (pounds per day)*
NO_x	100	55
CO	550	550
SO_x	150	150
PM_{10}	150	150
$PM_{2.5}$	55	55
Lead[a]	3	3
TACs and Odor Thresholds		
TACs[b]	Maximum incremental cancer risk ≥ 10 in 1 million Chronic and acute hazard index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	

Source: SCAQMD 2019.

Notes: µg/m³ = micrograms per cubic meter; CO = carbon monoxide; NO_2 = nitrogen dioxide; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; ppm = parts per million; SCAQMD = South Coast Air Quality Management District; SO_x = sulfur oxides; TAC = toxic air contaminant; VOC = volatile organic compounds

GHG emissions thresholds for industrial projects, as added in the March 2015 revision to the SCAQMD Air Quality Significance Thresholds, were not include included as they will be addressed within the GHG emissions analysis and not the air quality study.

[a] The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

[b] TACs include carcinogens and noncarcinogens.

The phasing out of leaded gasoline started in 1976. As gasoline no longer contains lead, the proposed Project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

The evaluation of whether the proposed Project would conflict with or obstruct implementation of the applicable air quality plan is based on the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993), Chapter 12, Sections 12.2 and 12.3. The first criterion assesses if the proposed Project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP, which is addressed in detail in Section 4.2.4, Impact Analysis. The second criterion is if the proposed Project would exceed the assumptions in the AQMP or increments based on the year of proposed Project buildout and phase, as discussed further in Section 4.2.4.

In addition to the above-listed emission-based thresholds, the SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the proposed Project as a result of construction activities. Such an evaluation is referred to as a localized significance threshold (LST) analysis. For project sites of five acres or less, SCAQMD LST Methodology (SCAQMD 2008) includes lookup tables that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance criteria (i.e., the emissions would not cause an exceedance of the applicable concentration limits for NO_2, CO, PM_{10}, and $PM_{2.5}$) without performing Project-specific dispersion modeling.

The LST significance thresholds for NO_2 and CO represent the allowable increase in concentrations above background levels in the vicinity of a project that would not cause or contribute to an exceedance of the relevant ambient air quality standards, while the threshold for PM_{10} represents compliance with Rule 403 (Fugitive Dust). The LST significance threshold for $PM_{2.5}$ is intended to ensure that construction emissions do not contribute

substantially to existing exceedances of the $PM_{2.5}$ ambient air quality standards. The allowable emission rates depend on the following parameters:

a. Source-receptor area (SRA) in which the project is located

b. Size of the project site

c. Distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals)

The Project site is located in SRA 9 (East San Gabriel Valley). The SCAQMD provides guidance for applying CalEEMod to the LSTs. LST pollutant screening level concentration data is currently published for 1-, 2-, and 5-acre sites for varying distances. The maximum number of acres disturbed on the peak day was estimated using the Fact Sheet for Applying CalEEMod to Localized Significance Thresholds (SCAQMD 2014). During grading activities, fugitive dust can be generated from the movement of dirt on the Project site. CalEEMod estimates dust from dozers moving dirt around, dust from graders or scrapers leveling the land, and loading or unloading dirt into haul trucks. Each of those activities is calculated differently in CalEEMod, based on the number of acres traversed by the grading equipment. Only some pieces of equipment generate fugitive dust in CalEEMod. The CalEEMod manual identifies various equipment and the acreage disturbed in an 8-hour day. For example:

- Crawler tractors, graders, and rubber-tired dozers: 0.5 acres per 8-hour day
- Scrapers: 1 acre per 8-hour day

The LST lookup tables that can be used to determine the maximum allowable daily emissions are provided at increments of 1 acre, 2 acres and 5 acres. The Project site is 2.95 acres. Therefore, the analysis applies the LSTs for a interpolated 2.5-acre disturbance area (between lookup table 2 acres and 5 acres), which is presented in Table 4.2-5.

The closest residential sensitive receptors would be located approximately 900 feet to the west and 650 feet to the south. The nearst schools to the proposed Project include: Excelsior School (41 West Santa Clara Street, Arcadia, CA 91007) approximately 630 feet to the west and Arroyo Pacific Academy (325 North Santa Anita Avenue, Arcadia, CA 91006) is located approximately 655 feet to the north.Therefore, the LST lookup table value for a distance of 100 meters (328 feet) was usedfor the analysis. An LST distance of 100 meters represenets a conservative analysis as the LST thresholds decrease as the distance between the Project and sensitive receptor decrease. The LST values from the SCAQMD lookup tables for SRA 9 (East San Gabriel Valley) for a disturbed acreage of 2.5 acre and a receptor distance of 100 meters are shown in Table 4.2-5.

Table 4.2-5. Localized Significance Thresholds for Source Receptor Area 9 (East San Gabriel Valley)

Pollutant	Threshold by Acres Disturbed Per Day (Pounds per Day)
	2.5-acres
NO_2	214
CO	2,651
PM_{10}	46
$PM_{2.5}$	13

Source: SCAQMD 2008.
Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.

LST thresholds were determined based on the values for a distance of 100 meters (328 feet) from the nearest sensitive receptor.

The potential for the proposed Project to expose sensitive receptors to substantial pollutant concentrations includes the LST analysis, a CO hotspot analysis, and a qualitative assessment of the health effects of other criteria air pollutants.

The potential for the proposed Project to result in an odor impact is based on the proposed Project's land use types and anticipated construction activity, and the potential for the proposed Project to create an odor nuisance pursuant to SCAQMD Rule 402.

Approach and Methodology

Construction Emissions

Emissions from the construction phase of the proposed Project were estimated using CalEEMod Version 2020.4.0. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the project applicant and CalEEMod default values when project specifics were not known.

For purposes of estimating proposed Project emissions, construction was assumed to start in June 2023, in which construction would last approximately 26 months, ending in August 2025. The June 2023 start date represents the earliest possible start date. Assuming an earlier start date for Project construction represents the worst- case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be less due to more stringent standards for off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles. The analysis contained herein is based on the following assumptions (duration of phases is approximate):

- Demolition: 1 month
- Site Preparation: <1 week
- Grading: 1 month
- Building Construction: 22 months
- Paving: 2weeks
- Application of Architectural Coatings: 4 months

The Project site is currently occupied by a 2-story office building, two single-story commercial buildings, an eight-story office building, associated single-story brick building, single-story bank drive through, and surface parking. The interior of the eight-story office building will be renovated. As part of the interior renovation, the existing coffee station in the lobby will be removed and a portion of the lobby will be renovated to include a 750 square foot café. The proposed Project involves the demolition of the two-story office building and two single-story commercial buildings. The Project proposes to construct a seven-story multi-family residential building, containing a total of 319 dwelling units, swimming pool and amenities and enclosed parking. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, 6 days per week, during proposed Project construction.

Construction worker estimates and vendor truck trips by construction phase were based on information provided by the Project applicant and or CalEEMod defaults. Haul truck trips during the grading and building phases were based on demolition and earthwork quantities provided by the applicant. During grading, it was assumed that

57,000 cubic yards of material would be excavated and exported. CalEEMod default trip length values were used for the distances for all construction-related trips.

The construction equipment mix and vehicle trips used for estimating the Project-generated construction emissions are shown in Table 4.2-6.

Table 4.2-6. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	*Average Daily Vendor Truck Trips*	*Total Daily Haul Truck Trips*	*Equipment Type*	*Quantity*	*Usage Hours*
Phase 1						
Demolition	14	0	486	Concrete/Industrial Saws	1	8
				Tractors/Loaders/Backhoes	3	8
				Rubber-Tired Dozers	1	8
Site Preparation	8	0	66	Graders	1	8
				Scrapers	1	8
				Tractors/Loaders/Backhoes	1	7
Grading	10	0	7,125	Excavators	1	8
				Graders	1	8
				Rubber-Tired Dozers	1	8
				Tractors/Loaders/Backhoes	2	7
Building Construction	348	84	2,100	Cranes	1	8
				Forklifts	2	7
				Generator Sets	1	8
				Tractors/Loaders/Backhoes	1	6
				Welders	3	8
Paving	16	0	0	Cement and Mortar Mixers	1	8
				Pavers	1	8
				Paving Equipment	1	8
				Rollers	2	8
				Tractors/Loaders/Backhoes	1	8
Architectural Coating	70	0	0	Air Compressors	1	6

Notes: See Appendix C-1 for details.

Operational Emissions

Emissions from the operational phase of the proposed Project were estimated using CalEEMod Version 2020.4.0. Conservatively, year 2024 was assumed as the first year of operation. In addition to the proposed Project, exiting conditions were modeled for the currently occupied office and retail buildings located at 30 E Santa Clara Street, 25 Wheeler Avenue and 33 Wheeler Avenue (9,000 sf, 4,591 sf and 3,733 sf, respectively) to conduct an operational emissions netting analysis.

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating, water heating, and stoves are calculated in the building energy use module of CalEEMod, as described in the following text.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2017). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of residential and nonresidential buildings and on the default factor of pounds of VOC per building square foot per day. For parking lot land uses, CalEEMod estimates VOC emissions associated with use of parking surface degreasers based on a square footage of parking surface area and pounds of VOC per square foot per day.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of residential and nonresidential surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The model default reapplication rate of 10% of area per year is assumed. Consistent with CalEEMod defaults, it is assumed that the residential surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. For nonresidential land uses (e.g., retail, community, and commercial areas), it is assumed that the surface area for painting equals 2.0 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. For the parking garage, the architectural coating area is assumed to be 6% of the total square footage, consistent with the supporting CalEEMod studies provided as an appendix to the CalEEMod User's Guide (CAPCOA 2021).

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers. The emissions associated from landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per residential dwelling unit per day and grams per square foot of nonresidential building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days (CAPCOA 2021). By design, the proposed Project would limit turf, and the proposed landscaped area would be minimal and any landscape equipment used is anticipated to be powered by electricity, when needed. Nonetheless, emissions associated with potential landscape maintenance equipment were included and no emission reduction features related to electric landscape equipment was assumed to conservatively capture potential Project operational emission sources.

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHGs in CalEEMod, since criteria pollutant emissions occur at the site of the power plant, which is typically off site.

The energy use from nonresidential land uses (natural gas usage per square foot per year) is calculated in CalEEMod based on the California Commercial End-Use Survey database. CalEEMod default values were used for both

residential and nonresidential land uses energy consumption. CalEEMod assumes compliance with the 2019 Title 24 Building Energy Efficiency Standards.

Mobile Sources

Mobile sources for the proposed Project would be motor vehicles (i.e., automobiles and light-duty trucks) traveling to and from the Project site. Motor vehicles may be fueled with gasoline, diesel, or alternative fuels. Default vehicle trip generation rates included in CalEEMod for each of the analyzed land uses were adjusted to match the proposed Project's trip generation rates presented in the Transportation Impact Analysis (Appendix K). CalEEMod default data, including emissions factors were conservatively used for the model inputs to estimate daily emissions from proposed vehicular sources. Emission factors representing the vehicle mix and emissions for 2024 were used to estimate emissions associated with full build-out of the proposed Project. Trip rate assumptions for the proposed Project are shown in Table 4.2-7. Existing development that will remain is not identified in Table 4.2-7 because it will not add new trips (see Appendix K-2).

Table 4.2-7. Project Trip Rate Assumptions

Land Use	CalEEMod Land Use Surrogate	Average Daily Trip Rate		
		Weekday	*Saturday*	*Sunday*
Residential Units*	Apartments Mid-Rise	5.44	4.91	4.09
Live Work Units**	General Office Building	4.04	0.91	0.29
Cafe**	Fast Food Restaurant w/o Drive Thru	101.14	203.31	146.06

Source: Appendix C-1. Café rates based on TIA 13.42 trips per DU. * Trip Rate per dwelling unit.
** Trip Rate per 1,000 square feet land use.

Toxic Air Contaminants – Health Risk Assessment

An HRA was performed to evaluate potential health risk associated with toxic air contaminants from construction of the proposed Project. The following discussion summarizes the dispersion modeling and HRA methodology.

The dispersion modeling of DPM was performed using the AERMOD, which is the model SCAQMD requires for atmospheric dispersion of emissions. AERMOD is a steady-state Gaussian plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources, building downwash, and simple and complex terrain. For the proposed Project, AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the "X/Q" values. X/Q is a dispersion factor that is the average effluent concentration normalized by source strength and is used as a way to simplify the representation of emissions from many sources. The X/Q values of ground-level concentrations were determined for construction emissions using AERMOD and the maximum concentrations determined for the 1-hour and period averaging periods. Principal parameters of this modeling are presented in Table 4.2-8.

Table 4.2-8. AERMOD Principle Parameters

Parameter	Details
Meteorological Data	AERMOD-specific meteorological data for the Azusa air monitoring station (AZUS) was used for the dispersion modeling (SCAQMD 2021b). A 5-year meteorological data set from 2012 through 2016 was obtained from the SCAQMD in a preprocessed format suitable for use in AERMOD.

Table 4.2-8. AERMOD Principle Parameters

Parameter	Details
Urban versus Rural Option	Urban dispersion option was selected due to the developed nature of the project area and per SCAQMD guidelines.
Terrain Characteristics	Digital elevation model files were imported into AERMOD so that complex terrain features were evaluated as appropriate. Per SCAQMD guidance, the National Elevation Dataset dataset with resolution of 1/3 arc-second was used.
Source Release Characterizations	Air dispersion modeling of DPM emissions was conducted assuming the off-road equipment would operate in accordance with the modeling scenario estimated in CalEEMod (Appendix A). The construction equipment and on-site truck travel DPM emissions were modeled as a line of adjacent volume sources across the project site to represent project construction with a release height of 5 meters, plume height of 2.33 meters, and plume width of 11.63 meters (SCAQMD 2008; EPA 2018).
Discrete Receptors	The HRA evaluates the risk to existing residential receptor located in proximity to the Project. A uniform 2-kilometer by 2-kilometer Cartesian grid with 50-meter spacing was centered over the Project site and converted into discrete receptors to represent proximate sensitive receptors. The closest off-site sensitive receptors to the Project site include residential receptors located approximately 900 feet west and 650 feet to the south. The nearest schools receptors include: Excelsior School (41 West Santa Clara Street, Arcadia, CA 91007) approximately 630 feet to the west and Arroyo Pacific Academy (325 North Santa Anita Avenue, Arcadia, CA 91006), located approximately 655 feet to the north.

Source: See Appendix B.

Dispersion model plotfiles from AERMOD were then imported into CARB's HARP2 to determine health risk, which requires peak 1-hour emission rates and annual-averaged emission rates for all pollutants for each modeling source. For the residential health risk, the HRA assumes exposure would start in the third trimester of pregnancy.

Cancer risk is an estimate of the chance that an individual will develop cancer during their lifetime. A cancer risk of 10 in a million indicates that a person has an additional risk of 10 chances in a million (0.001%) of developing cancer during their lifetime as a result of the air pollution scenario being evaluated. Hazard index is an estimate of the likelihood that an individual will experience non-cancer health effects (e.g., cardiovascular, neurological, respiratory, etc.). A chronic hazard index estimates the likelihood of non-cancer health effects when a person is exposed to a toxic pollutant concentration for a 1-year period or longer. A hazard index less than 1.0 indicates that people are not likely to experience any non-cancer health effects.

4.2.4 Impacts Analysis

Threshold 4.2a Would the project conflict with or obstruct implementation of the applicable air quality plan?

The Project site is located within the SCAB under the jurisdiction of the SCAQMD, which is the local agency responsible for administration and enforcement of air quality regulations for the area. The SCAQMD administers the AQMP for the SCAB, which is a comprehensive document outlining an air pollution control program for attaining all CAAQS and NAAQS. The most recent adopted AQMP is the 2016 AQMP (SCAQMD 2017), which the SCAQMD Governing Board adopted in March 2017 (SCAQMD 2017).

The purpose of a consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and, thus, if it would interfere with the region's ability to comply with federal and state air quality standards. The SCAQMD has established criteria for determining consistency with the currently

applicable AQMP in Chapter 12, Sections 12.2 and 12.3, in the SCAQMD CEQA Air Quality Handbook. The criteria are as follows (SCAQMD 1993):

- **Consistency Criterion No. 1:** The project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2:** The project will not exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Consistency Criterion No. 1

Section 4.2.4, Threshold 4.2b (below), evaluates the proposed Project's potential impacts in regards to CEQA Guidelines Appendix G (the potential to 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.). As discussed under Threshold 4.2b, the proposed Project would not result in construction or operational criteria air pollutant emissions that would exceed the SCAQMD mass daily thresholds. Because it would not exceed the SCAQMD criteria air pollutant mass thresholds, the Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, and thus, the proposed Project would not conflict with Consistency Criterion No. 1 of the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993).

Consistency Criterion No. 2

The second criterion regarding the proposed Project's potential to exceed the assumptions in the AQMP is primarily assessed by determining consistency between the proposed Project's land use designations and potential to generate population growth. In general, a project would be consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook). The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by SCAG for its RTP/SCS (SCAG 2016). SCAG bases its growth forecasts on general plans for cities and counties in the SCAB. The SCAQMD uses these growth forecasts for the development of the AQMP emissions inventory (SCAQMD 2017).[6] The SCAG 2016 RTP/SCS, and associated Regional Growth Forecast, are generally consistent with the local plans; therefore, the 2016 AQMP is generally consistent with local government plans. Note that although the Connect SoCal (2020–2045 RTP/SCS) is the most recent RTP/SCS, the SCAQMD is still in the early stages of updating its AQMP (anticipated to be released in 2022). Therefore, the SCAG 2016 RTP/SCS and associated Regional Growth Forecast would be applicable in this analysis of the potential to conflict with the SCAQMD 2016 AQMP.

As discussed in Section 4.9, Land Use and Planning of this Draft EIR, the City's General Plan identifies the site as Downtown Mixed Use. According to the City's General Plan, the Downtown Mixed Use designation permits service and retail uses, commercial businesses, professional offices, and residential uses within the City's downtown. Therefore the proposed Project is consistent with the General Plan land use designation for the Project site. The

[6] Information necessary to produce the emission inventory for the SCAB is obtained from the SCAQMD and other governmental agencies, including the California Air Resources Board (CARB), the California Department of Transportation, and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socioeconomic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into its Travel Demand Model for estimating/projecting vehicle miles traveled and driving speeds. SCAG's socioeconomic and transportation activities projections in their 2016 RTP/SCS are integrated in the 2016 AQMP (SCAQMD 2017).

proposed Project would be consistent with downtown land uses and would be in compliance with the Land Use Element goals and policies of the City's General Plan. The zoning for the Project site is also Downtown Mixed Use, which permits the same use types as the Downtown Mised Use land use designation. As such, the proposed Project would be consistent with the current zoning and land use designation, as described in more detail in Section 4.9, Land Use and Planning. Accordingly, the project would meet Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook. Therefore, implementation of the project would not result in a conflict with, or obstruct implementation of, the applicable air quality plan (i.e., the 2016 AQMP).

Summary

As described previously, the proposed Project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or conflict with Consistency Criterion No. 1. In addition, implementation of the project would not exceed the demographic growth forecasts in the SCAG 2016 RTP/SCS; therefore, the project would also be consistent with the SCAQMD 2016 AQMP, which based future emission estimates on the SCAG 2016 RTP/SCS. Thus, the project would not conflict with Consistency Criterion No. 2. The project would not exceed the SCAQMD significance thresholds during construction or operations; therefore, impacts related to the project's potential to conflict with or obstruct implementation of the applicable air quality plan would be less than significant.

Threshold 4.2b Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used to help determine whether a project's individual emissions would have a cumulatively considerable contribution on air quality. If a project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003).

Construction Emissions

Construction of the proposed Project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (e.g., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (e.g., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions.

Criteria air pollutant emissions associated with temporary construction activity were quantified using CalEEMod. Construction emissions were calculated for the estimated worst-case day over the construction period associated with each phase and reported as the maximum daily emissions estimated during the construction period spanning 2023 through 2025. Construction schedule assumptions, including phase type, duration, and sequencing, were based on information provided by the applicant and CalEEMod default values, and is intended to represent a reasonable scenario based on the best information available.

Implementation of the proposed Project would generate air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement application. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The proposed Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites two times per day depending on weather conditions. Internal combustion engines used by construction equipment, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$. The application of architectural coatings, such as exterior application/interior paint and other finishes, and application of asphalt pavement would also produce VOC emissions.

Table 4.2-9 presents the estimated maximum daily construction emissions generated during construction of the proposed Project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix C-1.

Table 4.2-9. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOCs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2023	3.52	70.67	32.79	0.23	10.87	4.47
2024	3.71	25.66	39.40	0.10	5.65	2.17
2025	23.71	16.63	26.22	0.07	5.01	1.69
Maximum daily emissions	**23.71**	**70.67**	**39.40**	**0.23**	**10.87**	**4.47**
SCAQMD threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold exceeded?	**Yes**	**No**	**No**	**No**	**No**	**No**

Notes:
VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
See Appendix C-1 for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.
These emissions reflect CalEEMod "mitigated" output, which accounts for compliance with SCAQMD Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings).

As shown in Table 4.2-9, with mitigation, daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during construction in all construction years. Construction-generated emissions would be temporary and would not represent a long-term source of criteria air pollutant emissions. As such, impacts would be less than significant.

Operational Emissions

Operation of the proposed Project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile sources, including vehicle trips; area sources, including the use of consumer products, natural gas hearths, and landscape maintenance equipment; and energy sources. As discussed in Section 4.2.4, pollutant emissions associated with long-term operations were quantified using CalEEMod. Project-generated mobile source emissions were estimated in CalEEMod based on Project-specific trip rates. CalEEMod default values generated from Project-specific land use quantities were used to estimate emissions from area and energy sources for the proposed Project and the existing operational land uses that will cease operation and for which the facilities will be demolished as part of the proposed Project.

Table 4.2-10 presents the maximum daily area, energy, and mobile source emissions associated with operation (Year 2026) of the proposed Project, exiting land uses and net emissions. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix C-1.

Table 4.2-10. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Proposed Project						
Area	8.85	4.68	27.56	0.03	0.50	0.50
Energy	0.14	1.17	0.56	0.01	0.09	0.09
Mobile	5.14	5.22	49.18	0.11	12.21	3.30
Project Total	**14.13**	**11.07**	**77.30**	**0.15**	**12.80**	**3.89**
Existing Land Use*						
Area	*0.42*	*<0.01*	*0.01*	*0.00*	*<0.01*	*<0.01*
Energy	*<0.01*	*0.03*	*0.02*	*<0.01*	*<0.01*	*<0.01*
Mobile	*1.31*	*1.29*	*11.75*	*0.03*	*2.59*	*0.70*
Existing Total	**1.73**	**1.32**	**11.78**	**0.03**	**2.59**	**0.70**
Net Change (Proposed Project – Existing Land Use)						
Total	**12.40**	**9.75**	**65.52**	**0.13**	**10.21**	**3.19**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
See Appendix C-1 for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.
[a] <0.01 = value less than reported 0.01 pounds per day.
* Office and retail buildings located at 30 E Santa Clara Stree, 25 Wheeler Avenue and 33 Wheeler Avenue (9,000 sf, 4,591 sf and 3,733, respectively).

As shown in Table 4.2-10, the net combined daily area, energy, mobile, vehicle testing, and off-road emissions would not exceed the SCAQMD operational thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. Impacts associated with Project-generated operational criteria air pollutant emissions would be less than significant.

Air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD. The maximum daily PM_{10} and $PM_{2.5}$ emissions would not exceed the significance thresholds during proposed Project construction activities. Fugitive dust, as well as vehicle and equipment exhaust, generated during Project construction would contribute to the SCAB's nonattainment designation for PM_{10} and $PM_{2.5}$; however, this contribution would not be considered cumulatively considerable.

With regard to operational cumulative impacts associated with nonattainment pollutants, in general, if a project is consistent with the community and/or general plans, it has been accounted for in the attainment demonstration contained within the state implementation plan and would therefore not cause a cumulatively significant impact on

the ambient air quality. As addressed in the first impact criterion, the proposed Project would be consistent with the growth projections anticipated in SCAQMD's 2016 AQMP. Accordingly, the proposed Project would not result in a cumulatively considerable contribution to the nonattainment pollutants in the SCAB.

Based on the preceding considerations, the proposed Project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant during construction and operation.

Threshold 4.3c Would the project expose sensitive receptors to substantial pollutant concentrations?

Localized Significance Threshold

As discussed in Section 4.2.1, Existing Conditions, sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993).

The closest off-site closest off-site sensitive receptors to the proposed Project are single-family residences approximtely 900 feet to the west and 650 to the south, as well as schools including: Excelsior School (41 West Santa Clara Street, Arcadia, CA 91007) approximately 630 feet to the west and Arroyo Pacific Academy (325 North Santa Anita Avenue, Arcadia, CA 91006) located approximately 655 feet to the north.

An LST analysis has been prepared to determine potential impacts to nearby sensitive receptors during construction of the Project. As indicated in the discussion of the thresholds of significance (Section 4.2.3, Thresholds of Significance), SCAQMD also recommends the evaluation of localized NO_2, CO, PM_{10}, and $PM_{2.5}$ impacts as a result of construction activities to sensitive receptors in the immediate vicinity of the Project site. The impacts were analyzed using methods consistent with those in SCAQMD's Final LST Methodology (2008). According to the Final LST Methodology, "off-site mobile emissions from the project should not be included in the emissions compared to the LSTs" (SCAQMD 2008).

Construction activities associated with the proposed Project would result in temporary sources of on-site fugitive dust and construction equipment emissions. To account for onsite operation of vendor trucks, haul trucks, and worker vehicle trips a distance of 1,000 feet of on-site vehicle operation was included in the LST analysis. The LST values from the SCAQMD lookup tables for SRA 9 (East San Gabriel Valley) for a disturbed acreage of 2.5 acre and a receptor distance of 100 meters are presented in Table 4.2-11 and compared to the maximum daily on-site emissions generated during Project construction.

Table 4.2-11. Localized Significance Thresholds Analysis for Project Construction

Maximum On-Site Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Construction emissions	35.95	28.31	5.31	2.78
SCAQMD LST	214	2,651	46	13
LST exceeded?	**No**	**No**	**No**	**No**

Source: SCAQMD 2008.
Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.

See Appendix C-1, Construction (Summer) and Construction (Winter) output, for complete results.
Localized significance thresholds are shown for 2.5-acre project sites corresponding to a distance to a sensitive receptor of 100 meters.
These estimates implementation of the proposed Project's fugitive dust control strategies, including watering of an active site two times per day.

As shown in Table 4.2-11, construction activities would not generate emissions in excess of site-specific LSTs; therefore, site-specific impacts during construction and operation of the proposed Project would be less than significant.

Carbon Monoxide Hotspots

Mobile source impacts occur on two scales of motion. Regionally, travel resulting from development allowed by the proposed Project would add to regional trip generation and increase the vehicle miles traveled within the local airshed and the SCAB. Locally, traffic generated as a result of development allowed by the proposed Project would be added to the area's roadway system near the Project site. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles cold-started and operating at pollution-inefficient speeds, and is operating on roadways already crowded with non-Specific Plan area traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing.

At the time that the SCAQMD 1993 Handbook was published, the SCAB was designated nonattainment under the CAAQS and NAAQS for CO. In 2007, the SCAQMD was designated in attainment for CO under both the CAAQS and NAAQS as a result of the steady decline in CO concentrations in the SCAB due to turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities. The SCAQMD conducted CO modeling for the 2003 AQMP (Appendix V, Modeling and Attainment Demonstrations, of SCAQMD 2003) for the four worst-case intersections in the SCAB: (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. At the time the 2003 AQMP was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day. Using CO emission factors for 2002, the peak modeled CO 1-hour concentration was estimated to be 4.6 ppm at the intersection of Wilshire Boulevard and Veteran Avenue. When added to the maximum 1-hour CO concentration from 2018 through 2020 at the Pasadena monitoring station (see Table 4.2-3, Local Ambient Air Quality Data) which was 2.6 ppm in 2020, the 1-hour CO would be 7.2 ppm, while the CAAQS is 20 ppm.

The 2003 AQMP also projected 8-hour CO concentrations at these four intersections for 1997 and from 2002 through 2005. From years 2002 through 2005, the maximum 8-hour CO hotspot was 3.8 ppm at the Sunset Boulevard and Highland Avenue intersection (3.4 ppm at the Wilshire Boulevard and Veteran Avenue in 2002). For the Project area, adding the 3.8 ppm to the maximum 8-hour CO concentration from 2018 through 2020 at the near by Pasadena monitoring station, which was 2.2 ppm in 2020, the 8-hour CO would be 6.0 ppm, while the CAAQS is 9.0 ppm.

Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be at least over 100,000 vehicles per day. Because the Project would generate a net increase in 909 residents, it is not anticipated to increase daily traffic volumes at any study intersection to more than 100,000 vehicles per day. As discussed in Section 4.11, Population and Housing, the proposed Project would be considered growth-accommodating rather than growth-inducing in that the proposed Project's 319 new

residential units would accommodate 909 residents, which are anticipated to be a mix of current and future residents to the City. If all 909 residents would be new to the City, the Project would be within the overall population growth projections included in SCAG's Connect SoCal. In addition, as discussed in Section 4.13, Transportation, the City's Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service (LOS) Assessment, and the San Gabriel Valley Council of Governments (SGVCOG) VMT Assessment tool, the entire Project would be screened from a project-level VMT analysis because the Project is in a Low VMT generating area within a TPA. Therefore, a VMT analysis is not required and impacts to VMT can be presumed to be less than significant. For these reasons, a CO hotspot is not anticipated to occur and associated impacts would be less than significant. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing. Based on these considerations, the proposed Project would result in a less-than-significant impact to air quality with regard to potential CO hotspots

Toxic Air Contaminants

Health Impacts of Toxic Air Contaminants

"Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period would contract cancer based on the use of standard Office of Environmental Health Hazard Assessment (OEHHA) risk assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. TACs that would potentially be emitted during construction activities would be DPM emitted from heavy-duty construction equipment and heavy-duty trucks. Heavy-duty construction equipment and diesel trucks are subject to CARB Airborne Toxic Control Measures to reduce DPM emissions. According to the OEHHA, HRAs should be based on a 30-year exposure duration based on typical residency period; however, such assessments should be limited to the period/duration of activities associated with a project (OEHHA 2015). The results of the HRA for proposed Project's construction is summarized in Table 4.2-12.

Table 4.2-12. Summary of Maximum Cancer and Chronic Health Risks - Unmitigated

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximally Exposed Individual Resident					
Construction HRA	Cancer Risk	Per Million	9.52	10	Less than Significant
	Chronic Hazard Index	Index Value	0.005	1.0	Less than Significant

Source: See Appendix C-2 for complete results.
Notes: CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

As shown in Table 4.2-12, project construction activities would result in a Residential Maximum Individual Cancer Risk of 9.52 in 1 million, which is less than the significance threshold of 10 in 1 million. Project construction would result in a Residential Chronic Hazard Index of 0.005, which is below the 1.0 significance threshold. Impacts would be less than significant. The detailed model outputs are provided in Appendix C-2.

Health Impacts of Other Criteria Air Pollutants

Construction and operation of the proposed Project would result in emissions that would not exceed the SCAQMD thresholds for any criteria air pollutants, including NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$. Project-generated VOC emissions during short-term construction would result in the exceedances of the SCAQMD threshold, as shown in Table 4.2-

8, but would be reduced to less than significant with mitigation as shown in Table 4.2-9. Additionally, compliance with SCAQMD Rule 1113 would restrict the VOC content of coatings for construction applications.

VOCs and NO_x are precursors to O_3, for which SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with O_3 are generally associated with reduced lung function. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in SCAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O_3 ambient air quality standards tend to occur April through October when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, the VOC and NO_x emissions associated with Project construction and operation could minimally contribute to regional O_3 concentrations and the associated health impacts. Because of the minimal contribution during construction and operation, health impacts would be considered less than significant.

Construction and operation of the proposed Project would also not exceed thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or would obstruct SCAB from coming into attainment for these pollutants. The proposed Project would also not result in substantial DPM emissions during construction and operation, and therefore would not result in significant health effects related to DPM exposure. Additionally, the proposed Project would be required to comply with SCAQMD Rule 403, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction and operation, health impacts would be considered less than significant.

Construction and operation of the proposed Project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. Health impacts that result from NO_2 and NO_x include respiratory irritation, which could be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, Project construction would be relatively short term, and off-road construction equipment would be operating at various portions of the site and would not be concentrated in one portion of the site at any one time. In addition, existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Construction and operation of the proposed Project would not create substantial, localized NO_x impacts. Therefore, potential health impacts associated with NO_2 and NO_x would be less than significant.

CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots was discussed previously and is determined to be a less than significant impact. Thus, the proposed Project's CO emissions would not contribute to significant health effects associated with this pollutant.

In summary, construction and operation of the proposed Project would not result in exceedances of the SCAQMD significance thresholds for criteria pollutants and potential health impacts associated with criteria air pollutants would be less than significant.

Threshold 4.3d Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Construction Impacts

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the proposed Project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Operational Impacts

Land uses and industrial operations that typically are associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding facilities (SCAQMD 1993). The proposed Project does not propose the aforementioned odor-generating land uses during the operational phase of the proposed Project. Furthermore, the proposed Project would comply with SCAQMD Rule 402, Nuisance, which prohibits the release of odors which may cause annoyance to a considerable number of persons, as well as other SCAQMD rules related to odor generation from restaurant activities. Therefore, the potential for the proposed Project to generate an odor impact is considered less than significant.

4.2.5 Cumulative Impacts Analysis

This section provides an analysis of cumulative impacts from construction and operation of the Project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the State CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., related projects) used for this analysis are presented in in Section 2.5, Cumulative Impacts, of Chapter 2, Environmental Setting, and in Table 2-3, List of Cumulative Projects, of this Draft EIR.

Construction-Related Cumulative Impacts

The potential for the Project to result in a cumulatively considerable air quality impact is evaluated in Threshold 4.2b. As discussed, construction of the Project is not expected to exceed the SCAQMD mass daily emission-based construction thresholds. In addition, construction of the Project would not exceed the SCAQMD's LST and would not result in impacts to potential nearby sensitive receptors. It is reasonable to assume that construction emissions of the related projects listed in Table 2-3 (from Chapter 2, Environmental Setting) would be limited by applicable SCAQMD rules. Therefore, because of the minimal amount of Project-related emissions relative to significance thresholds, and because of compliance with SCAQMD rules, Project-generated construction emissions would not be cumulatively considerable.

Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would be temporary and disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. The Project would result in a less than cumulatively considerable operational odor impact. Operation-Related Cumulative Impacts

As discussed under Threshold 4.2(b) above, the Project would result in less-than-significant long-term operational air quality impacts for all criteria pollutants.

Operations-Related Cumulative Impacts

Because the SCAQMD air quality plans are regularly updated and consider the cumulative emissions of existing and projected development, it may be concluded that a project that does not have a direct air quality impact would not have a cumulative regional air quality impact. Therefore, the Project would have a less than significant cumulative air quality impact related to long-term regional emissions of all criteria pollutants because direct impacts would be less than significant. As such, the Project potential to result in a cumulatively considerable increase of any criteria pollutant for which the portion of the SCAB is in nonattainment under an applicable NAAQS or CAAQS would be less than significant, including O_3, PM_{10}, and $PM_{2.5}$.

The analysis for local CO hotspot impacts under Threshold 4.2(c) is based on the SCAQMD 2003 AQMP CO analysis. The qualitative assessment that demonstrated a less than significant impact is inherently a cumulative analysis, and the cumulative impact would be less than significant.

The Project is not anticipated to generate nuisance operational odors; therefore, the Project would result in a less than cumulatively considerable operational odor impact.

4.2.6 Mitigation Measures

The proposed Project impacts would be less than significant, and no mitigation is required.

4.2.7 Level of Significance After Mitigation

The proposed Project impacts would be less than significant, and no mitigation is required.

4.2.8 References

CAPCOA (California Air Pollution Control Officers Association). 2010. Quantifying Greenhouse Gas Mitigation Measures – A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures. August 2010. http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.

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4.3 Cultural Resources

This section describes the existing cultural resources conditions of the Alexan Mixed-Use Development Project (Project) site and vicinity, and identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on survey and evaluation of cultural resources within the Project site and surrounding area, as well as the following:

Appendix D Cultural Resources Technical Report for the Alexan Arcadia Project, prepared by Dudek, dated July 2021.

The Cultural Resources Technical Report includes the results of a California Historical Resources Information System (CHRIS) records search; a pedestrian survey of the Project site by a qualified architectural historian and archaeologist; building development and archival research; development of an appropriate historic context for the Project site ; and recordation and evaluation four (4) built environment resources over 45 years old for historical significance and integrity in consideration of National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and City of Arcadia landmark designation criteria and integrity requirements. The Cultural Resources Technical Report was prepared in conformance with California Environmental Quality Act (CEQA) Guidelines Section 15064.5 for historical resources and all applicable local guidelines and regulations and is summarized in this section of the Draft Environmental Impact Report (EIR).

Comments received in response to the Notice of Preparation (NOP) are summarized in Table 1-1, Notice of Preparation and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft EIR. A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR.

4.3.1 Existing Conditions

This section describes the existing conditions of the Project site, including its prehistoric, ethnographic, and historical setting, and the results of the CHRIS record search. This section also identifies and evaluates the existing built environment resources within the Project site in consideration of historical significance and integrity.

Prehistoric Overview

Evidence for continuous human occupation in Southern California spans the last 10,000 years. Various attempts to parse out variability in archaeological assemblages over this broad period have led to the development of several cultural chronologies; some of these are based on geologic time, most are based on temporal trends in archaeological assemblages, and others are interpretive reconstructions. Each of these reconstructions describes essentially similar trends in assemblage composition in more or less detail. However, given the direction of research and differential timing of archaeological study following intensive development in Riverside and San Bernardino Counties, chronology building in the Inland Empire must rely on data from neighboring regions to fill the gaps. To be more inclusive, this research employs a common set of generalized terms used to describe chronological trends in assemblage composition: Paleoindian (before 7500 BP), Archaic (10,000–1500 BP), Late Prehistoric (1500 BP–AD 1769), and Ethnohistoric (after AD 1769) (Appendix D).

Paleoindian Period (pre-5500 BC)

Evidence for Paleoindian occupation in the region is tenuous. Our knowledge of associated cultural pattern(s) is informed by a relatively sparse body of data that has been collected from within an area extending from coastal San Diego, through the Mojave Desert, and beyond. A very unique technology defined by fluted projectile points and a highly formal lithic tool kit with almost no processing equipment is often considered to be the earliest evidence of human adaptation to North America. Widely known as "Clovis," regional manifestations of this toolkit show important variability both in projectile point style and tool kit composition. Importantly, the attributes of "Clovis" are uncommon in California, with very few examples of the diagnostic, "fluted" Clovis point. There is, however, a notable exception from Crystal Cove State Park in southern Orange County. This, along with other potential attributes of Clovis culture along the California Coast remain undated, and most of the earliest well-dated sites from the region contain rather different archaeological assemblages (Appendix D).

While the earliest evidence for human activity in California comes from the Channel Islands, ca. 13,000 BP, it does not exhibit obvious cultural similarity with the Clovis phenomenon. However, in the southern Central Valley fluted Clovis points date from ca. 11,000–10,500 BP (Appendix D). One of the earliest dated archaeological assemblages in coastal Southern California (excluding the Channel Islands) comes from SDI-4669/W-12 in La Jolla, with human remains dating to ca. 9900–9050 BP (Appendix D). The burial is part of a larger site complex that contained more than 29 human burials associated with an assemblage that fits the Archaic profile (i.e., large amounts of ground stone, battered cobbles, and expedient flake tools) (Appendix D). In contrast, typical Paleoindian assemblages include large stemmed projectile points, high proportions of formal lithic tools, bifacial lithic reduction strategies, and relatively small proportions of ground stone tools. Prime examples of this pattern come from Naval Air Weapons Station China Lake near Ridgecrest (Appendix D). These sites contained fluted and unfluted stemmed points and large numbers of formal flake tools (e.g., shaped scrapers, blades). Fluted points from SBR-2355 and SBR-2356, also in the Mojave Desert, are considered quite ancient (on the thickness of obsidian hydration rinds) and co-occur with a diverse assemblage that also contains stemmed points, typically attributed to the Lake Mojave archaeological culture. Other typical Paleoindian sites in the desert include the Komodo site (MNO-679)—a multi-component fluted point site, and MNO-680—a single component Great Basined Stemmed point site. (Appendix D). At MNO-679 and -680, ground stone tools were rare while finely made projectile points were common.

Turning back to coastal Southern California, the fact that some of the earliest dated assemblages are dominated by processing tools runs counter to traditional image of Paleoindians as highly mobile big-game hunters. Evidence for the latter—that is, typical Paleoindian assemblages—may have been located along the coastal margin at one time, prior to glacial desiccation and a rapid rise in sea level during the early Holocene (before 7500 BP) that submerged as much as 16 kilometers of the San Diego coastline since people first arrived in California, ca. 13,000 years ago (Appendix D). If this were true, however, it would also be expected that such sites would be located on older landforms near the current coastline. Some sites, such as SDI-210 along Agua Hedionda Lagoon, contain stemmed points similar in form and age to Silver Lake and Lake Mojave projectile points from the high desert (Appendix D). However, sites of this nature are extremely rare; more typical are sites that contain large numbers of milling tools intermingled with older projectile point forms. Separating cultural components on the basis of artifact form and frequency is therefore difficult.

Warren et al. (2004) claim that a biface manufacturing tradition at the Harris site complex (SDI-149) is representative of typical Paleoindian occupation in the San Diego region that possibly dates between ca. 11,200 and 8200 BP (on the basis of radiocarbon dates from the Harris site itself). Termed San Dieguito, assemblages at the Harris site are qualitatively distinct from most others in the San Diego region because the site has large numbers of well-made bifaces (including projectile points), formal flake tools, a biface reduction trajectory, and relatively small amounts of processing tools (Appendix D). Despite the unique assemblage composition, the definition of San Dieguito as a separate cultural

tradition is hotly debated. Gallegos (1987, 2017) suggested that the San Dieguito pattern is simply the inland manifestation of a broader economic pattern. This interpretation of San Dieguito has been widely accepted in recent years, in part because of the difficulty in distinguishing San Dieguito components from other assemblage constituents. In other words, it is easier to ignore San Dieguito as a distinct socioeconomic pattern than it is to draw it out of mixed assemblages.

The large number of finished bifaces (i.e., projectile points and non-projectile blades), along with large numbers of formal flake tools at the Harris site complex, is very different than nearly all other assemblages throughout the San Diego region, regardless of age. Warren et al. (2004) made this point, tabulating basic assemblage constituents for key early Holocene sites. Producing finely made bifaces and formal flake tools implies that relatively large amounts of time were spent on tool manufacture. Such a strategy contrasts with the expedient flake-based tools and cobble-core reduction strategy that typifies the regional Archaic sites. It can be inferred from the uniquely high degree of San Dieguito assemblage formality that the Harris site complex represents an economic strategy distinct from that represented by other roughly contemporaneous assemblages from throughout the region.

San Dieguito sites are rare in the inland valleys, with one possible candidate, RIV-2798/H, located on the shore of Lake Elsinore. Excavations at Locus B at RIV-2798/H produced a toolkit consisting predominately of flaked stone tools, including crescents, points, and bifaces, and lesser amounts of ground stone tools, among other items (Appendix D). A calibrated and reservoir-corrected radiocarbon date on a shell from this site points to an early occupation, ca. 8880–8525 BP. Grenda suggested this site represents seasonal exploitation of lacustrine resources and small game and resembles coastal San Dieguito assemblages and spatial patterning.

If the San Dieguito pattern truly represents a socioeconomic strategy distinct from the regional Archaic processing regime, its rarity implies that it was not only short-lived, but that it was not as economically successful as the Archaic strategy. Such a conclusion would fit with other trends in Southern California deserts, where hunting-related tools were replaced by processing tools during the early Holocene (Appendix D).

Archaic Period (10,000–1500 BP)

The more than 2,500-year overlap between the presumed age of Paleoindian occupations and the Archaic period highlights the difficulty in defining a cultural chronology in Southern California. If San Dieguito is the only recognized Paleoindian component in the coastal Southern California, then the dominance of hunting tools implies that it derives from Great Basin adaptive strategies and is not necessarily a local adaptation. Warren et al. (2004) admitted as much, citing strong desert connections with San Dieguito. Thus, the Archaic pattern is the earliest local socioeconomic adaptation in the region (Appendix D).

The Archaic pattern, which has also been termed the Millingstone Horizon (among others), is relatively easy to define with assemblages that consist primarily of processing tools, such as millingstones, handstones, battered cobbles, heavy crude scrapers, incipient flake-based tools, and cobble-core reduction. These assemblages occur in all environments across the region with little variability in tool composition. Low assemblage variability over time and space among Archaic sites has been equated with cultural conservatism (Appendix D). Despite enormous amounts of archaeological work at Archaic sites, little change in assemblage composition occurred until the bow and arrow, and then ceramics, were adopted after 1500 BP (Appendix D). Even then, assemblage formality remained low. After the bow was adopted, small arrow points appear in large quantities and already low amounts of formal flake tools are replaced by increasing amounts of expedient flake tools. Similarly, shaped millingstones and handstones decreased in proportion relative to expedient, unshaped ground stone tools (Appendix D). Thus, the terminus of the Archaic period is equally as hard to define as its beginning because basic assemblage

constituents and patterns of manufacturing investment remain stable, complemented only by the addition of the bow and ceramics.

Late Prehistoric Period (1500 BP–AD 1769)

The period of time following the Archaic and before Ethnohistoric times (AD 1769) is commonly referred to as the Late Prehistoric (Appendix D); however, several other subdivisions continue to be used to describe various shifts in assemblage composition. In general, this period is defined by the addition of arrow points and ceramics, as well as the widespread use of bedrock mortars. The fundamental Late Prehistoric assemblage is very similar to the Archaic pattern but includes arrow points and large quantities of fine debitage from producing arrow points, as well as ceramics, and cremations. The appearance of mortars and pestles is difficult to place in time because most mortars are on bedrock surfaces. Some argue that the Ethnohistoric intensive acorn economy extends as far back as 1500 BP (Appendix D). However, there is no substantial evidence that reliance on acorns, and the accompanying use of mortars and pestles, occurred before 600 BP. Throughout the inland region millingstones and handstones persisted in higher frequencies than mortars and pestles until the last 500 years (Appendix D); even then, weighing the economic significance of millingstone-handstone versus mortar-pestle technology is tenuous due to incomplete information on archaeological assemblages.

A summary of the ethnohistoric period may be found within Appendix D and provided within Chapter 4.14 Tribal Cultural Resources of this Draft EIR.

Historic Period Overview

Post-Contact history for the State of California is generally divided into three periods: the Spanish Period (1769–1821), Mexican Period (1821–1848), and American Period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish Period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican–American War, signals the beginning of the American Period when California became a territory of the United States.

Spanish Period (1769–1822)

Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríquez Cabríllo stopped in 1542 at present day San Diego Bay. With his crew, Cabríllo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica Bays, giving each location its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabríllo and Vizcaíno (Appendix D).

More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July of 1769, while Portolá was exploring southern California,

Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823 (Appendix D).

The Portolá expedition first reached the present day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Friar Juan Crespí named the campsite by the river "Nuestra Señora la Reina de los Angeles de la Porciúncula" or "Our Lady the Queen of the Angeles of the Porciúncula." Two years later, Friar Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Appendix D).

Mexican Period (1822–1848)

A major emphasis during the Spanish Period in California was the construction of missions and associated presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Appendix D).

Extensive land grants were established in the interior during the Mexican period, in part to increase the population inland from the more settled coastal areas where the Spanish first concentrated their colonization efforts. The proposed Project site, and nearly all of the City of Arcadia fell within Rancho Santa Anita. After Mexico's Secularization Act of 1833, all Mission lands were secularized and removed from the control of the church and given to political figures, friends, and members of the military. Rancho Santa Anita constituted a portion of the former Mission San Gabriel lands. This rancho was unique in that it was deeded to Victoria Bartolomea Maria Comicrabit, the politically powerful daughter of a Gabrielino/Tongva chief, and her second husband Hugo Reid, a Scottish-born immigrant to California, in 1839 after Reid and Comicrabit built a large adobe house there. The Rancho Santa Anita land grant encompassed 13,319 acres, and portions of present day Arcadia, Monrovia, Sierra Madre, and Pasadena. Reid eventually accumulated too much personal debt and was forced to sell Rancho Santa Anita to friend and neighbor Henry Dalton in 1847 (Appendix D).

During the heyday of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of non-native inhabitants increased during this period with the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who did not possess immunities to them (Appendix D).

American Period (1848–Present)

War in 1846 between Mexico and the United States precipitated the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. The Mexican-American War ended with the Treaty of Guadalupe Hidalgo in 1848, ushering California into its American Period.

California officially became a state in 1850 (Appendix D). Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of gold seekers, the ranching economy began to produce meat and dairy, in addition to hides and tallow. During the cattle boom of the 1850s, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Appendix D).

Historical Overview of Arcadia

After the annexation of California to the United States, Henry Dalton, applied for a land patent to Rancho Santa Anita with the Public Land Commission, as required by the Land Act of 1851. The rancho went through several owners until 1875, when Rancho Santa Anita was sold for $200,000 to Elias Jackson "Lucky" Baldwin. Baldwin was a wealthy landowner who had gained fame and fortune by investing in Nevada's Comstock Lode mine. Baldwin owned several ranchos east of Los Angeles and invested heavily in their development. After Baldwin purchased the rancho, he hired a property manager and began to arrange for multiple improvements, including large-scale orange orchards, irrigation systems, and a distillery and wine production operation. Most notably, he started a training track and stables for racehorses (Appendix D).

Though there was an economic downturn in the 1870s and Baldwin went into debt, he retained several of his properties and saw success during the land boom of the 1880s. Adjacent development in Monrovia and Sierra Madre, cities close to Rancho Santa Anita, inspired Baldwin to subdivide his land in 1883. The Santa Anita Tract was located between Monrovia to the east and Baldwin's large estate house to the west. Baldwin also secured the right-of-way for the Los Angeles & San Gabriel Valley Railroad to pass through the Santa Anita Tract, as well as water rights in Santa Anita and Little Santa Anita canyons. Baldwin developed other amenities and attractions for the area, including construction of the Oakwood Hotel, creating tourist excursions to the surrounding mountains, lining Santa Anita Avenue with eucalyptus trees, and continuing to breed and train racehorses. By 1886, the railroad had been purchased by Atchison Topeka and Santa Fe (ATSF) Railroad, and the tracks reached the Santa Anita Tract townsite. By 1887, the town was being referred to as Arcadia. Baldwin's speculative development made the town appear so successful that another railroad, the San Gabriel Valley Rapid Transit Railroad, built a depot and began offering rail service to the town. Despite this, by the end of the 1880s, the town had less than 200 residents (Appendix D).

Baldwin continued to grow the community in the 1890s and 1900s, helping to develop the town. In 1902, when the Pacific Electric Railway announced it would construct the Pasadena Short Line from Pasadena to Monrovia, Baldwin interceded with the company and negotiated for service to Arcadia. He also filed to incorporate Arcadia in 1903 and was immediately appointed mayor. Baldwin's intent was not necessarily to grow the town, but to gain traction for a business proposal and long-time hobby: establishing a horse-racing track at Arcadia. The town grew, with a small commercial business district emerging along Falling Leave Avenue (later, Huntington Drive). On the west side of Santa Anita Avenue, adjacent to the business corridor and railroad depots, Baldwin built Santa Anita Park, a racetrack, in 1907. Baldwin died in February 1909. Just a month later, the State of California passed a bill banning racetrack gambling and the Santa Anita Racetrack was closed. The original racetrack burned down in 1912 (Appendix D).

In the beginning of the twentieth century, commercial growth in Arcadia continued to be concentrated along Falling Leave Avenue. General improvements in the city included gas and electric utilities, streetlights, a municipal water system, a dedicated city-operated fire department, and graded and paved roads. Banks, schools, hotels and residential subdivisions were constructed in the townsite. Falling Leaf Avenue was paved, widened, and renamed Huntington Drive in 1913. The United States' entry into World War I had an impact on the city's development patterns. The Ross Field Balloon School was established by the U.S. Army at the Santa Anita Racetrack site. During the war years, 3,500 recruits were hosted at Ross Field. Arcadia expanded from 696 citizens in 1910 to 2,239 in 1920 (Appendix D).

A new downtown commercial corridor and civic center began to form along Huntington Drive in the late 1910s and 1920s. In 1918, Arcadia's first City Hall was erected at Huntington Drive and First Street. Eventually, several civic buildings, including the library, police department fire department, and a community center would emerge north of the City Hall building, on Wheeler Avenue. During the 1920s, several commercial business erected buildings on Huntington Drive, including the Arcadia Theatre, a drive-in market at Huntington Drive and First Avenue, and other grocery and dry goods markets. To the north of the commercial district, industrial properties began to concentrate along the ATSF and SP railroad tracks, especially near the intersection of Santa Clara Street and the railroad tracks. Outside of the town's central core, new residential subdivisions were created by dividing large land tracts into smaller plots. Several agricultural tracts in and around Arcadia were also dedicated to poultry raising, which remained a common land use in Arcadia through the 1930s (Appendix D).

In 1933, the State of California reintroduced racetrack wagering, reversing their 1909 anti-gambling position. By Christmas 1934, a new Santa Anita Park racetrack was opened by the Los Angeles Turf Club. With the end of Prohibition in 1933, the town became a destination for local gambling, sports betting, and alcohol consumption. The City also received a generous WPA grant to create a 184-acre public park at Santa Anita Regional Recreational Center (Arcadia County Park), which boasted an 18-hole golf course, pools, and tennis courts, open to the public. In the 1930s, Anita Baldwin, daughter of E.J. Baldwin, sold 1,300 acres of inherited property to be developed by Rancho Santa Anita, Inc. Rancho Santa Anita, Inc. parceled the large acreage into residential subdivisions, including Santa Anita Village, the Rancho, the Upper Rancho, Santa Anita Gardens, and Colorado Oaks. The effect of these investments and increased visitation, despite the national Depression, led to the City of Arcadia experiencing moderate growth in the 1930s, with "new buildings, new businesses, public improvements and home construction" taking place almost daily (Appendix D). By 1940, the City's population expanded to 9,122 citizens.

During World War II, Arcadia's Santa Anita Racetrack played a large role in the Executive Order 9066 removal of Japanese-Americans from their homes and subsequent internment, serving as an assembly center in 1942. The War Department took over the racetrack. Nearly 400 barracks buildings were erected around the grandstand building. In addition to housing Japanese-Americans before they were sent to internment camps, the racetrack was also used to hold 2,000 German and Polish prisoners-of-war. During the war, the City of Arcadia experienced little population or built environment growth during this period (Appendix D).

In the post-war period, like all of Southern California, the City of Arcadia experienced massive population growth and a building boom. The population of Arcadia increased from 9,122 people in 1940 to 23,066 people in 1950. Much of the town's growth was financed through Veterans' loans and Federal Housing Administration mortgage-promoted home building. In the downtown commercial core, all remaining empty lots were developed, and other commercial corridors emerged along Duarte Road and Foothill Boulevard (U.S. Route 66). Commercial shopping centers and commercial strips in these areas were designed to take advantage of automobile traffic as other modes of transportation, including the Pacific Electric Red Cars, ended service in the 1950s. Notable institutional growth during this period included the creation of the Los Angeles State and County Arboretum, which was carved out of

remaining undeveloped Rancho Santa Anita land in 1947. It opened to the public in 1955. The City's population growth continued, expanding to 41,005 people in 1960 (Appendix D).

Suburban sprawl, commercial growth, shopping centers, and a booming population characterized Arcadia in the 1960s and 1970s. Civic development included expanding the number of grammar and high schools, new libraries, and the fire and police departments. By 1968, the Foothill Freeway (now Interstate 210) was completed through Arcadia. It continued east towards San Dimas by 1971. Multiple attempts were made to expand the downtown commercial core along Huntington Drive by permitting high-rise buildings. These efforts were defeated in the 1960s and 1970s, resulting in a height limit of eight stories. One project built to this limit was the Towne Center Project, completed in 1971. Noteworthy commercial development away from the downtown commercial core was the Santa Anita Fashion Park, an indoor mall designed by Victor Gruen of Gruen Associates and opened in 1975.

In the 1980s and 1990s, the demographics of Arcadia changed dramatically, and the formerly majority-Caucasian city quickly transformed into a predominantly Asian-American community. The Asian-American community comprised 9% of the population in 1980. Over the next few decades, the community grew to 59% of the population by 2010. In addition to shifting demographics, commercial and industrial land uses have also changed in Arcadia. In 1996, the City published a General Plan to revitalize the downtown district. From the early 2000s to the present-day, single-family residences, townhomes, and condominiums have been constructed in formerly industrial and commercial areas around the two-block downtown commercial core of Huntington Drive. Today, the downtown commercial core is a mixed-use, primarily commercial area (Appendix D).

Project Site History

The proposed Project site is located east of Santa Anita Avenue and north of Wheeler Avenue in Arcadia's downtown commercial core. Santa Anita Avenue and Wheeler Avenue were part of the original townsite for the City of Arcadia. Along these avenues were concentrations of civic institutions and industrial developments. Santa Anita Avenue served as a road and bridle trail. E.J. Baldwin planted rows of trees along Santa Anita Avenue to form an attractive vista. While Wheeler Avenue was in the original 1887 plat map, between the downtown commercial core and the railroad, the avenue was not extensively developed until the twentieth century.

According to the Sanborn map published in 1924, the first prominent business to appear along Wheeler Avenue was the San Gabriel Valley Lumber Company. The company operated a large lumber yard at the northwest corner of First Avenue (east of the proposed Project site) and Wheeler Avenue. Wheeler Avenue, in the block bounding the proposed Project site, became the location of many of Arcadia's earliest civic buildings. The first Arcadia Public Library, opened in 1930, was located on the corner of First Street and Wheeler Avenue. Wheeler Avenue was also the location of the Police and Fire Department building (constructed in 1932 at 50 Wheeler Avenue). Later, the departments were split, and the Fire Department moved to its own building off of Wheeler Avenue in 1935. In 1939, the Arcadia Community Center was established at 30 Wheeler Avenue.

During the 1920s and 1930s, Santa Anita Avenue primarily used for agriculture. In the earliest aerial photographs, newspapers, and Sanborn Maps, Arcadia Hay and Grain had a grain barn and roadside business along Santa Anita Avenue in the present-day proposed Project site. There was no additional development on the proposed Project site until the 1950s (Appendix D).

In 1959, a commercial building was constructed at 31-33 Wheeler Avenue for contractor Thomas Cosentino. The building had two street-facing offices sharing a party wall. The building was designed by architect Jack Hale, and the original building permit names Thos. Cosentino Builders as the building contractors. The first two occupants

were Columbia Labs Inc., wax manufacturers, in the 31 Wheeler side and Thomas Cosentino Builders in 33 Wheeler. Over time, this building was used mainly as offices for manufacturing companies and local commercial entities. Other owners and occupants included Huntington Associates, Inc (circa 1967-1982), Mollin Investments (circa 1983-1984), and Arcadia Radiology (circa 1984-2011) (Appendix D).

In 1961, an adjoining commercial property was constructed at 25 Wheeler Avenue. Because original permits were not available for this property, less is known about the circumstances of its construction and original ownership. According to city directories from the 1960s, 25 Wheeler Avenue housed multiple small commercial enterprises in a suite of eight offices. In 1962, the Post Office was constructed on Wheeler Avenue. A demand parking corresponded with the growth of Arcadia's downtown commercial core. An area along Wheeler Avenue, west of the police and fire stations, and east of Santa Anita Avenue was turned into a parking area to serve the downtown commercial core (Appendix D).

At the end of the 1960s, the City of Arcadia established the Arcadia Community Redevelopment Agency that began consideration of the Towne Center Project. The Towne Center Project proposed redevelopment of an area in the downtown commercial core north of Huntington Drive between Santa Anita Avenue and First Avenue. Two high-rise buildings were proposed, the Glenrich Building, a medical office, and Towne Center, a bank and office building. The project was supported by the Chamber of Commerce and various business associations. In 1970, the Towne Center Project was approved, comprising an eight-story tower and a one-story bank building (Appendix D).

The design of Towne Center changed multiple times over the course of planning as investors and owners changed. Originally the building was developed by BBC Development Company and James Coppedge was the named architect (Appendix D). The project was scheduled to begin in 1968. In 1970, a new developer, Summit Management, took over the project and W. J. Fleming redesigned the building. The building was redesigned a third time by Fleming & Fryer in 1971, incorporating W.J. Fleming's earlier design. This design was implemented. Owners Union Realco and Bank of America planned to utilize the building immediately. A groundbreaking was held in April 1971. The project ultimately included the eight-story tower, a connected one-story bank, a parking lot, retaining wall with landscaping, and a second commercial building erected to house the Great Scot Restaurant. Both the Great Scot and the eight-story Towne Center opened in 1972. (100 N. Santa Anita Avenue) (Appendix D).

The Great Scot Restaurant, a late addition to the Towne Center Project, was separately designed by Willis K. Hutchason & Associates, and constructed by Keller and Grant, Inc and Van Vliet Construction Co. The restaurant advertised that its building was "an exact copy of a 16th Century coaching inn, situated 20 miles south of London" (Appendix D). According to promotional materials, the architects meticulously researched the sixteenth century building, as well as historical building methods, including half-timbered construction and wattle-and-daub. Great Scot remained a restaurant, albeit with different tenants over time, until approximately 2005 when it was converted to offices for a construction company. Tenants included: Great Scot (circa 1972-1980), Lord Charley's Restaurant (circa 1980-1985), The Gallery (circa 1985-1987), F.W. Szechwan Restaurant (circa 1987-1995), Little Garden Chinese Restaurant (circa 1995-2005), Dynamo Construction Co and Dynamo Realty (circa 2005-2008), and medical offices (circa 2008-present) (Appendix D).

The success of Towne Center figured directly in the Arcadia Redevelopment Agency's 1970s projects, which included the Fashion Park mall and attracting other businesses to the downtown commercial core. In 1976, City Council briefly considered abandoning Wheeler Avenue, closing the road and turning it into driveway access for downtown Arcadia parking. While the proposal to close Wheeler Avenue did not go through, the short street functions today as an access road for the limited businesses fronting Wheeler Avenue and provides access to the parking lots south of Wheeler Avenue (Appendix D).

In recent years, the area around the proposed Project site has undergone new development. In 1999, several big box retail stores were established north of the proposed Project site along N Santa Anita Avenue, between the freeway exit at Santa Anita Avenue and Huntington Drive. In 2003, Santa Anita Avenue was widened and landscaped. Between 2009 and 2015, the Metro Gold Line extension from Pasadena was approved and completed, strengthening public transportation to the downtown commercial core of Arcadia. In 2014, the area north of E Santa Clara Street, north of the proposed Project site, was redeveloped into multi-level parking and commercial retail stores. (Appendix D).

Project Site Architectural Styles

Multiple architectural styles are represented throughout the Project site. Below is a description and summary of each of these styles and associated character-defining features.

Corporate Modern (1945-1975)

Corporate Modern architecture was used for high-rise buildings in Southern California from the 1950s through 1970s. Like other Modern architectural movements, Corporate Modern architecture focused on austere exteriors with minimal ornamentation. Buildings were constructed using innovative and industrial materials such as steel, glass curtain walls, and concrete. The style is based largely on the International design aesthetic attributed to architect Mies van der Rohe's work before World War II. Prominent practitioners of the Corporate Modern style in Los Angeles included William Pereira and Charles Luckman. The style appears to be part of the "Late Modern" style as defined in the City of Arcadia Historic Context Statement (Appendix D).

Character-defining features of the Corporate Modern style include:

- Use of concrete, steel and glass
- Rectilinear forms
- Large vertical expanses of concrete
- Lack of exterior ornamentation
- Glass curtain walls
- Use of steel mullions
- First floor has a slight setback under a canopy
- Decorative entry points with a variety of materials such as marble or tiles
- Design dictated by steel framing systems

Mid-Century Modern (1940-1975)

Mid-Century Modern is a term used to describe the evolution of the International Style after World War II and encompasses a range of buildings forms. The Mid-Century Modern style was embraced in the building boom that followed World War II, particularly in the newly sprawling developments radiating from Southern California's major urban centers. There was a need for a style that could meet the demand for mass construction of many property types – from residences to schools to offices – and convey the modern sensibility of an era that valued a departure from the past; middle-class growth; economic efficiency; and new material technology. Mid-Century Modern design was embraced intellectually as a departure from the past, but it was economically appealing for its ability to be mass-produced with standardized, affordable, and replicable designs that could accommodate many programmatic needs and site requirements.

Aesthetically, Mid-Century Modern is a term used to describe the evolution of the International Style after World War II and encompasses a range of buildings forms and property types. While Mid-Century Modern architecture uses industrial materials and geometric forms, the style often references local vernacular traditions, particularly in the use of wood and the relationship between indoor and outdoor spaces. Mid-Century Modern is characterized by more solid wall surfaces as opposed to large planes of glass and steel that characterize the International Style (and its successors, including Corporate Modern). Stacked bond brick walls are a common feature of commercial and institutional (primarily educational) buildings in the Mid-Century Modern style. In residential buildings, post-and-beam construction with exposed wood structural systems is a common design element. Residential and low-scale commercial buildings exhibit flat roofs, deep overhangs, open floor plans, extensive use of glass, indoor/outdoor flow, and concrete slab foundations. The designs rarely incorporate applied ornamentation or references to historical styles.

Many property types exhibit the characteristics of the Mid-Century Modern style; however, not all Mid-Century Modern designs rise to the level of significant examples of the architectural style. The Case Study House program made Los Angeles a center of experimentation within the style, and the influence of new modern designs radiated outwards to communities around Los Angeles County, including Arcadia, where the characteristics of Mid-Century Modern design could be appropriated for massive scale production, and use modern materials that could be mass-produced (Appendix D).

Character-defining features of the Mid-Century Modern style include:

- Low, boxy, horizontal proportions
- Mass-produced materials
- Flat, smooth sheathing
- Flat roofed without coping at roof line; flat roofs hidden behind parapets
- Lack of exterior decoration or abstract geometrical motif
- Simple windows (metal or wood)
- Industrially plain doors
- Large window groupings
- Commonly asymmetrical
- Whites, buffs and pale pastel colors

Tudor Revival (1890-1950)

The Tudor architectural style originated during the reign of English Tudor monarchs, beginning with Henry VII in 1485 until the death of Elizabeth I in 1603. The name Tudor Revival was a relative misnomer since few examples closely resembled the architectural characteristics of sixteenth-century Tudor England. Instead, the buildings designed under this style incorporated aspects of late Medieval and early Renaissance English manor houses and folk cottages. The Tudor Revival style first became popular in the late eighteenth and early nineteenth centuries. Like the Craftsman style, the eventual popularity of the Tudor Revival style was due to its relationship to the Arts and Crafts movement. The style was also a reaction to increasing industrialization. Sixteenth- and seventeenth-century Tudor architecture was perceived as picturesque and harmonious with the natural landscape. Tudor Revival drew inspiration from late medieval domestic architecture, which varied from modest thatched-roof cottages to large manor houses with hand-hewn half-timbering. The style offered versatility in the interior plan rather than being limited by symmetry.

In America, the Tudor Revival style was first used for residential architecture in the 1890s, especially for larger homes on the East Coast. The earliest Tudor Revival homes in the United States date from the late nineteenth-century and present as architect-designed landmarks that closely resembled the English models. By the 1920s, the Tudor Revival style was a popular choice across the country's growing middle-class suburban neighborhoods. This was due in part to the evolving techniques of masonry veneering, which allowed any building to resemble their stone and brick English counterparts.

In Southern California, Tudor Revival style architecture typically dates to buildings constructed in the 1920s and 1930s. Early examples were often large single-family homes in wealthy neighborhoods. The style began appearing in greater numbers in the 1920s in Southern California, and it was applied to modest bungalows as the popularity of the Craftsman style waned (Appendix D).

Character-defining features of the Tudor Revival style include:

- Asymmetrical facades and irregular massing
- Stucco, brick or stone masonry, or masonry-veneered walls
- Steeply pitched roof, with at least one prominent front-facing gable; usually clad with slate, wood shingle or composition shingle roofing; may have false thatched roof cladding
- Decorative (non-structural) half-timbering
- Façade dominated by one or more front-facing gables
- Tall chimneys, often crowned by decorative chimney pots
- Informally patterned stonework or brickwork
- Battlements or crenelations in masonry
- Varied eave heights
- Oriel windows and jetty overhangs on the second story
- Multi-paned casement windows that are tall, narrow, and typically arranged in groups
- Entrance vestibules with arched openings

Project Site Architects and Designers

Multiple architects are known to have contributed to the design of buildings on the proposed Project site. Below is a description and summary biography of each of these architects or firms, as well as a short list of works.

Willis K. Hutchason and Associates (1969-1996)

Willis K. Hutchason was born in Los Angeles in 1920 and studied architecture at the University of California, Berkeley and University of Southern California. In 1953, Hutchason was admitted as a partner in the firm Balch, Bryan, Perkins & Hutchason and worked with William Glenn Balch, Louis L. Bryan, and John Loring Perkins. This firm was based in Los Angeles and located on Fountain Avenue. The firm appears to have specialized in designing schools, public buildings, and hotels. Hutchason notably worked with the Lawry's restaurant brand to design some of their Los Angeles County theme restaurants. Hutchason retired in 1996 and died in 2007 (Appendix D).

Selected architectural works associated with the career of Willis K. Hutchason include:

- Danbury School, Claremont, CA (1968)
- University High School, Irvine, CA (1969)
- Lawry's Prime Rib Restaurant (La Cienega location), Los Angeles, CA (1970)
- Tustin Union High School Master Plan, Tustin, CA (1970)
- Great Scot Restaurant (Lawry's-owned), Arcadia, CA (1971)
- Griswold's Restaurant and the Smorgasbord, Claremont, CA (1973)
- Lawry's Prime Rib Restaurant (Beverly Hills location), Beverly Hills, CA (1977)
- Frank Hall, Pomona College, Claremont, CA (1982)

Other Architects and Builders

The names of architects in archival research relating to buildings in the proposed Project site includes: "Fleming & Fryer" of Newport Beach (who were responsible for the final design of 150 N Santa Anita Avenue) and Jack Hale (a local architect who worked with Thomas Cosentino at 31-33 Wheeler Avenue). Dudek attempted to research these architects; however, the only mention of either Fleming & Fryer or Hale in historical newspapers are in reference to their respective buildings on the proposed Project site. Additional information about these architects was not found in the AIA's Historical Directory of American Architects, historical newspapers, genealogical research, or research through the local Arcadia Public Library. Therefore, it can be assumed they are not prominent or master architects.

CHRIS Records Search

On May 4, 2021, staff at the South Central Coast Information Center (SCCIC), located on the campus of California State University, Fullerton, provided the results of a CHRIS records search for the Project site and a 0.5-mile radius. Due to COVID-19, the SCCIC notified researchers that they are only able to provide data for Los Angeles County that has already been digitized. As such, not all available data known to CHRIS may be provided in the records search. The CHRIS records search results provided by the SCCIC included their digitized collections of mapped prehistoric and historic archaeological resources and historic built-environment resources; Department of Parks and Recreation site records; technical reports; archival resources; and ethnographic references. Dudek reviewed the SCCIC records to determine whether the implementation of the proposed Project would have the potential to impact known and unknown cultural resources. The confidential records search results are provided as Confidential Appendix B in Appendix D of this Draft EIR.

Previously Conducted Cultural Resources Studies

Results of the cultural resources records search indicated that 17 previous cultural resource studies have been conducted between 1984 and 2015 within 0.5-mile of the Project site. Of these studies, four (4) overlap the Project site. The entirety of the Project site has been subjected to previous cultural resource investigations between 1996 and 2010. A summary of the studies within the Project site boundary is provided below in Table 4.3-1 followed by brief summaries of the reports overlapping the Project site.

Table 4.3-1. Previously Conducted Studies Overlapping the Project site

SCCIC Report Number	Authors	Year	Title	Proximity to Project site
LA-06859	LSA Associated, Inc.	1996	Arcadia General Plan	Overlaps
LA-10896	Greenwood, David	2004	Historic Properties Survey and Effects Report for the Gold Line Phase II Project (Pasadena to Montclair) Los Angeles and San Bernardino Counties, CA	Overlaps
LA-12497	Maxon, Pat	2010	Draft Program Environmental Impact Report, City of Arcadia, 2010 General Plan Update	Overlaps
LA-12525	Poka, Ervin	2003	NHPA Section 106 Review; Metro Gold Line Phase II Extension Project	Overlaps

Source: SCCIC Records Search May 4, 2021
SCCIC = South Central Coastal Information Center

LA-06859

Arcadia General Plan (City of Arcadia 2010) details the general plan for the City of Arcadia and includes enumerated goals for cultural resources (see the Section 4.3.2 of this report). The area of study for this report encompasses the entirety of the City, including the Project site.

LA-10896

Historic Properties Survey and Effects Report for the Gold Line Phase II Project (Pasadena to Montclair) Los Angeles and San Bernardino Counties, California (Appendix D), documents the results of an archaeological investigation conducted to determine the effects of a proposed metro line. The investigation consists of archival research and pedestrian field efforts. The area of study for this report overlaps the entirety of the Project site. No new cultural resources were identified as a result of this study.

LA-12497

Draft Program Environmental Impact Report, City of Arcadia, 2010 General Plan Update (Appendix D), documents the results of an environmental impact report conducted on behalf of the City of Arcadia. The study consists of an archival records search, tribal outreach, and paleontological literature review. The area of study for this report overlaps the entirety of the Project site. No new cultural resources were identified as a result of this study.

LA-12525

NHPA Section 106 Review; Metro Gold Line Phase II Extension Project (Appendix D), documents the correspondence between the U.S. Department of Transportation and the State Historic Preservation Office regarding identification of Areas of Potential Effects within a proposed Metro Line. This report does not contain any information relevant to cultural resources.

Previously Recorded Cultural Resources

The CHRIS records search indicates that 63 cultural resources have been previously recorded within 0.5-mile of the Project site, as listed in Table 2 in Appendix D, none of which overlap or are adjacent to the Project site. Of these cultural resources, one is a historic-era archaeological site (located approximately 500 meters or 0.31 miles to the north) and the remaining 62 are historic built environment resources.

Geotechnical Report Review

The geotechnical report, *Alexan Arcadia Proposed Multi-Family Residential Development 150 North Santa Anita Avenue Arcadia, California* (Appendix E-1), was prepared for Arcadia Apartments, LLC in March 2021 to determine the subsurface geological conditions at 150 North Santa Anita Avenue in the City of Arcadia, Los Angeles County, California. The report details the results of subsurface explorations at four locations within the Project site, to determine subsurface geological conditions, including one at the northwest quadrant (B-1), one in the center (B2), one at the southwest corner (B3), and one within the southeast quadrant of the site (B4). According to the report, four 8-inch-in-diameter auger borings were completed to a maximum depth of 40.5 feet (ft) below ground surface (bgs) at locations for B1 and B2. Artificial fill soils were encountered between 2 and 4 ft bgs at all four investigation areas and are described as dark brown silty sand and are noted to likely be associated with past grading excavation activities at the site. Native soils observed underlying the artificial fill soils and are described as alluvium consisting of light brown to brown and reddish brown interbedded silty sand, poorly graded sand, and well-graded sand with varying amounts of fine to coarse gravel.

Native American Coordination

Assembly Bill 52 Consultation

The Project is subject to compliance with Assembly Bill 52 (California Public Resources Code [PRC] 21074), which requires consideration of impacts to tribal cultural resources as part of the CEQA process, and that the lead agency notify California Native American Tribal representatives (that have requested notification) who are traditionally or culturally affiliated with the geographic area of the proposed Project. The City of Arcadia contacted the two NAHC Native American individuals and/or tribal organizations on August 12, 2021 pursuant to AB 52 requirements. A more comprehensive accounting of the AB 52 efforts and communication relating to the proposed Project is provided in Section 4.14, Tribal Cultural Resources.

Survey Methods and Results

Built Environment Survey

Dudek Architectural Historian Kate Kaiser, MSHP, conducted an intensive survey of the proposed Project site on April 14, 2021. Ms. Kaiser meets the Secretary of the Interior's Professional Qualification Standards for architectural history. The survey entailed walking around the building exteriors of each property, documentation with notes and photographs, specifically noting character-defining features, spatial relationships, observed alterations, and examining any historic landscape features on the properties. Interiors were not surveyed as part of this proposed Project.

Three properties within the proposed Project site are developed with built environment resources over 45 years old and were identified as requiring recordation and evaluation for historical significance: 150 N Santa Anita Avenue (APN 5773-006-036), 31-33 Wheeler Avenue (APN 5773-006-005), and 25 Wheeler Avenue (APN 5773-006-004).

One property immediately adjacent to the Project site, 100 N Santa Anita Avenue (APN 5773-006-029), was identified as a built environment resource that is over 45 years old. This property was identified as requiring recordation and evaluation for historical significance.

One property located on the proposed Project site, 30 E Santa Clara Street (APN 5773-006-010), is developed with a building constructed in 1987 and does not meet the 45-year age threshold. Therefore, it was not evaluated or recorded.

Archaeological Survey

Dudek Archaeologist, Julie Swift, MA, conducted an archaeological survey of the Project site on July 1, 2021. Due to the developed nature of the Project site, an intensive-level archaeological survey was not conducted. Instead, an opportunistic survey approach was applied. Careful attention was given to barren ground including at the base of trees, in landscaped features, and in planter areas within the Project site. The ground surface was examined for the presence of prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools), historical artifacts (e.g., metal, glass, ceramics), sediment discolorations that might indicate the presence of a cultural midden, and depressions and other features that might indicate the former presence of structures or buildings.

Ground surface visibility within the Project site was variable based on existing site conditions and was limited to the base of tree wells and in landscaped and planter areas. As previously mentioned in Section 4.3.1 Geotechnical Report Review, subsurface exploratory borings identified artificial fill soils between 2 to 4 ft bgs within the Project site. The presence of the fill soil is an indication that any cultural material between 2 to 4 ft from the existing ground surface across the Project site has been previously displaced from the primary depositional location, buried, or destroyed. Additionally, the presence of fill soils demonstrates that the native soils upon and within which cultural deposits may exist in context could not have been observed during the survey. Soils observed during the archaeological survey appear to be non-native soils. No cultural material was identified during the archaeological survey.

Project site Property Description

150 N Santa Anita Avenue, (APN 5773-006-036)

The property at 150 N Santa Anita Avenue features one building with three distinct sections: an eight-story, rectangular plan, Corporate Modern style commercial portion built in 1972; a one-story Mid-Century Modern-style commercial wing extending the building footprint to the north (used as a bank); and a one-story wing to the south.

The eight-story portion of the building is on a raised concrete plinth foundation and features a 1.5 story high first/mezzanine level. It has symmetrical elevations with an emphasis on horizontality with ribbons of mirrored glass windows and spandrels on all elevations. Its concrete structure is highly visible with four vertical, textured concrete, structural members separating the five bays and fluted concrete levels separating each floor. At the top is a flat roof with a wide, cantilevered overhang with fluted concrete cladding and exposed concrete structural elements underneath. There are two entrances to this portion of the building, one on east elevation and one on the west elevation. Both entrances are located along the building's central axis and in recessed alcoves accessed by stairs and accessibility ramps. The entrances are surrounded by plate glass windows with stacked brick bulkheads. The floor of both entrances features a grey and white terrazzo flooring.

The one-story volume on the south elevation has a simple rectangular plan. It is on the same concrete plinth foundation as the eight-story building and features concrete stucco and stacked brick cladding and a flat roof with parapet. Windows are fixed glass with steel mullions. The primary entrance is on the west elevation and features glass and steel doors with sidelights and transom under a metal awning. The entrance is accessed by a secondary, utilitarian staircase and from the extended, terrazzo entry alcove of the eight-story building.

The one-story bank wing of the building extends from the north elevation and features a simple rectangular plan, with a covered ATM drive-through on the east elevation. This portion of the building features a concrete foundation, stacked brick cladding throughout, and a flat roof with low parapet. The main entrance to this building is on the west elevation in a recessed alcove, under a projecting cantilevered roof. The main entrance is fully glazed with glass and steel automatic doors, plate glass sidelights, and a fixed transom. Two fixed tinted glass windows are located on the west elevation, and near the bank teller/ATM window on the east elevation. The building connects to the eight-story building at its south elevation.

31-33 Wheeler Avenue (APN 5773-006-005)

The property at 31-33 Wheeler Avenue consists of a one-story, Mid-Century Modern-style commercial building, constructed in 1959. The primary (south) elevation is divided into two office storefronts separated by a party wall. The building also shares an exterior wall with 25 Wheeler Avenue, just to the west, which was not visible and could not be recorded for this proposed Project. To the rear of the building is a small surface parking lot. The 31-33 Wheeler Avenue building features a flat roof with shallow, cantilevered overhang over the primary (south) elevation and parapet walls on the east and west side elevations. Cladding on the primary (south) elevation consists of stacked red brick and concrete masonry unit construction on the east and rear (north) visible elevations. Fenestration on the primary (south) elevation is situated under the roof overhang and is symmetrical (mirrored) between the two offices. Original fenestration appears to have been replaced entirely with modern tinted glass and two steel doors, each with transom and a single-pane sidelight, as well as fixed, two-light, tinted, glass and steel windows. Fenestration on the east and rear (north) elevations consist of multi-light hopper windows with metal sashes, small single-light hopper windows with metal sashes, and solid steel doors with metal awnings over them. Fenestration on the rear (north) elevation is covered by metal security bars, installed directly into the building. Aside from the stacked brick and cantilevered roof, the building has no other decorative details. No additions were noted.

25 Wheeler Avenue (APN 5773-006-004)

The property at 25 Wheeler Avenue consists of a one-story, Mid-Century Modern-style commercial building, constructed in 1961. The property is developed with a single building, with the primary (south) elevation divided multiple bays and one storefront. Behind the building there is a small, enclosed parking lot. The building also shares an exterior wall with 31-33 Wheeler Avenue, to the east. The 31-33 Wheeler Avenue building features a flat roof with parapet on street-facing elevations, capped with a metal flashing. Cladding on the primary (south) elevation consists of textured stucco plaster, and concrete masonry unit construction on the west and rear elevations. Fenestration on the primary (south) elevation is not symmetrical; on the left side, there are four floor-to-ceiling fixed windows with white decals advertising services, and on the left side there is a deeply recessed door and windows that alternate panels of tinted glass, floor-to-ceiling windows, and panels of stucco finish. There is also a building directory sign on the right side of an entrance door at the center of the elevation. The west side elevation has no visible fenestration but is painted with a sign advertising the business at 25 Wheeler Avenue. The east side elevation is shared with 31-33 Wheeler Avenue and was not visible. The rear (north) elevation is also clad with stucco and consists of various fenestration type, including sliding glass doors, glass and steel doors with sidelights and large, single-pane, floor-to-ceiling windows, all situated under a slightly overhanging parapet and recessed a step below the back parking lot ground surface. The building had no other decorative details, and no visible additions.

100 N Santa Anita Avenue (APN 5773-006-029)

The building at 100 N Santa Anita Avenue consists of a two-and-a-half-story commercial building, constructed in 1972, and modeled after a traditional British Tudor Era (16th century) coaching inn, outside of London (Appendix D). The building's foundation appears to be a concrete slab, set slightly below the surrounding ground surface and sidewalk level, creating a half-basement/garden level. Cladding is stucco, arranged and painted to appear as half-timbered braces infilled with wattle-and-daub. The braces do not appear (from the exterior) to be structural and appear to be tooled stucco. The building has a multi-gabled, complex roof with different heights and is clad with roof tiles that appear to be stone or slate, with a curved outer edge. The roof finishes with a slight overhang with a tooled wood fascia board with curved ends. The building also has several decorative elements including jettied overhangs on the main and side elevations, and prominent brick chimneys with a combination of rough brick, clinker brick, and white stones, topped with decorative chimney pots. The main entrance is on the west elevation, at the top of a series of stairs and a landing, clad with stone. The entrance itself is set into a small alcove, set off by arching, faux-wood brace pieces to each side. There is a fabric awning over the entrance and other decorative elements such as pendant sconce lamps and wrought iron railings.

Fenestration varies throughout the building. Common window types observed were multi-light diamond-leaded casement windows, sometimes with colored or stained glass, usually grouped or paired; narrow 9, 12 and 16-light casement windows with wood sashes, usually grouped or paired with a few single windows noted on the non-primary elevations. Doors across all elevations appear to be replacements; however, they are in keeping with the building style. On the primary (west) elevation main entrance the door is a single, paneled wood door with two beveled glass windows and sidelights. On the rear (east) elevation there is a pair of double French doors. On the side (north) elevation, atop a wheelchair access ramp is a pair of heavy wood doors with windows under an awning. And on the side (south) elevation there is a single wood door also under an awning and leading to the half-basement level.

The building's immediate setting is landscaped with low-growing plants and shrubs. Along the primary (west) elevation, access to the stairs from the street/sidewalk is through a small courtyard paved with both brick and stone pavers and landscaped with low hedges and flowers, enclosed by a low stone wall. Surrounding the building on the primary (west) and side (north) elevations is a low, approximately 2.5-foot-tall stone wall with crenelations and an irregular wall cap. Surrounding the building on the rear (east) and side (south) elevations is a brick wall with curving, wavy patterns.

4.3.2 Relevant Plans, Policies, and Ordinances

Federal

National Register of Historic Places

While there is no federal nexus for this Project, the subject property was evaluated in consideration of NRHP designation criteria. The NRHP is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service, under the U.S. Department of the Interior, the NRHP was authorized under the National Historic Preservation Act, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by the National Park Service.

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the

NRHP. For a property to be listed in or determined eligible for listing, it must be demonstrated to possess integrity and to meet at least one of the following criteria:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of persons significant in our past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. That have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in NRHP guidance, "How to Apply the National Register Criteria," as "the ability of a property to convey its significance. To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity" (Appendix D). NRHP guidance further asserts that properties be completed at least 50 years ago to be considered for eligibility. Properties completed fewer than 50 years before evaluation must be proven to be "exceptionally important" to be considered for listing.

State

California Register of Historical Resources

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC Section 5020.1[j]). In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following 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.
(4) Has yielded, or may be likely to yield, information important in prehistory or history.

To understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

Section 7050.5 of the California Health and Safety Code

Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human grave. In the unlikely event that human graves are encountered, work should halt in the vicinity and the County Coroner should be notified immediately. At the same time, an archeologist should be contacted to evaluate the situation and grave. If the human remains are determined to be of Native American origin, the Coroner must contact the NAHC within 24 hours of identification.

California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- California Public Resources Code Section 21083.2(g) defines "unique archaeological resource."
- California Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a) define "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource." It also defines the circumstances when a project would materially impair the significance of an historical resource.
- California Public Resources Code Section 21074(a) defines "tribal cultural resources."
- California Public Resources Code Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- California Public Resources Code Sections 21083.2(b)-(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; CEQA Guidelines Section 15064.5[b]). If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1[q]), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (PRC Section 21084.1; CEQA Guidelines Section 15064.5[a]). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; CEQA Guidelines Section 15064.5[a]).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines Section 15064.5[b][1]; PRC Section 5020.1[q]). In turn, CEQA Guidelines section 15064.5(b)(2) states the significance of an historical resource is materially impaired when a project:

1. 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 of Historical Resources; or
2. 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 Public Resources Code or its identification in an 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
3. 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 of Historical Resources as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a Project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b], and [c]).

PRC Section 21083.2(g) defines a unique archaeological resource as 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:

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

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2[a]; CEQA Guidelines Section 15064.5[c][4]). However, if a non-unique archaeological resource qualifies as tribal cultural resource (PRC Section 21074[c], 21083.2[h]), further consideration of significant impacts is required. CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC Section 5097.98.

Regional and Local

City of Arcadia Historic Preservation Ordinance (Ordinance No. 2359, Article IX. Chapter 1, Division 3, Section 9103.17)

The City of Arcadia adopted a historic preservation ordinance in April 2019, based on the City's 2015 decision to conduct a Citywide Historic Resources Survey and consistent with the City of Arcadia General Plan elements which proposed to preserve elements of Arcadia's physical community. Below, the applicable portions of the ordinance are excerpted:

9103.17.020 – Purpose

The Arcadia City Council acknowledges that the recognition, preservation, protection, and reuse of historic resources are required in the interests of the health, prosperity, safety, social and cultural enrichment, general welfare, and economic well-being of the people of Arcadia. The designation and preservation of historic resources, and the regulation of alterations, additions, repairs, removal, demolition, or new construction to perpetuate the historic character of historic resources, is declared to be a public purpose of the city.

Therefore, the purposes of this Chapter include the following:

A. Enabling informed planning decisions regarding the treatment of properties that contribute to the city's character or reflect its historical and architectural development;
B. Establishing priorities for preservation, restoration, and rehabilitation efforts within the city;
C. Providing City planners with baseline information about potential historic resources from which to manage new development;
D. Safeguarding Arcadia's heritage by protecting resources that reflect elements of the city's cultural, social, economic, architectural, and archaeological history;
E. Deterring demolition, misuse, or neglect of designated historic landmarks, designated historic districts (and their contributing resources), and potential historic landmarks, which represent important links to the past of Arcadia, California, or the nation;
F. Providing the public with a better understanding of and appreciation for the built environment as a tangible link to Arcadia's history;
G. Promoting the use of historic resources, especially for the education, appreciation, and general welfare of the people of Arcadia;
H. Protecting and enhancing the city's attractiveness to residents and visitors, and supporting economic development.

9103.17.060 - Local Eligibility and Designation Criteria.

A. Criteria for Designation.

   Historic Landmark. On the recommendation of the Commission, the City Council may designate an individual resource (building, structure, object, or site) if it meets one or more of the following local eligibility criteria:

   1. It is associated with events that have made a significant contribution to the broad patterns of Arcadia's or California's history;
   2. It is associated with the lives of persons important to local or California history;

3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of master, or possesses high artistic values;
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the city or state.

Historic District. On the recommendation of the Commission, the City Council may designate a historic district if it meets one or more of the four criteria in Section 9103.17.060(A) and:

1. It possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.
2. A minimum of 60 percent of the buildings within the proposed historic district contribute to the district's significance.

B. **Automatic Consideration**. Any property individually listed in the National Register of Historic Places or California Register of Historical Resources shall be automatically considered designated historic resource by the City.

C. **Considerations for Evaluating Properties - Age**. A resource considered for listing as a local historic landmark must be at least 45 years of age, unless it can be demonstrated that the resource has achieved exceptional importance within the last 45 years.

D. **Consideration for Evaluating Properties - Integrity**. In order for a resource to be eligible for designation as a local landmark or historic district, the resource must retain sufficient integrity. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics that existed during the time period within which the resource attained significance. Only after significance has been established should the issue of integrity be addressed. There are seven aspects of integrity, as defined by the National Register: location, design, setting, materials, workmanship, feeling, and association. Since significance thresholds associated with local listing are generally less rigid than those associated with listing at the state or national levels, a greater degree of flexibility shall be provided when evaluating the integrity of a locally eligible historic resource, as opposed to one eligible for listing in the National or California Registers. For this reason, it is possible that a historic resource may not retain sufficient integrity to be eligible for listing in the National or California Registers, but may still be eligible for listing at the local level. Integrity shall be determined with reference to the particular characteristics that support the resource's eligibility under the appropriate criteria of significance.

City of Arcadia General Plan 2010 (City of Arcadia General Plan, Section 7.0 Parks, Recreation, and Community Resources Element)

The 2010 Arcadia General Plan enumerates a series of policies designed to protect and preserve cultural resources (City of Arcadia 2010a). Though the City does not have a preservation ordinance, the General Plan recommends potential city landmarks meet the following criteria:

- It exemplifies or reflects the broad cultural, political, economic or social history of the U.S., California, or City of Arcadia.
- It has yielded or has the potential to yield information in history or prehistory.
- It is representative of one of the diverse styles and variations of residential and commercial architecture found in Arcadia, whether vernacular or a work of identifiable artisans, master craftsmen, builder, or architects important locally or with wider significance.
- It is an object of significance because of its design or pleasing appearance in a setting.

- It is a site or structure that is important to the prehistory or history of the community.
- It is a surviving site, route, or structure important to the early settlement, economic origins, or technological development of the locale.
- It is a grouping or set of structures, historic sites or features, design components, natural features and landscape architecture, or other interesting details which together create exceptionally rich history or cultural ambiance.
- It is a hillside, geologic formations, body of water, arroyo, remaining natural vegetation, or other striking or familiar physical characteristic that is important to the special character, historic identity, or aesthetic setting of the community.

The 2010 General Plan also listed specific goals for historical resources in the city.

Goal PR-8: Continued recognition and support of the diverse historical and cultural organizations that celebrate and enrich the community

> **Policy PR-8.1:** Support programs that promote a full range of cultural activities and their appreciation among all age groups, all levels of education, and all cultural backgrounds.
>
> **Policy PR-8.2:** Nurture and support local arts organizations and promote the appreciation of and involvement in the creative and performing arts.
>
> **Policy PR-8.3:** Build community identity through educational, informational, and cultural art events that focus on local art, food, music, ethnic diversity, and other topics.

Goal PR-9: Retention and proper stewardship of historical and cultural resources

> **Policy PR-9.1:** Encourage the maintenance and preservation of historically, culturally, and or/ architecturally significant structures and sites in the community.
>
> **Policy PR-9.2:** Explore partnerships with local community organizations, such as the Arcadia Historical Society, to continue the preservation of historic and cultural resources.
>
> **Policy PR-9.3:** Collect, preserve, and celebrate Arcadia's heritage with quality exhibits and programs.
>
> **Policy PR-9.4:** Preserve Santa Anita Park's use as a live horse racing venue while economically feasible, and preserve and maintain iconic structures at the racetrack such as the grandstand.
>
> **Policy PR-9.5:** Identify historic sites, structures, neighborhoods, and other resources through a Historic Resource Inventory.
>
> **Policy PR-9.6:** Explore the establishment of a Cultural Heritage Ordinance.
>
> **Policy PR-9.7:** Develop incentives that promote preservation and rehabilitation of historic structures, sites, and other resources.

4.3.3 Thresholds of Significance

The significance criteria used to evaluate the Project's impacts to cultural resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to cultural resources would occur if the Project would:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5.
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.
c) Disturb any human remains, including those interred outside of dedicated cemeteries.

4.3.4 Impacts Analysis

Threshold 4.3a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

In order to determine if the proposed Project would impact historical resources under CEQA, all buildings or structures over 45 years in age within or immediately adjacent to the proposed Project site were evaluated for historical significance and integrity in consideration of NRHP, CRHR, and City of Arcadia designation criteria and integrity requirements. This includes the 150 N Santa Anita Avenue, 31-33 Wheeler Avenue, and 25 Wheeler Avenue properties, which are inside the proposed Project site, and 100 N Santa Anita Avenue, which is immediately adjacent to the proposed Project site. Because the designation criteria for the CRHR and City of Arcadia landmarks closely resembles the NRHP Criteria, these evaluations are grouped together in the statement of significance for each property below.

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

Archival research indicated that the buildings under evaluation within or immediately adjacent to the Project site were constructed between 1959 and 1972, however, none of these buildings are associated with historical events that have made a significant contribution to the broad patterns of our history. The 150 North Santa Anita Avenue property seems to have been the culmination of years-long planning efforts to redevelop the portion of Santa Anita Avenue north of Huntington Drive's downtown commercial corridor into Towne Center. Despite the long planning period, 150 N Santa Anita Avenue does not appear to have shaped the broader patterns of development of the City of Arcadia or had any effect on the development of the downtown commercial corridor, which was full developed by the 1950s. The 25 and 31-33 Wheeler Avenue properties appear related to the general trend of post-World War II commercial growth in Arcadia. While specific associations must be considered, research did not reveal any reason to believe the Wheeler Avenue properties' specific associations with commercial growth were significant. In addition, while the 100 North Santa Anita Avenue property—adjacent to the Project site —was designed in a Tudor Revival style, association with a trend or style is not sufficient for historic significance. Therefore, the properties within and/or adjacent to the Project site do not appear eligible under NRHP Criterion A, CRHR Criterion 1, or City of Arcadia Historic Landmark Criterion 1.

Criterion B/2: That are associated with the lives of persons significant in our past.

To be found eligible under Criterion B/2, one or more of the properties must be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. Archival research indicates that the 31-33 Wheeler Avenue was first owned by Thomas Cosentino, and subsequently by numerous owners and occupants for short periods. Archival research did not provide any evidence that Cosentino, subsequent occupants, or any person(s) associated any of the evaluated properties, were known to be historically important figures at the national, state, or local level. Due to a lack of identified significant associations with important persons in history, the properties under evaluation on and adjacent to the Project site do not appear eligible under NRHP Criterion B, CRHR Criterion 2, or City of Arcadia Historic Landmark Criterion 2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Considered as individual parts and as a whole, the evaluated properties on and adjacent to the Project site do not appear to be excellent examples of any of the styles represented, including Corporate Modern, Mid-Century Modern, and/or Tudor Revival, nor do these properties appear to be unique examples of a style or property type, period, or method of construction within Arcadia or to the surrounding communities. No information about the named architects of 150 North Santa Anita Avenue, Fleming & Fryer of Newport Beach or William J. Fleming, was revealed to indicate the buildings are the work of master architects. Similar conclusions were reached about architects Jack Hale (31-33 Wheeler Avenue) and Willis K. Hutchison & Associates (100 North Satna Anita Avenue). No information about the architects or builders of 25 Wheeler Avenue were available from historical permits, newspapers or other methods of archival research. The buildings also do not possess high artistic value. In consideration of the final component of Criterion C/3, the properties do not appear to contribute to a potential historic district. There is no visual cohesion or shared development history due to varying construction dates, more recent development, or nearby development of a different character. Therefore, the properties under evaluation on and adjacent to the Project site do not appear eligible under NRHP Criterion C, CRHR Criterion 3, or City of Arcadia Historic Landmark Criterion 3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The properties under evaluation on and adjacent to the Project site are not significant under Criterion D of the NRHP or Criterion 4 of the CRHR as a source, or likely source, of important historical information nor do they appear likely to yield important information about historic construction methods, materials, or technologies.

Integrity Discussion

To be eligible for listing in the National Register, properties must retain their physical integrity from the period in which they gained significance. In the case of architecturally significant properties, the period of significance is normally the date of construction. For historically significant properties, the length of the historic associations usually measures the period of significance. As none of the evaluated properties are significant under any National Register criterion, they do not have a period of significance and the integrity of the buildings does not require examination. It is worth noting, however, that the properties do retain certain aspects of integrity, including location, design and feeling. The buildings have never moved from their original locations and have had very few alterations, notable changes or modifications to their original overall form, plan, space, structure, and style. They also appear to have retained much of their original materials, and for several buildings, the workmanship of the original builders

is visible. To a certain extent, the buildings are still able to convey a sense of the time periods in which they were built. However, the buildings lack important historical associations and have experienced substantial changes to their setting over time as the area along Santa Anita Avenue underwent a modest infill and revitalization in the late 1990s through the 2000s, leading to the demolition of several surrounding commercial and industrial properties and replacing them with modern commercial retail stores or parking structures. In summary, the properties do not retain the requisite integrity for designation, and do not rise to the level of significance required for designation at the national, state, or local levels.

Summary of Findings

No cultural resources were identified within or adjacent to the Project site as a result of the CHRIS records search, NAHC SLF search, extensive archival research, field survey, and property significance evaluation. Neither the 150 N Santa Anita Avenue (APN 5773-006-036), 31-33 Wheeler Avenue (APN 5773-006-005), or 25 Wheeler Avenue (APN 5773-006-004) Project site properties, nor the adjacent 100 North Santa Anita Avenue (APN 5773-006-029) property appear eligible for NRHP, CRHR, or City designation due to a lack of significant historical associations, architectural merit, and physical integrity. Therefore, the properties are not considered historical resources for the purposes of CEQA. Further, no potential indirect impacts to historical resources were identified. The Project would not cause a substantial adverse change in the significance of a historical resource, or otherwise result in a direct impact to a historical resource. No other adjacent resources were identified as a result of the records search or survey that could be indirectly impacted by the proposed Project. Therefore, the Project would have a less than significant impact on historical resources. No mitigation is required.

Threshold 4.3b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

No prehistoric or historic-era archaeological resources have been identified as a result of background research, CHRIS database records search (completed May 4, 2021), or the archaeological pedestrian survey (completed July 1, 2021). While the Project site has been subject to previous cultural resource investigations, none of the investigations identified cultural resources within the Project site. Furthermore, a search of the CHRIS database for the Project did not identify any previously recorded cultural resources within the Project site. It is important to note that although the entirely of the Project site was previously investigated, none of these previous investigations were completed prior to the development of the site, indicating that the opportunity to observe native or undisturbed soils during the years of these previous investigations (1996 to 2010) was not possible. According to the 1928 aerial photograph for the Project site, a single barn is shown within the site along North Santa Anita Avenue and the remainder of the site is vacant. Between 1936 and 1949, there is an increase in development with the construction of an additional building adjoining the barn (1936) in the 1928 aerial, a small, fenced property at present day 30 East Santa Clara Street (1941), and a small barn or shed along East Santa Clara Street (1944). By 1949, commercial properties are added to the Project site. It is important to note that the historical route of the Santa Anita Wash and the Rio Hondo River is shown east and outside of the Project site. A review of the geotechnical report summarizing the results of subsurface explorations at four locations within the Project site stated that artificial fill soils were found between 2 to 4 ft bgs within all four subsurface exploratory investigations, resulting in less than reliable survey findings. Additionally, according to the geotechnical report, recommended depths of grading and excavations is 15 ft bgs for the south side of the proposed subterranean parking and up to 26 ft bgs for the subterranean levels on the north side, including foundation depths and a minimum of 12 inches bgs for the associated with paving of the Project site.

In consideration of all these factors, the potential to encounter unknown intact archaeological resources is considered low, but possible during ground disturbing activities within native soil (below 2 to 4 ft of existing grade) considering the lack of opportunity to observe native soils during the pedestrian survey and that no previous cultural investigation has occurred prior to placement of fill soils. In the event that unanticipated archaeological resources are encountered during Project implementation, impacts to these resources could be potentially significant. However, implementation of MM-CUL-1 would ensure that potential impacts related to inadvertent discovery of archaeological resources would be less than significant. MM-CUL-1 requires an inadvertent discovery clause, written by an archaeologist, to be added to all construction plans associated with ground disturbing activities and preparation and implementation of a Worker Environmental Awareness Program (WEAP); would ensure that a qualified archaeologist is retained and on-call to respond to any inadvertent discoveries during Project construction; and requires that all construction work occurring within 50 feet of any find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find. Thus, potentially significant impacts to archaeological resources would be reduced to less-than-significant levels with MM-CUL-1 incorporated.

Threshold 4.3c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

No prehistoric or historic burials were identified within the Project site as a result of the CHRIS records search. However, in the unexpected event that human remains are found, those remains would require proper treatment, in accordance with applicable laws. Procedures of conduct following the discovery of human remains on non-federal lands are mandated by California Health and Safety Code §7050.5, PRC §5097.98 and the California Code of Regulations (CCR) §15064.5(e). According to the provisions in CEQA, should human remains be encountered, all work in the immediate vicinity of the burial must cease, and any necessary steps to ensure the integrity of the immediate area must be taken. The Los Angeles County Coroner must then be immediately notified. The Coroner determines whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner has 24 hours to notify the NAHC, who will, in turn, notify the person they identify as the most likely descendent (MLD) of any human remains. Further actions are determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC. Compliance with these existing regulations would ensure that impacts to human remains resulting from the proposed project would be less than significant. No mitigation is required.

4.3.5 Cumulative Impact Analysis

Cumulative impacts on cultural resources consider whether impacts of the proposed Project together with other related projects identified within the vicinity of the Project site, when taken as a whole, substantially diminish the number of historic or archeological resources within the same or similar context or property type. Twenty-one cumulative projects have been identified in Section 2.5, Cumulative Projects, of Chapter 2, Environmental Setting, of this Draft EIR. However, impacts to cultural resources, if any exist, tend to be site-specific.

A previously discussed, a CHRIS records search was completed by staff at the SCCIC on May 4, 2021. The records search identified seventeen (17) previously conducted cultural resources technical investigations within the records search area. Four of these previous investigations overlap the entirety of the proposed Project site and no cultural resources were identified within the proposed Project site as a result of the overlapping studies. Additionally, the SCCIC records indicate

that sixty-three (63) previously recorded cultural resources were identified within the proposed Project's 0.5-mile buffer. These resources include one historic-era archaeological site and sixty-two (62) historic built environment resources. None of these resources are within or adjacent to the proposed Project site. As there are no known historical or archaeological resources on the Project site, the Project site is not part of an existing or known grouping or district of historical or archaeological resources that would be impacted as part of the cumulative impacts of other projects.

For archaeological resources, cumulative projects may require extensive excavation in culturally sensitive areas, and thus, may result in adverse effects to known or previously unknown, inadvertently discovered archaeological resources. There is the potential for accidental discovery of other archaeological resources by the proposed Project as well as by cumulative projects. Because all significant cultural resources are unique and non-renewable, all adverse effects or negative impacts contribute to a dwindling resource base. Through implementation of MM-CUL-1, which would require an inadvertent discovery clause, written by an archaeologist, be added to all construction plans associated with ground disturbing activities and Project personnel learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities; retention of a qualified on-call archaeologist to respond to inadvertent discoveries; and investigation and handling by a qualified archaeologist in the event that an unknown resource is encountered, the project-level impact to archeological resources would be reduced to less than significant.

Other individual projects occurring in the vicinity of the Project site would also be subject to the same requirements of CEQA as the proposed Project and any impacts to archaeological resources would be mitigated, as applicable. These determinations would be made on a case-by-case basis, and the effects of cumulative development on historical and archaeological resources would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, impacts on archaeological resources would not be cumulatively considerable with mitigation incorporated (MM-CUL-1).

The proposed Project was determined to have less-than-significant direct impacts on human remains. Existing regulations are adequate to address the potential for impacts due to the inadvertent discovery of human remains on the Project site. Other individual projects occurring in the vicinity of the Project site would also be subject to the same state requirements to contact appropriate agencies and coordinate with the County Coroner. Therefore, the proposed Project would not result in any cumulatively considerable impacts related to human remains.

4.3.6 Mitigation Measures

MM-CUL-1 Prior to commencement of construction activities, an inadvertent discovery clause, written by an archaeologist, shall be added to all construction plans associated with ground disturbing activities and the Project applicant shall retain a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, to prepare a Worker Environmental Awareness Program (WEAP). The WEAP shall be submitted to the City of Arcadia Planning and Community Development department (City) for review and approval. All construction personnel and monitors shall be presented the WEAP training prior to the start of construction activities. The WEAP shall be prepared to inform all personnel working on the proposed Project about the archaeological sensitivity of the area, to provide specific details on the kinds of archaeological materials that may be identified during construction, to explain the importance of and legal basis for the protection of significant archaeological resources, and to outline the actions to be taken in the event of a discovery of cultural resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures

include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor.

The WEAP shall require that a qualified archaeologist be retained and on-call to respond to and address any inadvertent discoveries identified during initial excavation in native soils, which underly the 2-4 feet bgs of artificial fill soils. As it pertains to archaeological monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by project-related construction.

If potential archaeological resources (i.e., sites, features, or artifacts) are exposed during construction activities for the proposed Project, the City shall be notified and all construction work occurring within 50 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted. The archaeologist shall be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5[f]; PRC, Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan and data recovery, may be warranted. The archaeologist shall also be required to curate any discovered specimens in a repository with permanent retrievable storage and submit a written report to the City of Arcadia for review and approval prior to occupancy of the first building on the site. Once approved, the final report shall be filed with the South Central Coastal Information Center (SCCIC).

4.3.7 Level of Significance After Mitigation

With the implementation of MM-CUL-1 potential impacts cultural resources would be less than significant. No mitigation is required for potential impacts to historic resources or human remains.

4.3.8 Reference

City of Arcadia. 2010. City of Arcadia General Plan. Updated 2013. Accessed July 2021. https://www.arcadiaca.gov/Shape%20Arcadia/Development%20Services/general%20plan/Parks%20Recreation%20and%20Community%20Resources.pdf

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4.4 Energy

This section describes the existing energy conditions of the Alexan Mixed-Use Project (Project) vicinity, identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures (if any), level of significance after mitigation, and references. Information contained in this section is based on the latest version of California Emissions Estimator Model (CalEEMod), Version 2020.4.0, to estimate the proposed Project's energy consumption from both construction and operations. For the relevant data, refer to the following appendix:

Appendix C-1 Air Quality and Greenhouse Gas Emissions CalEEMod Calculations, prepared by Dudek.

Other sources consulted are listed in Section 4.4.8, References. Comments received in response to the Notice of Preparation are summarized in Table 1-1, Notice of Preparation (NOP) and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft Environmental Impact Report (EIR). A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR.

4.4.1 Existing Conditions

Electricity

The production of electricity requires the consumption or conversion of non-renewable energy resources, including oil, gas, coal, and nuclear resources, into electrical energy. Renewable energy resources are also used, including water, wind, solar, and geothermal sources. The delivery of electricity involves a number of system components, including power generation facilities, transmission lines, and substations and transformers that lower the voltage to a level appropriate for distribution lines to the end-user. Electrical power is generally measured in watts, while energy use is measured in watt-hours. For example, if a light bulb has a capacity rating of 100 watts, the energy required to keep the bulb on for 1 hour would be 100 watt-hours. On a utility scale, a generator's capacity is typically rated in megawatts, which is one million watts, while energy usage is measured in megawatt-hours.

According to the U.S. Energy Information Administration (EIA), California used approximately 263,331 gigawatt-hours of electricity in 2019 (EIA 2021a). Electricity usage in California for different land uses varies substantially by the types of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita in the residential sector is lower than any other state except Hawaii (EIA 2020).

Southern California Edison (SCE) provides electricity to City of Arcadia residents and businesses, including those located on the proposed Project site. SCE, a subsidiary of Edison International, serves approximately 180 cities in 11 counties across central and Southern California. According to the California Energy Commission (CEC), approximately 81 billion kilowatt-hours (kWh) of electricity were used in SCE's service area in 2019 (CEC 2021a).

SCE receives electric power from a variety of sources. According to the California Public Utilities Commission (CPUC) 2019 California Renewables Portfolio Standard Annual Report, 36% of SCE's power came from eligible renewables, such as biomass/waste, geothermal, small hydroelectric, solar, and wind sources (CPUC 2019a). SCE maintains a lower percentage of renewable energy procurement when compared with California's two other large investor-owned utilities – Pacific Gas and Electric Company and San Diego Gas & Electric Company, both of which procured

39% and 44% of their electric power, respectively, from eligible renewables (CPUC 2019a). SCE also maintains a higher percentage of renewables relative to statewide procurement. The EIA determined that in 2018, approximately 38.6% (31,353 megawatts) of electric power was generated by a renewable source (i.e., geothermal, hydroelectric, biomass, solar thermal and photovoltaic, and wind) (EIA 2018). The California Renewables Portfolio Standard (RPS) Program establishes a goal for California to increase the amount of electricity generated from renewable energy resources to 20% by 2010 and to 33% by 2020. Recent legislation revised the current RPS target for California to obtain 50% of total retail electricity sales from renewable sources by 2030, with interim targets of 40% by 2024, and 45% by 2027 (CPUC 2016).

Within Los Angeles County, annual residential electricity use is approximately 20 billion kWh per year and annual non-residential electricity use is approximately 47 billion kWh per year, as reported by CEC for 2019 (CEC 2021b).

Natural Gas

Natural gas is a combustible mixture of hydrocarbon compounds (primarily methane) used as a fuel source. The majority of the natural gas consumed in California is obtained from sources located outside the state, and delivered through high-pressure transmission pipelines. Natural gas provides almost one-third of the state's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel. Natural gas is measured in terms of cubic feet.

According to the EIA, California used approximately 2,154,030 million cubic feet of natural gas in 2019 (EIA 2021b). Natural gas is used for cooking, space heating, generating electricity, and as an alternative transportation fuel. The majority of California's natural gas customers are residential and small commercial customers (core customers). These customers accounted for approximately 34% of the natural gas delivered by California utilities (CPUC 2019b). Large consumers, such as electric generators and industrial customers (noncore customers), accounted for approximately 64% of the natural gas delivered by California utilities in 2019 (EIA 2021b).

The Southern California Gas Company (SoCalGas) provides Los Angeles County with natural gas service. SoCalGas' service territory encompasses approximately 20,000 square miles and more than 500 communities. In the California Energy Demand mid-energy demand scenario, natural gas demand is projected to have an annual growth rate of 0.03% in SoCalGas' service territory. In 2024, the total natural gas capacity available is estimated to be 3.8 billion cubic feet per day[1] (California Gas and Electric Utilities 2018). This amount is approximately equivalent to 2.86 billion thousand British thermal units (kBTU) per day or 28.6 million therms per day. Within the County, annual natural gas consumption is approximately 3 billion therms (CEC 2019c).

Petroleum

Petroleum-based fuels currently account for 90% of California's transportation energy sources. 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 gases (GHGs) from the transportation sector, and reduce vehicle miles traveled (VMT). Accordingly, gasoline consumption in California has declined. The CEC predicts that the demand for gasoline will continue to decline and there will be an increase in the use of alternative fuels (CEC 2016). According to the EIA, California used approximately 662 million barrels of petroleum in 2019, with the majority (565 million barrels) used for the transportation sector (EIA 2021c). This total annual consumption equates to a daily use of approximately 1.8 million barrels of petroleum. There are 42 U.S. gallons

[1] One cubic foot of natural gas has approximately 1,020 BTUs of natural gas or 1.02 kBTUs of natural gas.

in a barrel, so California consumes approximately 75.6 million gallons of petroleum per day, adding up to an annual consumption of 27.6 billion gallons of petroleum. In California, petroleum fuels refined from crude oil are the dominant source of energy for transportation sources. Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. California has implemented policies to improve vehicle efficiency and to support use of alternative transportation, which are described in Section 4.4.2, Relevant Plans, Policies, and Ordinances.

4.4.2 Relevant Plans, Policies, and Ordinances

Federal

Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2010, fuel economy standards were set at 27.5 miles per gallon for new passenger cars and 23.5 miles per gallon for new light trucks. Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Intermodal Surface Transportation Efficiency Act of 1991

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 promoted the development of intermodal transportation systems to maximize mobility and address national and local interests in air quality and energy. ISTEA contained factors for metropolitan planning organizations to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, metropolitan planning organizations adopted policies defining the social, economic, energy, and environmental values guiding transportation decisions.

Transportation Equity Act for the 21st Century

The Transportation Equity Act for the 21st Century was signed into law in 1998 and builds on the initiatives established in the ISTEA legislation (previously discussed). The act authorizes highway, highway safety, transit, and other efficient surface transportation programs. The act continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of transportation decisions. The act also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of intelligent transportation systems to help improve operations and management of transportation systems and vehicle safety.

Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased Corporate Average Fuel Economy standards for motor vehicles, the act includes other provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and lighting efficiency standards (Sections 301–325)
- Building energy efficiency (Sections 411–441)

This federal legislation requires ever-increasing levels of renewable fuels (the RFS) to replace petroleum (EPA 2017). The U.S. Environmental Protection Agency (EPA) is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that lay the foundation for achieving significant reductions in GHG emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program is referred to as RFS2 and includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel and set separate volume requirements for each one.
- EISA required the EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green" jobs.

U.S. Environmental Protection Agency and National Highway Traffic Safety Administration Joint Rule for Vehicle Standards

On April 1, 2010, the EPA and the National Highway Traffic Safety Administration (NHTSA) announced a joint final rule to establish a national program consisting of new standards for light-duty vehicles model years 2012 through 2016. The joint rule is intended to reduce GHG emissions and improve fuel economy. The EPA promulgated the first-ever national GHG emissions standards under the Clean Air Act, and NHTSA promulgated Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. This final rule follows the EPA and Department of Transportation's joint proposal on September 15, 2009, and is the result of the President Obama's May 2009 announcement of a national program to reduce GHGs and improve fuel economy. The final rule became effective on July 6, 2010 (EPA and NHTSA 2010).

The EPA GHG standards require new passenger cars, light-duty trucks, and medium-duty passenger vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide (CO_2) per mile in model year 2016, equivalent to 35.5 miles per gallon (MPG) if the automotive industry were to meet this CO_2 level through fuel economy improvements alone. The CAFE standards for passenger cars and light trucks will be phased in between 2012 and 2016, with the final standards equivalent to 37.8 MPG for passenger cars and 28.8 MPG for light trucks, resulting in an estimated combined average of 34.1 MPG. Together, these standards will cut GHG emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program. The rules will simultaneously reduce GHG emissions, improve energy security, increase fuel savings, and provide clarity and predictability for manufacturers (EPA and NHTSA 2010).

In August 2012, the EPA and NHTSA approved a second round of GHG and CAFE standards for model years 2017 and beyond (EPA and NHTSA 2012). These standards will reduce motor vehicle GHG emissions to 163 grams of CO_2 per mile, which is equivalent to 54.5 MPG if this level were achieved solely through improvements in fuel efficiency, for cars and light-duty trucks by model year 2025. A portion of these improvements, however, will likely be made through improvements in air-conditioning leakage and through use of alternative refrigerants, which would not contribute to fuel economy. The first phase of the CAFE standards (for model years 2017 to 2021) are projected to require, on an average industry fleet-wide basis, a range from 40.3 to 41.0 MPG in model year 2021. The second phase of the CAFE program (for model years 2022 to 2025) is projected to require, on an average industry fleet-wide basis, a range from 48.7 to 49.7 MPG in model year 2025. The second phase of standards has not been finalized due to the statutory requirement that NHTSA set average fuel economy standards not more than five model years at a time. The regulations also include targeted incentives to encourage early adoption and introduction into the marketplace of advanced technologies to dramatically improve vehicle performance, including the following:

- Incentives for electric vehicles, plug-in hybrid electric vehicles, and fuel cell vehicles
- Incentives for hybrid technologies for large pickups and for other technologies that achieve high fuel economy levels on large pickups
- Incentives for natural gas vehicles
- Credits for technologies with potential to achieve real-world GHG reductions and fuel economy improvements that are not captured by the standards' test procedures

In August 2018, EPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards now in place, the 2018 proposal would increase U.S. fuel consumption by about half a million barrels per day (2%–3% of total daily consumption, according to the EIA) and would impact the global climate by 3/1000th of 1°C by 2100 (EPA and NHTSA 2018). California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. Thus, the timing and consequences of the 2018 federal proposal are speculative at this time.

State

Warren-Alquist Act

The California legislature passed the Warren-Alquist Act in 1974. The Warren-Alquist Act created the CEC. The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation's first energy conservation standards for buildings constructed and appliances sold in California.
- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

State of California Energy Action Plan

The CEC and CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure that adequate, reliable, and reasonably priced electrical power and natural gas supplies are provided, and identified policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers. In 2005, a second Energy Action Plan was adopted by the CEC and CPUC to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, the CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan. This determination was based, in part, on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new energy action plan, the CEC and CPUC prepared an update that examines the state's ongoing actions in the context of global climate change.

Senate Bills 1078 (2002), 107 (2006), X1-2 (2011), 350 (2015) and 100 (2018)

Senate Bill (SB) 1078 established the California RPS Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill relatedly required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

SB 107 (2006) accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) requires all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 sets a three-stage compliance period: by December 31, 2013, 20% had to come from renewables; by December 31, 2016, 25% had to come from renewables; and by December 31, 2020, 33% will come from renewables.

SB 350 (2015) expanded the RPS because it requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

SB 100 (2018) accelerated and expanded the standards set forth in SB 350 by establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030 be secured from qualifying renewable energy sources. SB 100 also states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California by 2045. This bill requires that the achievement of 100% zero-carbon electricity resources does not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

Consequently, utility energy generation from non-renewable resources is expected to be reduced based on implementation of the RPS requirements described above. The proposed Project's reliance on non-renewable energy sources would be reduced accordingly.

Assembly Bill 1007 (2005)

AB 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Assembly Bill 32 (2006) and Senate Bill 32 (2016)

In 2006, the state legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted SB 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, CARB prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies, using renewable resources, and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources. Additional information on AB 32 and SB 32 is provided in Section 4.6, Greenhouse Gas Emissions, of this EIR.

California Building Energy Standards

Title 24 of the California Code of Regulations, Part 6.

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the CEC (and revised if necessary) (California Public Resources Code, Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (California Public Resources Code, Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402[d]) and cost effectiveness (California Public Resources Code, Sections 25402[b][2] and [b][3]). As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The current Title 24 standards are the 2019 Title 24 Building Energy Efficiency Standards, which became effective January 1, 2020. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards will use approximately 53% less energy than those under the 2016 standards (CEC 2018a). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018a).

As set forth in Section 110.10, Mandatory Requirements for Solar Ready Buildings, states that low-rise and high-rise multi-family buildings, hotels, and nonresidential buildings must include a "solar zone", which is a section of the roof designated and reserved for the future installation of a solar electric or solar thermal system. The solar zone for these uses must be located on the roof or overhang of the building (or on the roof or overhang of another structure located within 250 feet of the building) or on covered parking installed with the building, and must have a total area no less than 15% of the total roof area of the building excluding any skylight area. The solar zone requirement is applicable to the entire building, including mixed-occupancy. See the 2019 standards for additional requirements regarding the azimuth, shading, interconnection pathways, and electrical service panels of solar zones.

Title 24 of the California Code of Regulations, Part 11.

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2016 standards became effective January 1, 2017.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements; stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 80% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs.

The California Building Standards Commission approved amendments to the voluntary measures of the CALGreen standards in December 2018. The 2019 CALGreen standards became effective January 1, 2020. As with the 2019 Title 24 standards, the 2019 CALGreen standards focus on building energy efficiency. The 2019 CALGreen standards are the current applicable standards. For nonresidential projects, some of the key mandatory CALGreen 2019 standards involve requirements related to bicycle parking, designated parking for clean air vehicles, electric vehicle charging stations, shade trees, water conserving plumbing fixtures and fittings, outdoor potable water use in landscaped areas, recycled water supply systems, construction waste management, excavated soil and land clearing debris, and commissioning (24 CCR Part 11). For high-rise residential buildings (i.e., more than 4 floors), the non-residential measures generally apply.

Title 20 of the California Code of Regulations.

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwashers; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of

appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Senate Bill 1.

SB 1 (Murray) (August 2006) established a $3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the California Public Resources Code, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the state to establish a self-sufficient solar industry. The goals included establishing solar energy systems as a viable mainstream option for both homes and businesses within 10 years of adoption, and placing solar energy systems on 50% of new homes within 13 years of adoption. SB 1, also termed "Go Solar California," was previously titled "Million Solar Roofs."

Assembly Bill 1470 (Solar Water Heating).

This bill established the Solar Water Heating and Efficiency Act of 2007. The bill makes findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand. The bill defines several terms for purposes of the act. The bill requires the commission to evaluate the data available from a specified pilot program, and, if it makes a specified determination, to design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the state by 2017.

Integrated Energy Policy Report

The CEC is responsible for preparing integrated energy policy reports that identify emerging trends related to energy supply, demand, and conservation; public health and safety; and maintenance of a healthy economy. The CEC's 2019 Integrated Energy Policy Report discusses the state's policy goals of decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast (CEC 2019d). SB 100 calls for California's electricity system to become 100% zero-carbon by 2045. CEC, CPUC, and CARB are working together to identify pathways to deeply decarbonize the state's electricity system in response to SB 100. The aim is to leverage California's clean electricity system to decarbonize, or remove carbon from, other portions of the state's energy system. Specifically, for the decarbonizing of building energy, the goal would be achieved by designing future commercial and residential buildings to have their energy sourced almost entirely from electricity in place of natural gas. Regarding the increase in renewable energy flexibility, the goal would be achieved through increases in energy storage capacity within the state, increases in energy efficiency, and adjusting energy use to the time of day when the most amount of renewable energy is being generated. Over time these policies and trends would serve to beneficially reduce the proposed Project's GHG emissions profile and energy consumption as they are implemented.

State Vehicle Standards

In response to the transportation sector accounting for more than half of California's CO_2 emissions, AB 1493 was enacted in 2002. AB 1493 required CARB to set GHG emissions standards for passenger vehicles, light-duty trucks,

and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emissions standards for motor vehicles manufactured in 2009 and all subsequent model years. The 2009–2012 standards resulted in a reduction in approximately 22% of GHG emissions compared to emissions from the 2002 fleet, and the 2013–2016 standards resulted in a reduction of approximately 30%.

In 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global-warming gases with requirements for greater numbers of zero-emissions vehicles into a single package of standards called Advanced Clean Cars. By 2025, when the rules would be fully implemented, new automobiles would emit 34% fewer global-warming gases and 75% fewer smog-forming emissions (CARB 2011).

Although the focus of the state's vehicle standards is on the reduction of air pollutants and GHG emissions, one co-benefit of implementation of these standards is a reduced demand for petroleum-based fuels.

Regional and Local

Southern California Association of Governments

SB 375 requires Metropolitan Planning Organizations to prepare a Sustainable Communities Strategy (SCS) in their Regional Transportation Plan (RTP). The Southern California Association of Governments (SCAG) Regional Council adopted the 2012 RTP/SCS in April 2012 (SCAG 2012), and the 2016–2040 RTP/SCS (2016 RTP/SCS) was adopted in April 2016 (SCAG 2016). Both the 2012 and 2016 RTP/SCSs establish a development pattern for the region that, when integrated with the transportation network and other policies and measures, would reduce GHG emissions from transportation (excluding goods movement). Specifically, the 2012 RTP/SCS links the goals of sustaining mobility with the goals of fostering economic development; enhancing the environment; reducing energy consumption; promoting transportation-friendly development patterns; and encouraging all residents affected by socioeconomic, geographic, and commercial limitations to be provided with fair access. The 2012 and 2016 RTP/SCSs do not require that local general plans, specific plans, or zoning be consistent with it but provide incentives for consistency for governments and developers. Because the current South Coast Air Quality Management District's Air Quality Management Plan is based on the SCAG 2016 RTP/SCS demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by SCAG for their 2016–2040 RTP/SCS, the SCAG 2016 RTP/SCS is discussed in Section 4.2.2, Impacts Analysis. See Southern California Association of Governments in Section 4.4.2 for an additional discussion on SCAG.

On May 7, 2020, SCAG's Regional Council adopted the Connect SoCal (2020–2045 RTP/SCS). The Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. Connect SoCal charts a path toward a more mobile, sustainable and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

City of Arcadia General Plan

The City of Arcadia General Plan (City of Arcadia 2010) includes various policies related to energy conservation (both directly and indirectly). Applicable policies include the following:

Policy RS-5.1: Support State agencies' efforts to adopt regulations that can increase the thermal integrity of buildings, increase the efficiency of combustion equipment, and reduce building thermal loads through controls or automation.

Policy RS-5.2: Support the development and use of alternative energy technologies for regional and local use. Remove barriers to use of individual energy systems that are consistent with City aesthetic and design objectives.

Policy RS-5.3: Require that all new development meets or exceeds the state and local energy conservation requirements.

Policy RS-5.4: Investigate the options for adopting local "green" building standards that address energy use in particular. Consider having City facilities serve as a model for energy efficiency by incorporating state-of-the-art energy features in new public buildings and significant remodeling of existing buildings.

Policy RS-5.5: Support State legislative initiatives to revise utility rates in a manner that provides incentives for energy conservation and provides funding for research and development of alternative energy sources.

Policy RS-5.6: Reduce the amount of energy consumed by City operations, and assist residents and businesses in reducing their energy consumption by:

- emphasizing fuel efficiency in the acquisition and use of City-owned vehicles and equipment;
- periodically reviewing energy consumption in City buildings and implement programs to reduce energy use; and
- increasing public awareness of energy conservation techniques through the public dissemination of conservation information.

Policy RS-5.7: Promote the installation of heat recovery and co-generation facilities, where feasible, in new industrial and large commercial developments.

Policy RS-5.8: Promote innovative building, site design, and orientation techniques which minimize energy use.

Policy RS-5.9: Facilitate the provision of energy-efficient modes of transportation and fixed facilities which establish transit, bicycle, and pedestrian modes as viable alternatives.

Policy RS-5.10: Support efforts at the State and federal levels relative to the funding of research and the development of renewable/reusable energy sources.

Policy RS-5.11: Support efforts of the City's electricity provider that increase energy conservation in all households and businesses.

Policy RS-5.12: Adopt green building guidelines and/or incentives, which may include assessing green building techniques as a formal stage of City design review and developing a green building ordinance or program that addresses both new and existing buildings.

Policy RS-5.13: Promote the application of active solar energy systems in residential development by facilitating, where possible, the efforts of federal and state entities in the allocation of cost incentive programs.

Policy RS-5.14: Explore the possibility of identifying City facilities that can accommodate solar installations.

Policy RS-5.15: Educate the public on sustainable building practices and the environmental and economic benefits they offer.

Policy RS-5.16: Set an example in the design and operation of new civic buildings by implementing LEED certifiable or similar building standards. Policy RS-5.17: Investigate providing incentives for LEED certifiable or equivalent for new and/or retrofitted private commercial and industrial buildings.

4.4.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to energy are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to energy would occur if the project would:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Approach and Methodology

CalEEMod Version 2020.4.0 (CAPCOA 2021) was used to estimate the potential proposed Project-energy consumption during construction and operation. Construction of the proposed Project would result in petroleum consumption primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details specific to construction and operation are discussed in Section 4.2, Air Quality, specifically in Approach and Methodology (Construction Emissions and Operational Emissions), are also applicable for the estimation of construction-related energy consumption. Potential energy consumption from proposed Project operations were estimated for area sources (landscape maintenance), energy sources (natural gas and electricity), mobile sources, solid waste, and water supply and wastewater treatment. Construction of the proposed Project is anticipated to commence in June 2023 and reach completion in August 2025, lasting approximately 26 months. Additional details from each category are discussed in the Air Quality section, in Section 4.2.3.

4.4.4 Impacts Analysis

Threshold 4.4a. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Implementation of the proposed Project would increase the demand for electricity and natural gas in the City, as well as gasoline consumption during construction and operation.

Electricity

Construction

Temporary electric power for lighting, heating/cooling, and electronic equipment, such as computers inside temporary construction trailers, as well as lighting for construction activities, would be required during short-term construction activities. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. All sources of electricity would be from existing power lines that serve the site and no new infrastructure would be required. There is nothing unusual about construction of the proposed Project that would result in a wasteful, inefficient, and unnecessary use of electrical energy. The electricity used for construction activities would be temporary and would have a negligible contribution to the proposed Project's overall energy consumption. Impacts to electricity during construction would be less than significant, and no mitigation is required.

Operations

The operational phase would require electricity for multiple purposes including building heating and cooling, lighting, appliances, electronics, and water and wastewater conveyance. As discussed in Section 4.2 under Approach and Methodology (Operational Emissions), CalEEMod default values for electricity consumption for the proposed Project's land uses were utilized which account for compliance with the 2019 Title 24 standards. The project includes 100-kW onsite solar system included in the CalEEMod analysis. Table 4.4-1 presents the anticipated electricity demand for the proposed Project.

Table 4.4-1. Operational Electricity Demand – Proposed Project

Land Use	kWh/Year
Building and Lighting Electricity Demand	
Residential and Amenities	1,214,421
Live-Work	308,715
Cafe	9,430
Parking Garage	1,175,950
Total	**2,708.516**
Other Electricity Demand	
All Land Uses – Water/Wastewater Total	**516,987**
Total	**3,225,503**

Source: Appendix C-1.
Note:
kWh = kilowatt-hour.

As shown in Table 4.4-1, buildout of the proposed Project is estimated to have a total electrical demand of 3,225,503kWh per year (or 3.32 million kWh per year) for proposed Project usage without netting out the existing land use electrical use. This estimate, therefore, is a conservative estimate of additional operational electricity demand because it does not reduce electricity estimates for buildings that will be demolished. As previously discussed, the County's annual electricity use was approximately 20 billion kWh in 2019. Therefore, the proposed Project's electrical consumption would be a small percentage (0.016%) of the County's current annual use. SCE forecasts that its total energy consumption in 2026 (the Project buildout year) will be approximately 120,000 gigawatt hours of electricity (CEC 2018b). Based on the Project's estimated electrical consumption of 3,225,503 kWh/year, the Project's increase in electricity would account for approximately 0.0027% of SCE's total projected consumption during 2026 for the Project's buildout year.[2]

In addition, the proposed Project would be built in accordance with the current Building Energy Efficiency Standards (Title 24) at the time of construction, which include robust requirements for energy efficiency. Also, the provisions of the CALGreen code apply to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure. In mixed occupancy buildings, such as the proposed Project, each portion of a building must comply with the specific green building measures applicable to each specific occupancy. The project would also include a 100-kW onsite solar system. Therefore, due to the inherent increase in efficiency of building code regulations, the proposed Project would not result in a wasteful, inefficient, or unnecessary use of energy. Impacts related to operational electricity use would be less than significant.

Natural Gas

Construction

Natural gas is not anticipated to be required during construction of the proposed Project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the "petroleum" subsection. Any minor amounts of natural gas that may be consumed as a result of proposed Project construction would be substantially less than that required for proposed Project's operation and would have a negligible contribution to the proposed Project's overall energy consumption.

Operations

Natural gas consumption during proposed Project operation would be required for various purposes, including building heating and cooling. As discussed in Section 4.2 under Approach and Methodology (Operational Emissions), default natural gas generation rates in CalEEMod for the proposed Project were utilized which account for compliance with the 2019 Title 24 standards. Table 4.4-2 presents the natural gas demand for the proposed Project.

Table 4.4-2. Operational Natural Gas Demand

Land Use	kBTU/Year
Residential with Amenities	4,168,417
Live-Work	273,617
Cafe	172,748
Total	**4,614,782**

Source: Appendix C-1.
Note: kBTU = thousand British thermal units.

[2] Project's consumption (3.226 gigawatt hours) divided by SCE's projected consumption (120,000 gigawatt hours).

As shown in Table 4.4-2, the proposed Project would consume approximately 4,614,782 kBTU per year without netting out the existing land use natural gas consumption. Therefore, the consumption estimate is conservative because it does not account for buildings that will be demolished. As previously discussed, the County annual natural gas consumption is estimated to be 3 billion therms per year. Therefore, the proposed Project's estimated increase in natural gas consumption of 4,614,782 kBTU (or 46,148 therms) per year would be a small percentage (0.0015%) of SoCalGas' annual supply to County customers. In addition, the proposed Project is subject to statewide mandatory energy requirements as outlined in Title 24, Part 6, of the California Code of Regulations. Title 24, Part 11, contains energy measures that are applicable to the proposed Project. The proposed Project would be required to meet Title 24 requirements applicable at that time, as required by state regulations through the plan review process. Therefore, due to the inherent increase in efficiency of building code regulations, the proposed Project would not result in a wasteful, inefficient, or unnecessary use of natural gas. Impacts related to operational natural gas use would be less than significant.

Petroleum

Construction

Petroleum would be consumed throughout construction of the proposed Project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and VMT associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment associated with construction activities, vendor trucks, and haul trucks would rely on diesel fuel. Construction workers would travel to and from the Project site throughout the duration of construction. It was assumed that construction workers would travel in gasoline-powered vehicles.

Heavy-duty construction equipment of various types would be used during construction. CalEEMod was used to estimate construction equipment usage. Based on that analysis, diesel-fueled construction equipment would operate for an estimated 32,759 hours, as summarized in Table 4.4-3.

Table 4.4-3. Hours of Operation for Construction Equipment

Phase	Hours of Equipment Use
Demolition	800
Site Preparation	69
Grading	988
Building Construction	30,200
Paving	576
Application of Architectural Coatings	600
Total	**34,393**

Source: Appendix C-1.

Fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2020). The estimated diesel fuel use from construction equipment is shown in Table 4.4-4.

Table 4.4-4. Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO_2e (MT)	kg CO_2/Gallon	Gallons
Demolition	5	25.46	10.21	2,494.05
Site Preparation	3	3.26	10.21	319.08
Grading	5	29.67	10.21	2,906.07
Building Construction	8	542.58	10.21	53,141.58
Paving	6	9.38	10.21	918.96
Application of Architectural Coatings	1	12.78	10.21	1,252.08
			Total	**61,031.82**

Source: Appendix C-1.
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Fuel consumption from worker and vendor truck trips was estimated by converting the total CO2 emissions from the construction phase to gallons using the conversion factors for CO2 to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline fueled, whereas vendor and haul trucks are assumed to be diesel fueled. The estimated fuel use for worker vehicles, vendor, and haul trucks are presented in Table 4.4-5, Table 4.4-6, and Table 4.4-7, respectively.

Table 4.4-5. Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO_2e (MT)	kg CO_2/Gallon	Gallons
Demolition	280	1.48	8.78	168.30
Site Preparation	24	0.11	8.78	12.03
Grading	150	1.14	8.78	130.24
Building Construction	178,524	773.46	8.78	88,093.83
Paving	160	0.82	8.78	93.42
Application of Architectural Coatings	700	28.88	8.78	3,289.23
			Total	**91,787.04**

Source: Appendix C-1.
CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Table 4.4-6. Construction Vendor Diesel Demand

Phase	Trips	Vehicle CO_2e(MT)	kg CO_2/Gallon	Gallons
Demolition	0	0	10.21	0
Site Preparation	0	0	10.21	0
Grading	0	0	10.21	0
Building Construction	43,092	408.35	10.21	39,995.50
Paving	0	0	10.21	0
Application of Architectural Coatings	0	0	10.21	0
			Total	**39,995.50**

Source: Appendix C-1.
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Table 4.4-7. Construction Haul Diesel Demand

Phase	Trips	Vehicle CO_2e (MT)	kg CO_2/Gallon	Gallons
Demolition	486	14.86	10.21	1,455.80
Site Preparation	66	2.20	10.21	197.70
Grading	6,500	217.91	10.21	21,342.70
Building Construction	2,100	63.32	10.21	6,202.11
Paving	0	0.00	10.21	0.00
Application of Architectural Coatings	0	0.00	10.21	0.00
			Total	**29,198.31**

Source: Appendix C-1.
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

As shown in Tables 4.4-5 through 4.4-7, the proposed Project is estimated to consume approximately 187,433 gallons of petroleum during the construction phase. For disclosure, by comparison, approximately 60 billion gallons of petroleum would be consumed in California over the course of the proposed Project's construction phase (26 months), based on the California daily petroleum consumption estimate of approximately 75.6 million gallons per day (EIA 2019c). Thus, the total expected petroleum use from the proposed Project's construction represents approximately 0.0003% of California's consumption of petroleum over the construction duration. In accordance CARB's Airborne Toxics Control Measure, the proposed Project would be required to restrict heavy-duty diesel vehicle idling time to 5 minutes, which would reduce petroleum usage. Overall, because petroleum use during construction would be temporary, and would not be wasteful or inefficient, impacts would be less than significant.

Operations

The fuel consumption resulting from the proposed Project's operational phase would be attributable to various vehicles associated with each land use. Petroleum fuel consumption associated with motor vehicles traveling within the City during operation is a function of VMT. Trip generation rates for the proposed Project were based on the Traffic Impact Analysis (Appendix K). The estimated fuel use from the proposed Project land uses operational mobile sources is shown in Table 4.4-8.

Table 4.4-8. Petroleum Consumption – Operation

Fuel	Vehicle MT CO_2	kg CO_2/Gallon[a]	Gallons
Gasoline	1,762.52	8.78	200,742.90
Diesel	95.73	10.21	9,375.88
		Total	**210,118.78**

Source: Appendix C-1.
MT = metric ton; CO_2 = carbon dioxide; kg = kilogram.

As depicted in Table 4.4-8, mobile sources from buildout of the proposed Project would result in approximately 210,119 gallons of petroleum fuel usage per year. For disclosure, by comparison, California as a whole consumes approximately 27.6 billion gallons of petroleum per year (EIA 2021c).

Over the lifetime of the proposed Project, the fuel efficiency of vehicles is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the Project site during operation would decrease over time. As detailed in Section 4.4.2, there are numerous regulations in place that require and encourage

increased fuel efficiency. For example, CARB has adopted an approach to passenger vehicles that combines the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards. The approach also includes efforts to support and accelerate the number of plug-in hybrids and zero-emissions vehicles in California (CARB 2011). As such, operation of the proposed Project is expected to use decreasing amounts of petroleum over time due to advances in vehicle fuel economy standards.

In summary, the proposed Project would increase petroleum use during operation, but due to efficiency increases the amount of petroleum consumed would diminish over time. Petroleum consumption associated with the proposed Project would not be considered inefficient or wasteful and would result in a less than significant impact.

In summary, the consumption of energy resources (including electricity, natural gas, and petroleum) during the Project construction and operation would not be inefficient or wasteful and would result in a less than significant impact.

Threshold 4.4b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The proposed Project would comply with all applicable regulatory requirements including Title 24 of the California Code of Regulations contains energy efficiency standards for residential and nonresidential buildings based on a state mandate to reduce California's energy demand. Specifically, Title 24 addresses a number of energy efficiency measures that impact energy used for lighting, water heating, heating, and air conditioning, including the energy impact of the building envelope such as windows, doors, wall/floor/ceiling assemblies, and roofs. Part 6 of Title 24 specifically establishes energy efficiency standards for residential and nonresidential buildings constructed in the State of California in order to reduce energy demand and consumption. Part 11 of Title 24 also includes the CALGreen standards, which established mandatory minimum environmental performance standards for new construction projects. The proposed Project would comply with Title 24, Part 6 and Part 11, per state regulations.

Additionally, the proposed Project would receive electricity from SCE, which has the mandate to comply with SB 100. This policy requires that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California by 2045, and that the zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling. Thus, the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; therefore, impacts during construction and operation of the proposed Project would be less than significant.

4.4.5 Cumulative Impacts Analysis

The proposed Project and additional forecasted growth in SCE's service area and SoCalGas' service area would cumulatively increase the demand for electricity and natural gas supplies and infrastructure capacity. Although the proposed Project would result in the use of renewable and non-renewable resources during construction and operation, which could limit future availability of non-renewable energy sources, the use of such resources would be on a relatively small scale, would be reduced by measures making the Project more energy-efficient, and would be consistent with growth expectations for the service areas. Furthermore, as with the Project, during construction and operation, other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CALGreen and state energy standards under Title 24, and incorporate mitigation measures, as necessary.

Furthermore, as described above, the proposed Project would be consistent with the energy efficiency policies emphasized by the 2020 RTP/SCS. Since the Project is consistent with the Connect SoCal (2020 RTP/SCS), its contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of transportation fuel would not be cumulatively considerable and, thus, would be less than significant.

As such, the Project's contribution to cumulative impacts related to wasteful, inefficient and unnecessary use of electricity would not be cumulatively considerable and, thus, would be less than significant.

4.4.6 Mitigation Measures

Proposed Project impacts would be less than significant, and no mitigation is required.

4.4.7 Level of Significance After Mitigation

Impacts from energy consumption as a result of implementing the proposed Project would be less than significant. Therefore, no mitigation is required.

4.4.8 References

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4.5 Geology and Soils

This section describes the existing geological conditions of the Alexan Mixed-Use Development Project (Project or proposed Project) site and vicinity, identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on survey and Investigation of paleontological resources within the Project site and surrounding area, as well as the following:

Appendix D-1 Geotechnical Investigation. Alexan Arcadia Proposed Multi-Family Residential Development, 150 North Santa Anita Avenue, Arcadia, California.

Appendix D-2 **CONFIDENTIAL** Vertebrate Paleontology Records Check for paleontological resources for the proposed Indigo Hotel Project, Dudek Project # 11663, in the City of Arcadia, Los Angeles County

Other sources consulted are listed in Section 4.5.8, References, and include the California Geological Survey's (CGS) Earthquake Zones of Required Investigation (CGS 2020) and the Arcadia General Plan Safety Element (City Arcadia 2010).

Comments received in response to the Notice of Preparation (NOP) are summarized in Table 1, Notice of Preparation and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft Environmental Impact Report (EIR). A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR.

4.5.1 Existing Conditions

This section describes the existing conditions in the Project area and identifies the known geologic conditions and soils present at the proposed Project site.

Regional and Local Setting

The City of Arcadia (City) is located in the north-central San Gabriel Valley, adjacent to the southern flank of the San Gabriel Mountains. The San Gabriel Valley is an alluvium-filled valley bounded by the Sierra Madre Fault Zone and San Gabriel Mountains on the north, by the Puente Hillson the south, by the Covina and Indian Hills on the east, and by the Raymond Basin on the west. The region is known to have a history of seismic activity with known active faults in the vicinity that include the Whittier and Raymond faults.[1] Certain areas of the City with high groundwater tables underlain by sand and silty sand with low density have a high potential for liquefaction. These areas can be found along Raymond Fault, where it bisects the City to the north, as well as within the far southeast corner of City adjacent to the neighboring Cities of El Monte and Irwindale.

Topography

The topography at the Project site and vicinity slopes gently downward towards the south. Surface water drainage at the site appears to be by sheet flow along the existing ground contours to the city streets. The Project site is not

[1] A fault is considered active if it has shown evidence of displacement within the Holocene time period which is anytime within the last 11,700 years.

within a hillside area. The City of Arcadia General Plan (2010) and County of Los Angeles Safety Element (2009) indicate that the site is not located in a hillside area or an area identified as having a potential for slope stability hazards.

Seismicity and Faulting

The Project site is located in a seismically active region with numerous active faults that are capable of producing seismic events in the region. Figure 4.5-1, Regional Faults, identifies the faults considered to most influence the seismic exposure of the region, including the faults relatively close to the Project site: the Raymond Fault and the Sierra Madre Fault (CGS 2010). Quaternary faults shown on Figure 4.5-1 are faults that are recognized at the surface and have moved in the past 1.6 million years. Prominent faults in the region include Whittier, Hollywood, Cucamonga, Newport-Inglewood, Santa Monica, and San Andreas (CGS 2010). The California Geological Survey (CGS 2018) classifies faults as follows:

- Holocene-active faults: faults that have moved during the past approximately 11,700 years (i.e., Holocene time). These faults exhibit signs of geologically recent movement, are most likely to experience movement in the near future, and are capable of surface rupture, and are considered "active faults."
- Pre-Holocene faults: faults that have not moved in the past 11,700 years but have moved in the past 2 million years (i.e., Quaternary time). These faults are considered "potentially active faults" and may be capable of surface rupture but are less likely than Holocene-active faults to cause surface rupture. These faults are also capable of generating future earthquakes.
- Age-undetermined faults: faults where the recency of fault movement has not been determined. These faults are considered "inactive faults."

Holocene-active faults have been responsible for large historical earthquakes in southern California, including the 1971 San Fernando earthquake (moment magnitude [Mw] 6.7), the 1992 Landers earthquake (Mw 7.3), the 1952 Kern County earthquake (Mw 7.5), the 2019 Searles Valley (Ridgecrest) earthquake (Mw 7.1), the 1933 Long Beach earthquake (Mw 6.4). Moment magnitude is a widely accepted method of describing the size of earthquakes by measuring the amount of energy released and amount of movement of bedrock. The southern California region also includes blind thrust faults, which are faults that do not rupture at the surface but are capable of generating substantial earthquakes. Examples of earthquakes caused by blind thrust faults include the 1987 Whittier Narrows earthquake (Mw 5.9) and the 1994 Northridge earthquake (Mw 6.7). Both of these earthquakes occurred on previously unidentified blind thrust faults (CGS 2018).

Fault zones, as opposed to a fault which is a fracture or fractures that define displacement of bedrock, are defined as a zone of related faults that commonly are braided and subparallel but may be branching and divergent. A fault zone can vary significantly in width, ranging from a few feet to several miles. For example, the San Andreas Fault Zone is a region of crushed and broken rock, varying in width from a few hundred feet to a mile wide. Many smaller faults branch from and join the San Andreas Fault Zone (USGS 2016). Not all segments of an active fault zone are included in Alquist-Priolo Fault Zones (see the discussion under the "Surface Rupture" subheading below for more information on Alquist-Priolo Fault Zones). Rather, Alquist-Priolo Fault Zones consist of fault segments that are well defined and present sufficient evidence to for geologists to conclude that the faults are active.

Regional active faults in the Project region are listed in Table 4.5-1, Summary of Nearby Faults, and are described below. Distances from the Project site to individual faults represent the distance to the nearest fault segment within the respective fault zones.

Table 4.5.1. Summary of Nearby Faults

Regional Faulting	Approximate Distance to Project Site (miles)	Probable Maximum Magnitude (Mw) of	Latest Surface Faulting
Raymond Fault	0.6	6.5	Holocene
Sierra Madre Fault	2.7	7.2	Holocene
Puente Hills Thrust Fault	2.9	7.1	Holocene
Whittier Fault	8.5	6.8	Holocene
Hollywood Fault	11.0	6.4	Holocene
Cucamonga Fault	16.0	6.9	Holocene
Newport-Inglewood Fault	20.7	7.1	Holocene
Santa Monica	22.1	6.6	Late Quaternary; Holocene
Northridge (Oak Ridge)	23.2	7.0	Holocene
San Andreas	23.8	7.8	Holocene
Palos Verdes	29.1	7.3	Holocene
Elsinore (Glen Ivy)	30.2	7.5	Late Quaternary; Holocene

Sources: CGS 2010; CIT 2013; City of Arcadia 2013

Raymond Fault

The Raymond fault passes through the northern portion of the City of Arcadia and is thought to connect to the Hollywood fault to the west. An Alquist-Priolo Earthquake Fault Zone has been established along the entire segment, which extends approximately 500 feet on each side of the fault. Figure 4.5-2, Geotechnical Hazards, depicts the location of the Raymond fault where it bisects the City. This fault zone is the nearest to the Project site at approximately 0.6-mile northwest of the site. The Raymond Fault is thought to be capable of a 6.5 magnitude earthquake (CGS 2021, CIT 2013, City of Arcadia 2013).

Sierra Madre Fault

The Sierra Madre Fault crosses the northern end of the City of Arcadia, following the base of the San Gabriel Mountains in a southeast-northwest direction. The Sierra Madre fault is thought to be capable of a 7.2 magnitude earthquake and is located 2.7 miles to the northeast of the Project site. One of the strands to the northeast is often referred to as the Duarte Fault, because of its location near that community. The Sierra Madre is not a continuous fault and is comprised of several different segments or strands. Although these segments are not considered independent faults, they could theoretically rupture independently of one another. It was also been suggested that a large event along the San Andreas Fault, could trigger all segments of the Sierra Madre to rupture simultaneously (Bayarsayhan 1996, City of Arcadia 2013, CIT 2013).

Puente Hill Thrust Fault

This fault is a blind thrust fault associated with the Lower Elysian Park Thrust Fault. The fault is located approximately 2.9 miles southeast of the Project site, and is Holocene-active. The Puente Hills Fault, which extends from northern Orange County under downtown Los Angeles and into Hollywood, was most recently responsible for the 2014 magnitude Mw 5.1 earthquake, centered in La Habra, and indirectly (in conjunction with the Lower Elysian Park Fault) the 1987 magnitude Mw 6.0 Whittier Narrows earthquake, centered in Whittier. This fault is capable of a maximum probable magnitude of Mw 6.5 to 7.1 (Shaw et al. 2002; USGS 2017).

San Andreas Fault

The Holocene-active San Andreas Fault is California's most prominent structural feature, trending in a generally northwest-southeast direction for almost the entire length of the state. The southern segment of the fault is approximately 280 miles long, extending from the Mexican border into the Transverse Ranges west of Tejon Pass. Along this segment, there is no single traceable fault line; rather, the fault is composed of several branches. The fault is located approximately 23.8 miles to the northeast of the Project site and is likely capable of producing an Mw 6.8 to 8.0 earthquake (CGS 2010; CIT 2013).

Surface Rupture

Surface rupture involves the displacement and cracking of the ground surface along a fault trace. Surface ruptures are visible instances of horizontal or vertical displacement, or a combination of the two, typically confined to a narrow zone along the fault. Surface rupture is more likely to occur in conjunction with active fault segments where earthquakes are large, or where the location of the movement (earthquake hypocenter) is shallow. The Alquist-Priolo Earthquake Fault Zoning Act of 1972 regulates development near Holocene-active faults to address the hazard of surface fault rupture and provide protection of any development that may consider these zones. This Act requires the State Geologist to establish regulatory zones (known as Alquist-Priolo Special Study Fault Zones) around the surface traces of Holocene-active faults and to issue appropriate maps (CGS 2018). The Project site is not located within an Alquist-Priolo Earthquake Fault Zone (CGS 2020).

Ground Shaking

Ground shaking is the movement of the earth's surface as a result of an earthquake. Ground motion produced by seismic waves emanates from slow or sudden slip on a fault. The degree of ground shaking felt at a given site depends on the distance from the earthquake source, the magnitude of the earthquake, the type of subsurface material on which the site is situated, and topography. Generally, damage from ground shaking is less severe on rock than on alluvium or fill, but other local phenomena may override this generalization. Ground shaking can produce significant ground horizontal and vertical movement that can result in severe damage to structures that are generally not equipped to withstand it. The Project site is located in the seismically active Southern California region and could be subject to moderate to strong ground shaking in the event of an earthquake on one of the many active Southern California faults.

The Project site lies in close proximity to several seismically active faults; therefore, during the life of the proposed structures, the site will probably experience moderate to occasionally high ground shaking from nearby fault zones. The soils underlying the Project site fall within the characteristics of Class D (i.e., "Stiff Soil" profile), as defined in Chapter 20 of the American Society of Civil Engineers (ASCE) 7-10. According to the Geotechnical Investigation, the site has potential ground acceleration of 0.939g (Appendix D-1). As a point of reference, areas near the 1994 Northridge earthquake experienced ground accelerations of up to approximately 1.0g.

Subsurface Soils

According to the Geotechnical Investigation, the Project site is underlain by artificial fill and Holocene age alluvium comprised of alluvial channel and outwash deposits consisting of varying amounts of silt, sand, and gravel. Artificial fill was encountered in the exploratory borings to a maximum depth of 4 feet below existing ground surface. The artificial fill generally consists of dark brown silty sand. The fill is characterized as slightly moist to moist and medium dense. The fill is likely the result of past grading or construction activities at the site. Deeper fill may exist between

excavations and in other portions of the site that were not directly explored. Holocene age alluvium was encountered beneath the artificial fill and consists primarily of light brown to brown and reddish brown interbedded silty sand, poorly graded sand, and well-graded sand with varying amounts of fine to coarse gravel. The alluvium is characterized as dry to moist and medium dense to very dense.

Groundwater

According to the Geotechnical Investigation, the historical high groundwater levels for the general area have been interpreted at 100-150 feet below the ground surface in the vicinity of the Project site. Groundwater was not encountered in the borings drilled for the Geotechnical Investigation which went to a maximum depth of 40½ feet beneath the existing ground surface. Groundwater levels can vary seasonally, however, and groundwater seepage conditions can develop where none previously existed, especially in impermeable fine-grained soils which are heavily irrigated or after seasonal rainfall.

Liquefaction/Lateral Spreading

Liquefaction is a process in which loose, saturated granular soils lose strength as a result of cyclical loading (i.e., seismic ground shaking). The strength loss is a result of a decrease in granular sand volume and positive increase in pore pressures. Generally, liquefaction can occur if all of the following conditions apply: liquefaction-susceptible soil, groundwater within a depth of 50 feet or less, and strong seismic ground shaking occurs. Soils that are most susceptible to liquefaction are poorly consolidated, fine to medium-grained, primarily sandy soil. In addition, lateral spreading, a hazard associated with liquefaction, is the finite, lateral movement of gently to steeply sloping, saturated soil deposits caused by earthquake-induced liquefaction.

As shown in Figure 4.5-2, Geotechnical Hazards, the Project site is not located in an area considered susceptible to liquefaction (CGS 2020). According to the 2010 Arcadia General Plan Safety Element, primary liquefaction areas within the Arcadia planning area are: southeast of Live Oak Avenue to the San Gabriel River, along Live Oak Avenue between Santa Anita and Tenth Avenue, along the wash areas of Santa Anita Canyon just north of the Raymond fault, and an area north of the Raymond fault. The liquefaction evaluation for the Project site was completed under the guidance of Special Publication 117A: Guidelines for Evaluating and Mitigating Seismic Hazards in California. Historical high groundwater is anticipated at a depth of greater than 50 feet below the site. Therefore, the potential for liquefaction to occur beneath the site is considered to be very low (Appendix D-1).

Slope Instability/Landslides

A landslide is the downhill movement of masses of earth material under the force of gravity. The factors contributing to landslide potential are steep slopes, unstable terrain, and proximity to earthquake faults. This process typically involves the surface soil and an upper portion of the underlying bedrock. Movement may be very rapid, or so slow that a change of position can be noted only over a period of weeks or years (creep). The size of a landslide can range from several square feet to several square miles. As shown in Figure 4.5-2, the Project site is not located with an earthquake-induced landslide zone (CGS 2021).

Subsidence

Subsidence is the permanent collapse of the pore space within a soil or rock and downward settling of the earth's surface relative to its surrounding area. Subsidence can result from the extraction of water or oil, liquefaction, the addition of water to the land surface—a condition called "hydrocompaction", or from the placement/construction of new loadings (e.g., new structures). The compaction of subsurface sediment caused by the withdrawal or addition of fluids can cause subsidence. Land subsidence can disrupt surface drainage; reduce aquifer storage; cause earth fissures; damage buildings and structures; and damage wells, roads, and utility infrastructure. Volumetric changes in earth quantities will occur when excavated onsite soil materials are replaced as properly compacted fill. The placement of new loadings can result in subsidence that occurs either in a relatively short time period or over longer time periods, but is typically addressed through site preparations such as compaction of site soils. According to the Geotechnical Investigation, the site is not located within an area of known ground subsidence. No large-scale extraction of groundwater, gas, oil, or geothermal energy is occurring or planned at the site or in the general site vicinity. There appears to be little or no potential for ground subsidence due to withdrawal of fluids or gases at the site.

Collapsible and Expansive Soils

The preliminary geotechnical investigation indicated that artificial fill soils in the upper 4 feet exhibit collapsible potential upon wetting. Materials anticipated to exhibit this condition consist of the artificial fill soils and any encountered soft alluvial soils. Soils below the collapsible soil zone are anticipated to exhibit low compressibility characteristics in their current state. Expansive soils are clay-based soils that increase in volume when wet and shrink when dry. Expansive soils can affect overlying structures and other surface improvements over time through these cyclical volumetric changes. The soils encountered at the site are primarily granular in nature and are considered to be "non-expansive" and/or have generally "low" expansion potential (Appendix D-1).

Paleontological Resources

Paleontological resources, or fossils, are the remains of once living plants and/or animals and their traces (e.g., burrows and tracks) preserved in earth's crust, and are generally considered to be greater than 5,000 radiocarbon years old (approximately 5,700 calendar years) or prior to recorded human history per the Society of Vertebrate Paleontology (SVP 2010) guidelines. With the exception of fossils found in low-grade metasedimentary rocks, significant paleontological resources are found in sedimentary rock units that are old enough to preserve the remains or traces of plants and animals. To determine paleontological sensitivity of the Project vicinity, a paleontological records search was requested from the Natural History Museum of Los Angeles County (LACM), and desktop geological and paleontological research were conducted (Appendix D-2). For this analysis, a paleontological records search for the Indigo Hotel project (125 W. Huntington Drive and 175 Colorado Place) was used since that project is approximately 0.3-mile away, is mapped as being underlain by the same geological unit as the Arcadia Mixed-Use Project, and is current enough to be used and relied upon for this analysis (dated May 10, 2019).

The Project area is located in the City of Arcadia, within the San Gabriel Valley of Los Angeles County, southwest of the San Bernardino Mountains (Dibblee and Ehrenspeck 1998). The Project area is underlain by Quaternary gravel and sand (map unit Qg; <11,700 years old), derived as alluvial fans and major stream channels (Dibblee and Ehrenspeck 1998). Quaternary older alluvial fan deposits (map unit Qof; ~2.58 million to 11,700 years old) are mapped nearby and are comprised of sand and gravel (Dibblee and Ehrenspeck 1998). The alluvial fan deposits in this area are derived from the San Gabriel Mountains to the north. Pleistocene (or "Ice Age"), older alluvial fan

deposits may be encountered at an unknown depth beneath surficial Holocene age deposits (Dibblee and Ehrenspeck 1998).

According to the records search results received from the Natural History Museum of Los Angeles County (LACM), a fossil specimen of mastodon (*Mammut*) was recovered in Pasadena, near the intersection of Washington Boulevard and Allen Avenue from an unknown depth below the ground surface (McLeod 2019). Another fossil locality, LACM 1807, located southeast of the Project area, south of Arrow Highway and east of Irwindale Boulevard, and north of Dalton Wash, included a fossil specimen of mastodon (*Mammut americanum*) recovered from a gravel pit between 115 and 120 below the original ground surface at LACM 1807 (McLeod 2019). In Eagle Rock, east of Interstate 110 (Pasadena Freeway) and Eagle Rock Boulevard, south of York Boulevard, locality LACM (CIT) 342 yielded fossil specimens of turkey (*Parapavo californicus*) and mammoth (*Mammuthus*) at a depth of 14 feet below the ground surface (McLeod 2019). Both specimens were documented in scientific publications (Miller 1942; Roth 1984).

In his compilation of late Quaternary vertebrates from California, Jefferson (1991) lists Pleistocene fossil reptiles and large mammals recovered from Pleistocene alluvial deposits in this part of Los Angeles County. The fossils include but are not limited to mammoth (*Mammuthus*), mastodon (*Mammut americanum*), bison (*Bison*), horse (*Equus*), and camel (*Camelops*), large cat (*Panthera atrox*) turtle (*Clemmys marmota*).

4.5.2 Relevant Plans, Policies, and Ordinances

Federal

Earthquake Hazards Reduction Act

In October 1977, the U.S. Congress passed the Earthquake Hazards Reduction Act to reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the act established the National Earthquake Hazards Reduction Program. This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act, which refined the description of agency responsibilities, program goals, and objectives.

The mission of the National Earthquake Hazards Reduction Program includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improved building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improved mitigation capacity; and accelerated application of research results. The National Earthquake Hazards Reduction Program Act designates the Federal Emergency Management Agency as the lead agency of the program and assigns several planning, coordinating, and reporting responsibilities. Other National Earthquake Hazards Reduction Program Act agencies include the National Institute of Standards and Technology, National Science Foundation, and the U.S. Geological Survey. International Building Code

International Building Code

The international Building Code (IBC) is published by the International Conference of Building Officials. The 2018 IBC is the most recent iteration, and issues performance standards for the design and installation of structures and building systems. The IBC issues codes governing structural and safety provisions, including those aimed at preventing and/or addressing seismic hazards and is intended to provide consistency in building standards across the world.

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Act (California Public Resources Code [PRC] Sections 2621–2630) was passed in 1972 to mitigate the hazard of surface faulting to structures designed for human occupancy. The main purpose of the law is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The law addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards. The Alquist-Priolo Act requires the State Geologist (nto establish regulatory zones known as Earthquake Fault Zones around the surface traces of active faults and to issue appropriate maps. The maps are distributed to all affected cities, counties, and state agencies for their use in planning efforts. Before a Project can be permitted in a designated Alquist-Priolo Earthquake Fault Zone, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (PRC Sections 2690–2699.6) addresses earthquake hazards from non-surface fault rupture, including liquefaction and seismically induced landslides. The act established a mapping program for areas that are considered to be highly susceptible to liquefaction and landslides. The act also specifies that the lead agency for a Project may withhold development permits until geologic or soils investigations are conducted for specific sites and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils.

National Pollutant Discharge Elimination System Permit

In California, the State Water Resources Control Board administers regulations promulgated by the U.S. Environmental Protection Agency (55 Code of Federal Regulations [CFR] 47990), requiring the permitting of stormwater-generated pollution under the National Pollutant Discharge Elimination System (NPDES). In turn, the State Water Resources Control Board's jurisdiction is administered through nine Regional Water Quality Control Boards. Under these federal regulations, an operator must obtain a General Construction Permit through the NPDES Stormwater Program for all construction activities with ground disturbance of 1 acre or more. The General Construction Permit requires the implementation of best management practices (BMPs) to reduce sedimentation into surface waters and to control erosion. One element of compliance with the NPDES permit is preparation of a Stormwater Pollution Prevention Plan (SWPPP) that addresses control of water pollution, including sediment, in runoff during construction.

California Building Code

The California Building Code (CBC) has been codified in the California Code of Regulations (CCR) as Title 24, Part 2. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or those standards are not enforceable. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability, by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. As indicated previously, the CBC is updated and revised every 3 years. The 2019 version of the CBC became effective January 1, 2020. It is anticipated that the

proposed Project would use the most current CBC at the time of building permit issuance. The 2019 edition of the CBC is based on the 2018 International Building Code (IBC), published by the International Code Conference.

Chapters 16 and 16A of the 2019 CBC include structural design requirements governing seismically resistant construction, including factors and coefficients used to establish seismic site class and seismic occupancy category for the soil/rock at the building location and the proposed building design. Chapters 18 and 18A include the requirements for foundation and geotechnical soil investigations, and geohazard reports (Section 1803A); excavation, grading, and fill (Section 1804A); damp-proofing and water-proofing (Section 1805A); allowable load-bearing values of soils (Section 1806A); the design of foundation walls, retaining walls, embedded posts and poles (Section 1807A); foundations (Section 1808A); and design of shallow foundations (Section 1809A) and deep foundations (Section 1810A). Chapter 33 of the 2019 CBC includes requirements for safeguards at work sites to ensure stable excavations and cut or fill slopes (Section 3304).

Construction activities are subject to occupational safety standards for excavation and trenching, as specified in the California Safety and Health Administration regulations (CCR Title 8) and in Chapter 33 of the CBC. These regulations specify the measures to be used for excavation and trench work where workers could be exposed to unstable soil conditions. The proposed Project would be required to employ these safety measures during excavation and trenching.

California Environmental Quality Act

Paleontological Resources

Paleontological resources are limited, nonrenewable resources of scientific, cultural, and educational value and are afforded protection under state laws and regulations. Paleontological resources are explicitly afforded protection by the California Environmental Quality Act (CEQA), specifically in Section VII(f) of CEQA Guidelines Appendix G, the "Environmental Checklist Form," which addresses the potential for adverse impacts to "unique paleontological resource[s] or site[s] or … unique geological feature[s]." This provision covers fossils of signal importance – remains of species or genera new to science, for example, or fossils exhibiting features not previously recognized for a given animal group – as well as localities that yield fossils significant in their abundance, diversity, preservation, and so forth. Further, CEQA provides that generally, a resource shall be considered "historically significant" if it has yielded or may be likely to yield information important in prehistory (PRC Section 15064.5 [a][3][D]). Paleontological resources would fall within this category. The Public Resources Code, Chapter 1.7, Sections 5097.5 and 30244 also regulates removal of paleontological resources from state lands, defines unauthorized removal of fossil resources as a misdemeanor, and requires mitigation of disturbed sites.

Regional and Local

City of Arcadia General Plan

The City of Arcadia General Plan (City of Arcadia 2010) includes various policies related to geology and safety (both directly and indirectly). Applicable policies include the following:

Goal S-1: Minimize potential for loss of life, physical injury, and property damage resulting from earthquakes and geologic hazards

> ***Policy S-1.2:*** Emphasize carefully planned development within seismic and geologic hazard areas to minimize potential hazards risk as the City's preferred hazards management strategy.

Policy S-1.3: Require detailed geologic investigations to accompany development proposals for sites that lie within known or suspected seismic and geologic hazard areas. Require that such investigations and reports conform to accepted professional standards and any applicable State and City requirements.

Policy S-1.4: Monitor activities of the California Geological Survey and other relevant agencies and organizations to stay informed regarding new mapping and reports that advance the state of knowledge of seismic and geologic hazards affecting Arcadia.

Policy S-1.5: Continue enforcing the most rigorous building and grading codes which govern seismic safety.

Goal S-2: Superior storm drainage and flood control facilities that minimize risk of flooding

Policy S-2.1: Prioritize improvements to Arcadia's storm drain system in areas that are prone to localized ponding and flooding.

Policy S-2.2: Continue rigorous maintenance of storm drainage and flood control facilities within the City's jurisdiction.

Policy S-2.3: Require that new development Projects retain as much runoff as possible on the development site to reduce flow volumes into the storm drain system, allow for recharge of the groundwater basins, and comply with the City's storm water permitting requirements (consistent with the National Pollutant Discharge Elimination Systems program, or NPDES) and employ Best Management Practices (BMPs).

City of Arcadia Municipal Code

The California Building Code, 2019 edition, published at CCR Title 24, Part 2, including Appendix J, issuing grading requirements, is adopted by reference pursuant to Article VIII, Chapter 1, Part 1, Section 8110 of the Arcadia Municipal Code (AMC) (City of Arcadia 2021).

Article III. Chapter 7 – Special Studies Geologic Zones

As set forth in Chapter 7 of the AMC, the Alquist-Priolo Special Studies Zones Act (the Act) (PRC Chapter 7.5, Division 2) requires that a State Geologist [2] establish Special Studies Zones [3] to encompass all potentially and recently active faults in California that may constitute a potential hazard to structures from surface faulting. Section 3701, Authority, of the AMC incorporates by reference the provisions and intent of the Act as though fully set forth, including the provisions and designations related to the location, extent, and definitions of Special Studies Zones

[2] The State Geologist is the chief administrator of the California Geological Survey (CGS) within the Department of Conservation (DOC). For the purposes of this report, any reference to the "State Geologist" shall be assumed to refer to the collective institutional knowledge of the CGS, which would include all official designations, findings, and publications referenced to the CGS herein.

[3] A Special Study Zone is defined in the AMC as "…an area of limited extent centered on a positioned fault. The zone boundaries are positioned approximately 660 feet on either side of a fault. The Special Studies Zones are believed by the [California Geological Survey] to warrant special geologic investigations to confirm the presence or absence of hazardous faults". The term "Special Study Zone" is no longer used by the CGS, which refers to these zones as Earthquake Fault Zones. For the purposes of this report, a Special Study Zone, as referred to by the AMC, shall be assumed to reference the state designated Earthquake Fault Zone, as identified by the CGS California Earthquake Hazards Zone Application and/or the CGS Official Maps of Earthquake Fault Zones by quadrangle.

Section 3704.1 – Geologic Reports; Recommendations; Fees: This sections requires that a geologic report be prepared prior to issuance of a development permit for any project within a Special Studies Zone, as identified by the CGS California Earthquake Hazards Zone Application and/or the CGS Official Maps of Earthquake Fault Zones by quadrangle.

Article VII, Chapter 5, Part V, Division 4 - Water Efficient Landscaping

This Division establishes compliance with the Water Efficient Landscaping Ordinance (Ord. No. 2330) and applies to all new construction Projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check, or design review.

Section 7554.6 – Soil and Grading Requirements: Under the Section J104.2.3 of the Ord. No. 2330, of the AMC, all new construction projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check, or design review, mut prepare a soil management report and grading design plan in order to minimize soil erosion, runoff, and water waste. A grading plan is intended to ensure that the grading of a project site is designed to minimize soil erosion, runoff, and water waste. The grading plan is a required component of the Landscape Documentation Package.

Article VII, Chapter 8 – Stormwater Management and Discharge Control

Chapter 8 of the AMC requires that all grading plans and permits comply with the provisions of this section for NPDES compliance and that BMPs must be installed before grading begins or as instructed by the City. As grading progresses, all BMPs must be updated as necessary to prevent erosion and control structures related pollutants from discharging from the site.

Section 7827 – Control of Runoff Required – Construction Activity: Section 7827 requires that, prior to obtaining a grading or building permit, each operator of any construction activity shall submit evidence to the Director that all applicable permits have been obtained, including but not limited to the State Water Board's Construction Permit, State Water Board 401 Water Quality Certification, and shall implement such an erosion and sediment control plan and best management practices (BMPs) to the Satisfaction of the City. Part B of this section states that: "[n]o grading permit shall be issued for any development with a disturbed area of one (1) acre or greater unless the applicant can show that (i) a Notice of Intent to comply with the State Construction Activity Stormwater Permit has been filed and (ii) a Stormwater Pollution Prevention Plan (SWPPP) has been prepared. Part D further requires that for all Project sites greater than one acre, the required erosion and sediment control plans must address all elements of a SWPPP. Finally, all erosion and sediment control plans for construction sites of one acre or more must be developed and certified by a Qualified SWPPP Developer, while all structural BMPs shall be designed by a licensed California Engineer.

Section 7828 – Low Impact Development (LID) Control of Runoff Required for Planning Priority Projects: Section 7828 of the AMC states that the site for every Planning Priority Project (as defined in Section 7812) shall be designed to control pollutants, pollutant loads, and runoff volume to the maximum extent feasible by minimizing impervious surface area and controlling runoff from impervious surfaces through infiltration, evapotranspiration, bioretention and/or rainfall harvest and use.

Article VIII, Chapter 1 – City of Arcadia Development Code

The City of Arcadia Development Code is intended to regulate the use and development of land within the City consistent with the City of Arcadia General Plan. The intent of the Development Code is to promote orderly development; protect the public health, safety, and general welfare; protect the character, social diversity, and economic vitality of neighborhoods and business districts; and ensure that new uses and development benefit the City.

> ***Section 9103.09.030 - Landscape Plan Requirement:*** Part A, Plan Check Requirements and Content, of Section 9103.09.030 of the AMC requires that a Landscape Documentation Package be prepared by a licensed landscape architect for all applicable Projects, including those with an aggregate landscape area equal to or greater than 500 square feet. This package requires preparation of a soil management report, a landscape design plan, an irrigation design plan and a grading design plan. As outlined in Section 7554.6, discussed above, the grading plan shall

4.5.3 Thresholds of Significance

The significance criteria used to evaluate a Project's impacts to geology and soils are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to geology and soils would occur if the Project 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 as known fault. Refer to Division of Mines and Geology Special Publication 42.
   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 direct or indirect 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 waste water.
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

4.5.4 Impacts Analysis

Threshold 4.5a Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

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

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known faults traverse the Project site (CGS 2021). According to the Geotechnical Investigation, the closest such zone is located along the Raymond Fault, located approximately 0.6 miles to the northwest of the Project site (Figure 4.5-2). Therefore, the Project site would not be subject to rupture of a known earthquake fault because no faults traverse the site. Furthermore, the Project site would not directly or indirectly cause or exacerbate existing fault rupture risks from the construction of new buildings and associated infrastructure on the Project site because no Project-related activities would occur within the Raymond Fault zone. Therefore, no impact related to surface rupture of a known earthquake fault would occur.

ii. Strong seismic ground shaking?

The Project site is located in the seismically active region of Southern California. The Raymond Fault and the Sierra Madre Fault have been mapped in the vicinity of the Project site. These faults, as well as numerous other regional faults (e.g., Puente Hills Thrust Fault, Santa Monica Fault, Verdugo Fault, Whittier Fault, San Fernando, and San Andreas Fault), are capable of producing moderate to large earthquakes that could cause substantial ground shaking at the Project site. The severity of ground shaking would depend on the magnitude of the earthquake, the distance to the Project site, duration of shaking and on-site geologic conditions. Ground shaking could lead to substantive damage to structures and infrastructure, personal injury and death, utility service disruption, fire, explosion, and hazardous material spills, if not engineered appropriately.

The soils underlying the Project site fall within the characteristics of Class D (i.e., "Stiff Soil" profile), as defined in Chapter 20 of the American Society of Civil Engineers (ASCE) 7-10. This information was used to calculate the anticipated ground motions on the Project site, using the U.S. Geological Survey U.S. Seismic Design Maps tool (Appendix D-1). According to the Geotechnical Investigation, the site has the potential to experience ground accelerations of 0.939g, which is substantive and capable of causing significant damage if not designed appropriately. The Geotechnical Investigation (Appendix D-1) provides the seismic parameters to be used in the structural design of the Project, based on the materials encountered subsurface exploration at the site and provides for preliminary design measures that are consistent with CBC building code requirements. The CBC provides procedures for earthquake-resistant structural design that includes considerations for on-site soil conditions, occupancy, and the configuration of the structure, including the structural system and height. Although substantial damage to structures may be unavoidable during large earthquakes, the proposed structures would be designed to resist structural collapse and thereby provide reasonable protection from serious injury, catastrophic property damage, and loss of life.

As previously discussed, the 2019 edition of the CBC is based on the 2018 International Building Code, and all construction must be conducted in compliance with the CBC. Chapters 16 and 16A of the 2019 CBC include structural design requirements governing seismically resistant construction, including factors and coefficients used

to establish seismic site class and seismic occupancy category for the soil/rock at the building location and the proposed building design.

Project construction would be completed in accordance with the CBC. As with all development within the City of Arcadia, development within the Project site would be required to comply with the seismic safety requirements of the CBC. The CBC provides procedures for earthquake resistant structural design that includes considerations for onsite soil conditions, occupancy, and the configuration of the structure, including the structural system and height. Standards provided in CBC Section 1803 also require preparation of a geotechnical evaluation and that all recommendations set forth in a final site-specific design-level geotechnical report – which would be based on the preliminary Geotechnical Investigation that was prepared for the Project – be incorporated into all applicable phases of Project excavation, grading and construction. Therefore, upon compliance with the CBC and City policies aimed at minimizing geologic hazards, including CBC Section 1803, requiring the incorporation of recommendations set forth in the final design-level site-specific geotechnical investigation, the Project site would not directly or indirectly cause substantial adverse effects involving strong seismic ground shaking, and impacts would be less than significant, with mitigation incorporated.

iii. Seismic-related ground failure, including liquefaction?

As previously stated, according to the Geotechnical Investigation, the historical high groundwater levels for the general area have been interpreted at 100-150 feet below the ground surface in the vicinity of the Project site, and the potential for liquefaction to occur beneath the Project site is considered to be very low. Furthermore, as shown in Figure 4.5-2, the site is not located within a mapped California Geologic Survey liquefaction hazard zone (Appendix D-1, CGS 2021). As such, seismic-related ground failure due to liquefaction would not be expected to occur on the Project site and impacts would be less than significant.

iv. Landslides?

As previously discussed, the Project site is not located within an earthquake-induced landslide zone. Because the Project site is not located within an area identified by the CGS as having potential for seismic slope instability, geologic hazards associated with landsliding are not anticipated at the site (Appendix D-1). Additionally, the Project would not exacerbate the potential for on- or off-site landslides. As such, implementation of the Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Impacts would be less than significant.

Threshold 4.5b Would the Project result in substantial soil erosion or the loss of topsoil?

Construction

The Project site is not located in a hillside development area or agricultural zone that could be susceptible to eroding soils or the loss of topsoil due to site development. The Project site is currently fully developed and paved, with negligible amounts of soil exposed in areas of ornamental landscaping.

Project construction would entail demolition and grading of portions of the Project site as well as excavations for the subterranean parking structure, followed by construction of the foundation and proposed structures. As discussed under Threshold 4.5c below, the Project site has the potential for collapsible soils and would require removal and recompaction of any previously disturbed and/or artificial fill soils. As recommended in the Geotechnical Investigation, the fills underlying the Project site would be removed and replaced with compacted fill

(Appendix D-1). These construction activities could result in temporary, short-term impacts related to a potential for erosion and loss of topsoil during the development of the Project site.

As previously discussed, Chapter 8 of the AMC requires that all grading plans and permits must comply with the provisions of the NPDES General Construction Permit and implement erosion control BMPs before grading begins to prevent erosion and loss of topsoil from the site. Prior to the start of construction activities, the Contractor is required to file a Permit Registration Document with the State Water Resources Control Board (SWRCB) in order to obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2009-009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ, NPDES No. CAS000002). No grading permit would be issued unless the plans for such work include a SWPPP with details of BMPs which include erosion control measures to minimize the transport of sediment and protect public and private property from the effects of erosion. The required SWPPP would establish site-specific erosion and sediment control BMPs for all construction activities. Typical examples of erosion-related construction BMPs include the following:

- Silt fences and/or fiber rolls installed along with the limits of work and/or the Project construction site
- Stockpile containment and exposed soil stabilization structures (e.g., Visqueen plastic sheeting, fiber rolls, gravel bags and/or hydroseed)
- Runoff control devices (e.g., fiber rolls, gravel bag barriers/chevrons, etc.) used during construction phases conducted during the rainy season
- Wind erosion (dust) controls
- Tracking controls at the site entrance, including regular street sweeping and tire washes for equipment
- Regular inspections and maintenance of BMPs

These BMPs would be refined and/or added to as necessary by a qualified SWPPP professional to meet the performance standards in the Construction General Permit. Compliance with the Construction General Permit would ensure that soil erosion would be minimized.

Although the Project would require excavation of soils related to construction of the subterranean parking structure and related to removal and recompaction of collapsible soils, this would not result in a substantial loss of topsoil. The Project site is currently developed and paved and does not contain native topsoil, with the exception of minimal landscaped areas adjacent to surface parking lots and buildings. The Project site is not used, and is not zoned for, agricultural uses or other activities that require the use of topsoil. Therefore, with compliance of the NPDES General Construction Permit, potential impacts associated with soil erosion and/or loss of topsoil would be less than significant.

Operations

Long-term operation of the Project would not result in substantial soil erosion or loss of topsoil as the majority of the Project site would be covered by the structures and paving, while the remaining portions of the site would be covered with irrigated landscaping. No exposed areas subject to erosion would be created or affected by the Project. In addition, the majority of the area surrounding the Project site is completely developed and would not be susceptible to indirect erosional processes (e.g., uncontrolled runoff) caused by the Project. With the implementation of applicable construction BMPs that also include post-construction requirements, impacts related to erosion or loss of topsoil would be less than significant.

Threshold 4.5c Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Landslides

As previously discussed, the Project site is relatively level and the topography in the site vicinity slopes slightly downward toward the south (Appendix D-1). The State of California (CDMG, 1999; CGS, 2017) and the City of Arcadia (2010) indicate that the site is not located within a zone of required investigation for earthquake-induced landslides. There are no known landslides near the site, nor is the site in the path of any known or potential landslides. Therefore, the potential for slope stability hazards to adversely impact the site is considered low. Because the Project site is not located within an area identified by the CGS as having potential for seismic slope instability, geologic hazards associated with landsliding are not anticipated at the site (Appendix D-1). No impacts would occur.

Liquefaction/Lateral Spreading

According to the State of California (CDMG, 1999; CGS, 2017) and the City of Arcadia (2010) the site is not located in an area potentially susceptible to liquefaction or lateral spreading. Potential impacts concerning liquefaction are evaluated under Threshold a(iii) above. Lateral spreading is the finite, lateral movement of gently sloping, saturated soil deposits caused by earthquake-induced liquefaction. Impacts associated with lateral spreading would be similar to those associated with liquefaction and would therefore be less than significant.

Subsidence

According to the Geotechnical Investigation, the existing artificial fill and any unsuitable, soft alluvial soils onsite are considered suitable for reuse provided they are compacted to meet current building code requirements (Appendix D-1). Volumetric changes in earth quantities would occur if excavated onsite soil materials were to be replaced with properly compacted fill. In accordance with the CBC Section 1804A, the compacted fill shall comply with the provisions of an approved final design level geotechnical report, which is also in accordance with CBC Section 1803, as discussed above. The proposed Project would be required to meet the most recent building safety criteria and construction design recommendations of the site-specific final design level geotechnical report that would be prepared for the proposed Project. As such, impacts related to subsidence would be less than significant.

Subsidence and Collapsible Soils

As previously stated, the preliminary geotechnical investigation indicated that artificial fill soils in the upper 4 feet exhibit collapsible potential upon wetting. If such materials are left in the current condition, excessive settlement of structures and site improvements could result due to the weight of new foundations and the introduction of water from rain or irrigation. Excessive settlement from such materials could be prevented through excavation and recompacted, as recommended by the preliminary geotechnical investigation. Materials anticipated to exhibit this condition consist of the artificial fill soils and any encountered soft alluvial soils. Soils below the collapsible soil zone are anticipated to exhibit low compressibility characteristics in their current state (Appendix D-1).

The preliminary geotechnical investigation concluded that after appropriate site preparations (e.g., removal and recompaction of artificial fills) total settlement of foundations would be less than about 1.25 inch and bearing

pressure is limited to about 4,000 pounds per square foot. Associated differential settlement should be less than 0.75 inches over 20 feet. Such settlement is anticipated to be tolerable for the proposed development.

A final design-level geotechnical investigation report is required in accordance with the CBC. As previously discussed, the CBC, 2019 edition, including Appendix J, issuing grading requirements, is adopted by reference pursuant to Section 8110 of the AMC (City of Arcadia 2021). In accordance with Section 1803 of the CBC, a geotechnical investigation is required to include soil testing, laboratory testing or engineering calculations to evaluate soil types, soil expansion, depth of groundwater, deep foundations, rock strata, excavation, compacted fill, soil strength, seismic design criteria and other soil characteristics that need to be considered in the structural design and construction of buildings and infrastructure. Geotechnical investigations must be prepared by registered professionals (i.e., California Registered Civil Engineer or Certified Engineering Geologist). Recommendations from geotechnical investigations must be incorporated into the design and construction of the Project, as reviewed and approved by the City's Development Services Department. As such, impacts related to collapsible soils would be less than significant.

In summary, upon Project compliance with the CBC and City policies aimed at minimizing geologic hazards, and the recommendations set forth in the final design level geotechnical report, the proposed Project would not directly or indirectly exacerbate existing conditions related to on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, and impacts would be less than significant.

Threshold 4.5d Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils are clay-rich soils that shrink when dry and swell when wet. This change in volume can exert substantial pressure on foundations over time, resulting in structural distress and/or damage. According to the preliminary geotechnical investigation, the site is underlain by artificial fill and Holocene age alluvium comprised of alluvial channel and outwash deposits consisting of varying amounts of silt, sand, and gravel (Appendix D-1, USDA 2019).

As previously discussed, based on depth of the proposed subterranean levels, the near surface soils have a low expansion potential. Given the low expansion potential anticipated at the site, only nominal steps will be needed to mitigate adverse effects. Typical mitigation measures described in Chapter 18 of the CBC to alleviate expansive soils include the following:

- Excavation of expansive soils until such a depth that competent material is encountered
- Installation of foundations designed to resist forces exerted on the foundation due by expansive soils
- Stabilization of the soils by chemical, dewatering, pre-saturation, or equivalent techniques

Project construction would not increase or exacerbate the potential for expansive soils to create substantial direct or indirect risks to life or property. Additionally, the proposed Project would be constructed according to the mandatory seismic and structural design guidelines established in CBC, Chapter 16, Section 1601 et seq. As such, impacts would be less than significant.

Threshold 4.5e Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The Project site is currently served by existing sewer infrastructure, and any new development would require connecting to the existing system. There is adequate capacity in the sewer system for the Project, as discussed in Section 4.15. There are no septic tanks or alternative wastewater disposal proposed; therefore, implementation of the Project would result in no impact.

Threshold 4.5f Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

An LACM records search for the Project vicinity was conducted in May 2019 (Confidential Appendix D-2).[4] As previously discussed, although no fossils are recorded from within the Project site, they are documented nearby from similar sedimentary deposits as those underlying the Project area. As such, the LACM recommends paleontological monitoring of substantial excavations into Quaternary older alluvial fan deposits at depth within the Project area and sediment sample collection to determine the presence of microvertebrate specimens.

No paleontological resources were identified within the Project area as a result of the institutional records search or desktop geological review, and the Project site is not anticipated to be underlain by unique geologic features. If intact paleontological resources are located on site, ground-disturbing activities associated with construction of the Project, such as grading during site preparation, trenching for utilities and excavations for the subterrain parking, have the potential to destroy a unique paleontological resource or site. As such, the Project area is considered to be potentially sensitive for paleontological resources at depth. Given the proximity of past fossil discoveries in the surrounding area and potential for underlying, Pleistocene-age older alluvial fan deposits, the sedimentary deposits within the Project area are considered to be highly sensitive for supporting paleontological resources. Younger, Holocene age alluvial gravel and sand deposits within the Project area have low potential to yield paleontological resources on the surface and at shallow depths, and thus, require no mitigation during excavation. However, the Holocene gravel and sand deposits become older with depth, where Pleistocene alluvium is present. Implementation of MM-GEO-1 would ensure that potential impacts would be reduced to less than significant levels.

With respect to unique geologic features, the proposed Project site is fully developed and paved, with the exception of small areas of landscaping near the parking lots and buildings. The site does not include any unique geologic features, and there would be no impacts associated with Project implementation to geologic features.

4.5.5 Cumulative Impact Analysis

Potential cumulative impacts on geology and soils would result from Projects that combine to create geologic hazards, including unstable geologic conditions, or contribute substantially to erosion. The majority of impacts from geologic hazards, such as rupture of a fault line, liquefaction, landslides, expansive soils, and unstable soils, are

[4] The LACM paleontological records search was originally conducted for Indigo Hotel Project in the City of Arcadia in May 2019. However, as the Indigo Hotel Project site is located approximately .0.3 miles west of the proposed Project site, both sites are in the same general vicinity within the Mt. Wilson USGS topographic quadrangle. As such, the proposed Project site was included in the LACM search parameters for the Indigo Hotel Project site (Appendix D-2). As there is no new information that has arisen that would change the findings and conclusions reach in the 2019 LACM records search, the results are still be applicable to the current Proposed Project, and no subsequent paleontological investigation or records search is required. Additionally, inclusion of MM-GEO-1 would ensure that potential impacts to paleontological resources would be less than significant.

site-specific and are therefore generally mitigated on a Project-by-Project basis. Each cumulative Project would be required to adhere to required building engineering design per the most recent version of the CBC in order to ensure the safety of building occupants and avoid a cumulative geologic hazard. Additionally, as needed, Projects would incorporate individual mitigation or geotechnical requirements for site-specific geologic hazards present on each individual cumulative Project site, similar to that described above for the proposed Project.

Similarly, MM-GEO-1 would ensure that potential impacts to paleontological resources would be less than significant and other cumulative Projects that would have a potential to impact subsurface materials that are sensitive for significant fossils would likely require similar mitigation. Given these existing regulatory and likely mitigation requirements, a potential cumulative impact related to site-specific geologic hazards, such as seismically induced ground failure, subsidence, soil collapse, and expansive soils, as well as paleontological resources, would not occur. As such, the proposed Project, in combination with other cumulative Projects, would not contribute to a significant cumulative impact associated with geology and soils or paleontological resources.

4.5.6 Mitigation Measures

MM-GEO-1 Prior to commencement of any grading activity on-site, the Applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the Project. The PRIMP shall be consistent with the SVP (2010) guidelines and shall outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the Project area based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The qualified paleontologist shall attend the preconstruction meeting and a paleontological monitor shall be on-site during all rough grading and other significant ground-disturbing activities in previously undisturbed, Pleistocene alluvial deposits. These deposits may be encountered at depths as shallow as 5-10 feet below ground surface. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find.

4.5.7 Level of Significance After Mitigation

Potential impacts to geology and soils would be less than significant. Incorporation of MM-GEO-1 would reduce construction-related impacts to paleontological resources to a less-than-significant level.

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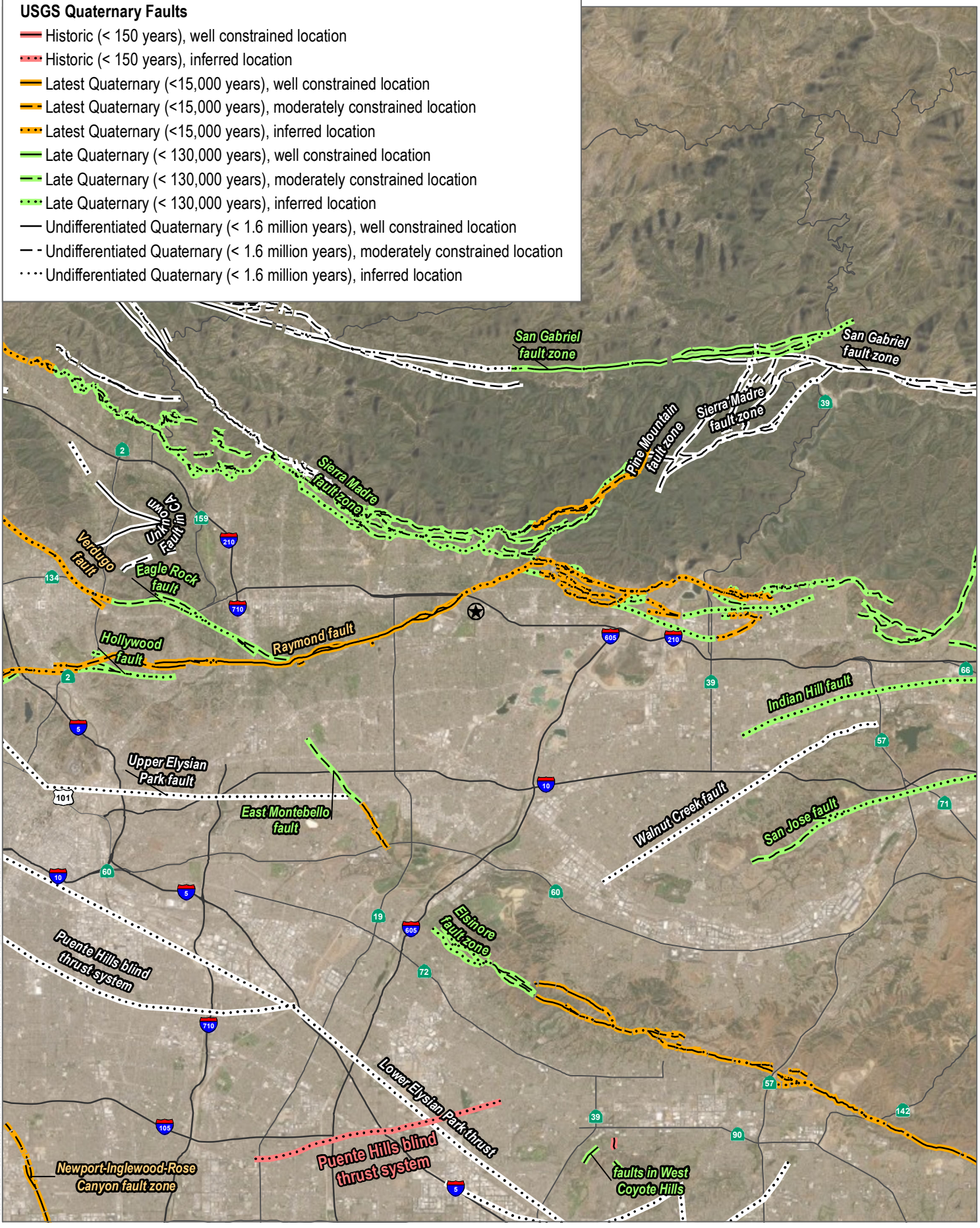

SOURCE: Esri and Digital Globe, Open Street Maps 2019, USGS 2020

DUDEK

0 1.75 3.5 Miles

FIGURE 4.5-1

Regional Faults

Alexan Mixed-Use Development Project

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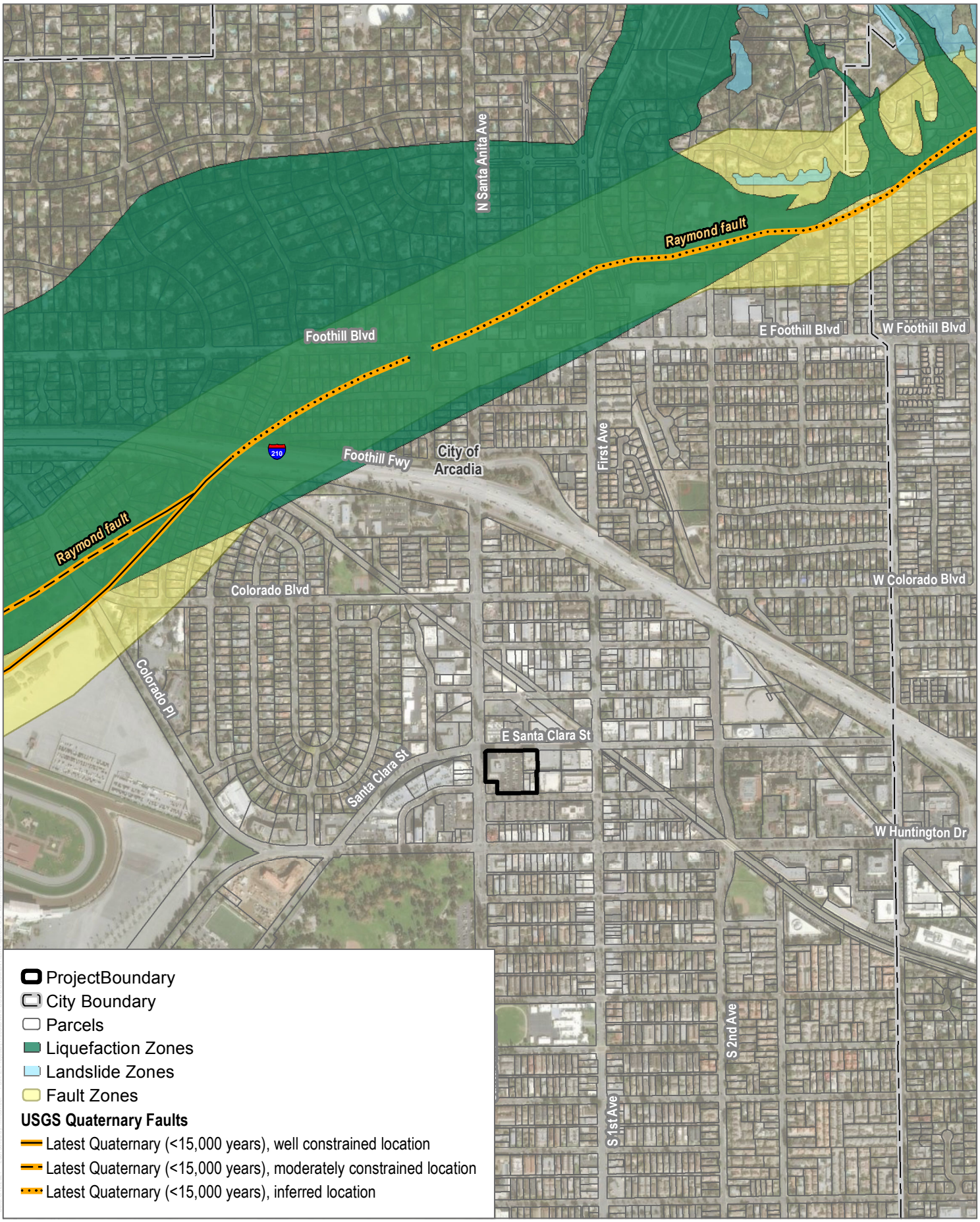

SOURCE: Esri and Digital Globe, Open Street Maps 2019, USGS 2020, CGS 2021

DUDEK

0 500 1,000 Feet

FIGURE 4.5-2

Geotechnical Hazards

Arcadia Mixed Use Development Project

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4.6 Greenhouse Gas Emissions

This section describes the existing greenhouse gas (GHG) emissions conditions of the Alexan Mixed-Use Development Project (Project) site and vicinity, project design features, and identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures (if any), level of significance after mitigation, and references. Information contained in this section is based on the latest version of California Emissions Estimator Model (CalEEMod), Version 2020.4.0, to estimate the proposed Project's GHG emissions from both construction and operations and existing land use operation. For the relevant data, refer to the following appendix:

Appendix C-1 CalEEMod Outputs, prepared by Dudek

Other documentation used in this analysis includes the Transportation Impact Analysis, included as Appendix K, the South Coast Air Quality Management District (SCAQMD) Draft Guidance Document – Interim CEQA GHG Significance Threshold, and the SCAQMD Greenhouse Gases CEQA Significance Thresholds Working Group Meeting No. 15. Other sources consulted are listed in Section 4.6.8, References.

Comments received in response to the Notice of Preparation are summarized in Table 1-1, Notice of Preparation and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft Environmental Impact Report (EIR). A copy of the Notice of Preparation is included in Appendix A-1 and the comment letters received in response to the Notice of Preparation are included in Appendix A-2 of this Draft EIR.

4.6.1 Existing Conditions

The Greenhouse Effect

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017a).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained

by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-twentieth century and is the most significant driver of observed climate change (IPCC 2013; EPA 2017a). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system, which is discussed further under "Potential Effects of Human Activity on Climate Change."

Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (see also 14 CCR 15364.5).[1] Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as HFCs, PFCs, and SF_6, which are associated with certain industrial products and processes. The following paragraphs provide a summary of the most common GHGs and their sources.[2]

Carbon Dioxide. CO_2 is a naturally occurring gas and a by-product of human activities and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are from the combustion of fuels such as coal, oil, natural gas, and wood and changes in land use.

Methane. CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (such as in rockets, racecars, and aerosol sprays).

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1 Climate forcing substances include GHGs and other substances such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in the California Health and Safety Code Section 38505, because impacts associated with other climate forcing substances are not evaluated herein.

2 The descriptions of GHGs are summarized from the Intergovernmental Panel on Climate Change's Second Assessment Report and Fourth Assessment Report (IPCC 1995, 2007), CARB's Glossary of Terms Used in GHG Inventories (CARB 2018), and EPA's Glossary of Climate Change Terms (EPA 2016).

Fluorinated Gases. Fluorinated gases (also referred to as F-gases) are synthetic powerful GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric ozone-depleting substances (e.g., CFCs, HCFCs, and halons). The most prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to ozone-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, with HFCs, to the ozone depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride:** SF_6 is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF_6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen Trifluoride:** NF_3 is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

Chlorofluorocarbons. CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere) and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric O_3.

Hydrochlorofluorocarbons. HCFCs are a large group of compounds, whose structure is very close to that of CFCs—containing hydrogen, fluorine, chlorine, and carbon atoms—but including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out.

Black Carbon. Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify the global warming potential. Diesel particulate matter emissions are a major source of black carbon and are toxic air contaminants that have been regulated and controlled in California for several decades to protect public health. In relation to declining diesel particulate matter from the California Air Resources Board's (CARB) regulations pertaining to diesel engines, diesel fuels, and burning activities, CARB estimates that annual black carbon emissions in California have reduced by 70% between 1990 and 2010, with 95% control expected by 2020 (CARB 2014).

Water Vapor. The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone. Tropospheric ozone (O_3), which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric O_3, which is created by the interaction between solar ultraviolet radiation and molecular oxygen (O_2), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O_3, due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols. Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2016). The IPCC developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e).

The current version of CalEEMod (Version 2020.4.0) (CAPCOA 2021) assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the proposed Project.

Contributions to Greenhouse Gas Emissions

Per the Environmental Protection Agency (EPA) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2019 (EPA 2021), total United States GHG emissions were approximately 6,558.3 MMT CO_2e in 2019 (EPA 2021). The primary GHG emitted by human activities in the United States was CO_2, which represented approximately 80.1% of total GHG emissions (5,255.8 MMT CO_2e). The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 92.4% of CO_2 emissions in 2019 (4,856.7 MMT CO_2e). Relative to 1990, gross United States GHG emissions in 2019 were 1.8% higher; however, the gross emissions were down from a high of 15.6% above 1990 levels in 2007. GHG emissions decreased from 2018 to 2019 by 1.7% (113.1 MMT CO_2e) and overall, net emissions in 2019 were 13% below 2005 levels (EPA 2021).

According to California's 2000–2019 GHG emissions inventory (2021 edition), California emitted approximately 418 MMT CO_2e in 2019, including emissions resulting from out-of-state electrical generation (CARB 2021). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high-GWP substances, and recycling and waste. Table 0- presents California GHG emission source categories and their relative contributions to the emissions inventory in 2019.

Table 0-1. Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)[a]	Percent of Total[a]
Transportation	166.1	39.7%
Industrial	88.2	21.1%
Electric power	58.8	14.1%
Commercial and residential	43.8	10.5%
Agriculture	31.8	7.6%
High global-warming potential substances	20.6	4.9%
Recycling and waste	8.9	2.1%
Total	**418.2**	**100%**

Source: CARB 2021.
Notes: GHG = greenhouse gas; GWP = global warming potential; MMT CO_2e = million metric tons of carbon dioxide equivalent. Emissions reflect 2018 California GHG inventory.
[a] Totals may not sum due to rounding.

Between 2000 and 2019, per-capita GHG emissions in California have dropped from a peak of 14.0 MT per person in 2001 to 10.5 MT per person in 2019, representing an approximate 25% decrease. In addition, total GHG emissions in 2019 were approximately 7 MMT CO_2e lower than 2018 emissions (CARB 2021).

Potential Effects of Human Activity on Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 Intergovernmental Panel on Climate Change Synthesis Report indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia.[3] Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, rising sea levels, and ocean acidification.[4]

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, frequency of severe weather events, and electricity demand and supply. The primary effect of global climate change has been a rise in average global tropospheric temperature. Reflecting the long-term warming trend since pre-industrial times, observed global mean surface temperature for the decade 2006–2015 was 0.87°C (likely between 0.75°C and 0.99°C) higher than the average over the 1850–1900 period.5 Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. Human activities are estimated to have caused approximately 1.0°C (1.8°F) of global warming above pre-industrial

[3] IPCC, Climate Change 2014 Synthesis Report: A Report of the Intergovernmental Panel on Climate Change, 2014.
[4] IPCC, Climate Change 2014 Synthesis Report: A Report of the Intergovernmental Panel on Climate Change, 2014.
[5] IPCC, Summary for Policymakers, in Global Warming of 1.5°C – An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty, 2018.

levels, with a likely range of 0.8°C to 1.2°C (1.4°F to 2.2°F).6 Global warming is likely to reach 1.5°C (2.7°F) between 2030 and 2052 if it continues to increase at the current rate.[7]

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment identified various indicators of climate change in California, which are scientifically-based measurements that track trends in various aspects of climate change. Many indicators reveal discernable evidence that climate change is occurring in California and is having significant, measurable impacts in the State. Changes in the State's climate have been observed, including an increase in annual average air temperature with record warmth from 2012 to 2016, more frequent extreme heat events, more extreme drought, a decline in winter chill, an increase in cooling degree days and a decrease in heating degree days, and an increase in variability of Statewide precipitation.[8]

Warming temperatures and changing precipitation patterns have altered California's physical systems—the ocean, lakes, rivers and snowpack—upon which the State depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the State's annual water supply. Impacts of climate on physical systems have been observed, such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters.[9]

Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed including climate change impacts on terrestrial, marine, and freshwater ecosystems. As with global observations, species responses include those consistent with warming: elevational or latitudinal shifts in range, changes in the timing of key plant and animal life cycle events, and changes in the abundance of species and in community composition. Humans are better able to adapt to a changing climate than plants and animals in natural ecosystems. Nevertheless, climate change poses a threat to public health as warming temperatures and changes in precipitation can affect vector-borne pathogen transmission and disease patterns in California, as well as the variability of heat-related deaths and illnesses. In addition, since 1950, the area burned by wildfires each year has been increasing.

The CNRA has released four California Climate Change Assessments (2006, 2009, 2012, and 2018), which have addressed the following: acceleration of warming across the State, more intense and frequent heat waves, greater riverine flows, accelerating sea level rise, more intense and frequent drought, more severe and frequent wildfires, more severe storms and extreme weather events, shrinking snowpack and less overall precipitation, and ocean acidification, hypoxia, and warming. To address local and regional governments need for information to support action in their communities, the Fourth Assessment in 2018 includes reports for nine regions of the State, including

6 IPCC, Summary for Policymakers, in Global Warming of 1.5°C – An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty, 2018.

7 IPCC, Summary for Policymakers, in Global Warming of 1.5°C – An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty, 2018.

8 Office of Environmental Health Hazard Assessment (OEHHA), Indicators of Climate Change in California, May 9, 2018.

9 OEHHA, Indicators of Climate Change in California, May 9, 2018.

the Los Angeles Region where the Project is located. Key projected climate changes for the Los Angeles Region include the following:[10]

- Continued future warming over the Los Angeles Region. Across the Region, average maximum temperatures are projected to increase around 4°F to 5°F by the mid-century, and 5°F to 8°F by the late-century.
- Extreme temperatures are also expected to increase. The hottest day of the year may be up to 10°F warmer for many locations across the Los Angeles Region by the late-century under certain model scenarios. The number of extremely hot days is also expected to increase across the Region.
- Despite small changes in average precipitation, dry and wet extremes are both expected to increase. By the late twenty-first century, the wettest day of the year is expected to increase across most of the Los Angeles Region, with some locations experiencing 25-percent to 30-percent increases under certain model scenarios. Increased frequency and severity of atmospheric river events are also projected to occur for this region.
- Sea levels are projected to continue to rise in the future, but there is a large range based on emissions scenario and uncertainty in feedbacks in the climate system. Roughly 1 foot to 2 feet of sea level rise is projected by the mid-century, and the most extreme projections lead to 8 feet to 10 feet of sea level rise by the end of the century.
- Projections indicate that wildfire may increase over southern California, but there remains uncertainty in quantifying future changes of burned area over the Los Angeles Region.

4.6.2 Relevant Plans, Policies, and Ordinances

Federal

Massachusetts vs. EPA

On April 2, 2007, in Massachusetts v. U.S. Environmental Protection Agency, the U.S. Supreme Court ruled that CO2 was a pollutant and directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The elevated concentrations of GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The combined emissions of GHGs—CO_2, CH_4, N_2O, and hydrofluorocarbons—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

[10] CNRA, California's Fourth Climate Change Assessment – Los Angeles Regional Report, 2018.

Energy Independence and Security Act

On December 19, 2007, President George W. Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the Act would do the following, which would aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
2. Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Federal Vehicle Standard

In response to the U.S. Supreme Court ruling discussed above, the Bush Administration issued Executive Order (EO) 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016 (75 FR 25324–25728).

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021 (77 FR 62624–63200). On January 12, 2017, EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks (EPA 2017b).

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

In August 2018, EPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards now in place, the 2018 proposal would increase U.S. fuel consumption by about half a million barrels per day (2%–3% of total daily consumption, according to the Energy Information Administration) and would impact the global climate by 3/1000th of one degree Celsius by 2100 (EPA and NHTSA 2018). California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures

and have committed to cooperating with other countries to implement global climate change initiatives. Thus, the timing and consequences of the 2018 federal proposal are speculative at this time.

On September 27, 2019, EPA and NHTSA published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program" (84 FR 51,310), which became effective November 26, 2019. The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the EPA and NHTSA issued Part Two of the SAFE Rule, which went into effect 60 days after being published in the Federal Register. The Part Two Rule sets CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light duty trucks for model years 2021 through 2026. This issue is evolving as California and 22 other states, as well as the District of Columbia and four cities, filed suit against the EPA and a petition for reconsideration of the rule on November 26, 2019. The litigation is ongoing.

State

Reduction Targets

Executive Order B-30-15. EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under S-3-05 and Assembly Bill (AB) 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in S-3-05. To facilitate achieving this goal, EO B-30-15 called for CARB to update the Scoping Plan to express the 2030 target in terms of MMT CO_2e. The EO also called for state agencies to continue to develop and implement GHG emissions reduction programs in support of the reduction targets.

Executive Order S-3-05. EO S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the state agencies for implementing the EO and for reporting on progress toward the targets. This EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80% below 1990 levels

EO S-3-05 also directed the California Environmental Protection Agency to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The California Climate Action Team was formed, which subsequently issued reports from 2006 to 2010 (CAT 2016).

Assembly Bill 32. In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32 (Núñez and Pavley). The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the state's long-range climate objectives.

Senate Bill 32 and Assembly Bill 197. Senate Bill (SB) 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two

members of the Legislature to the Board as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and, requires CARB to identify specific information for GHG emissions reduction measures when updating the scoping plan.

Executive Order B-18-12. EO B-18-12 (April 2012) directed state agencies, departments, and other entities under the governor's executive authority to take action to reduce entity-wide GHG emissions by at least 10% by 2015 and 20% by 2020, as measured against a 2010 baseline. EO B-18-12 also established goals for existing state buildings for reducing grid-based energy purchases and water use.

Senate Bill 605 and Senate Bill 1383. SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants (SLCPs) in the state; and SB 1383 (2016) requires CARB to approve and implement that strategy by January 1, 2018. SB 1383 also establishes specific targets for the reduction of SLCPs (40% below 2013 levels by 2030 for methane and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its SLCP Reduction Strategy in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, methane, and fluorinated gases (CARB 2017a).

Executive Order B-55-18. EO B-55-18 (September 2018) establishes a statewide policy for the state to achieve carbon neutrality no later than 2045, and achieve and maintain net negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the state's GHG emissions. CARB will work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

California Air Resources Board Regulations

Regulations for the Mandatory Reporting of Greenhouse Gas Emissions. CARB's Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (17 CCR 95100–95157) incorporated by reference certain requirements that EPA promulgated in its Final Rule on Mandatory Reporting of Greenhouse Gases (Title 40, CFR, Part 98). Specifically, Section 95100(c) of the Mandatory Reporting Regulation incorporated those requirements that EPA promulgated in the Federal Register on October 30, 2009; July 12, 2010; September 22, 2010; October 28, 2010; November 30, 2010; December 17, 2010; and April 25, 2011. In general, entities subject to the Mandatory Reporting Regulation that emit over 10,000 MT CO_2e per year are required to report annual GHGs through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 MT CO_2e per year threshold are required to have their GHG emission report verified by a CARB-accredited third-party verified.

2007 Statewide Limit. In 2007, in accordance with California Health and Safety Code, Section 38550, CARB approved a statewide limit on the GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 MMT CO_2e).

Climate Change Scoping Plan. One specific requirement of AB 32 is for CARB to prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code, Section 38561[a]), and to update the plan at least once every 5 years. In 2008, CARB approved the first scoping plan. The Climate Change Scoping Plan: A Framework for Change (Scoping Plan) included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures,

policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
2. Achieving a statewide renewable energy mix of 33%
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS 17 CCR, Section 95480 et seq.)
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation

The Scoping Plan also identified local governments as essential partners in achieving California's goals to reduce GHG emissions because they have broad influence and, in some cases, exclusive authority over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Specifically, the Scoping Plan encouraged local governments to adopt a reduction goal for municipal operations and for community emissions to reduce GHGs by approximately 15% from then levels (2008) by 2020. Many local governments developed community-scale local GHG reduction plans based on this Scoping Plan recommendation.

In 2014, CARB approved the first update to the Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (First Update) defined the state's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EOs S-3-05 and B-16-2012. The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050 including 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 the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the state's 1990 emissions level, using more recent global warming potentials identified by the Intergovernmental Panel on Climate Change, from 427 MMT CO_2e to 431 MMT CO_2e.

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in S-3-05. The Governor called on California to pursue a new and ambitious set of strategies, in line with the five climate change pillars from his inaugural address, to reduce GHG emissions and prepare for the unavoidable impacts of climate change. In the summer of 2016, the Legislature affirmed the importance of addressing climate change through passage of Senate Bill (SB) 32 (Pavley, Chapter 249, Statutes of 2016).

In January 2017, CARB released the 2017 Climate Change Scoping Plan Update (2030 Scoping Plan) for public review and comment (CARB 2017b). The 2030 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target and define the state's climate change priorities to 2030 and beyond. The strategies' "known commitments" include implementing renewable energy and energy efficiency (including the mandates of SB 350), increased stringency of the Low Carbon Fuel Standard, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant Plan, and increased stringency of SB 375 targets. To fill the gap in additional reductions needed to achieve the 2030 target, it recommends continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20%.

For local governments, the 2030 Scoping Plan replaced the initial Scoping Plan's 15% reduction goal with a recommendation to aim for a community-wide goal of no more than 6 MT CO_2e per capita by 2030 and no more than 2 MT CO_2e per capita by 2050, which are consistent with the state's long-term goals. These goals are also consistent with the Under 2 MOU and the Paris Agreement, which are developed around the scientifically based levels necessary to limit global warming below 2°C. The 2030 Scoping Plan recognized the benefits of local government GHG planning (e.g., through Climate Action Plans [CAPs]) and provide more information regarding tools CARB is working on to support those efforts. It also recognizes the California Environmental Quality Act (CEQA) streamlining provisions for project level review where there is a legally adequate CAP.[11] The Second Update was approved by CARB's Governing Board on December 14, 2017.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32, SB 32, and the EOs and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. A project is considered consistent with the statutes and EOs if it meets the general policies in reducing GHG emissions to facilitate the achievement of the state's goals and does not impede attainment of those goals. As discussed in several cases, a given project need not be in perfect conformity with each and every planning policy or goals to be consistent. A project would be consistent, if it will further the objectives and not obstruct their attainment.

California Building Energy Standards

CCR Title 24, Part 6. Title 24 of the California Code of Regulations (CCR) was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the California Energy Commission (CEC) (and revised if necessary) (California Public Resources Code, Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (California Public Resources Code, Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402[d]) and cost effectiveness (California Public Resources Code, Sections 25402[b][2] and [b][3]). As a result, these standards save energy, increase electricity supply

[11] *Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490; *San Francisco Tomorrow et al. v. City and County of San Francisco* (2015) 229 Cal.App.4th 498; *San Franciscans Upholding the Downtown Specific Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656; *Sequoyah Hills Homeowners Assn. V. City of Oakland* (1993) 23 Cal.App.4th 704, 719.

reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The current Title 24 standards are the 2019 Title 24 Building Energy Efficiency Standards, which became effective January 1, 2020. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards will use approximately 53% less energy than those under the 2016 standards (CEC 2018). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018).

As set forth in Section 110.10, Mandatory Requirements for Solar Ready Buildings, states that low-rise and high-rise multi-family buildings, hotels, and nonresidential buildings must include a "solar zone," which is a section of the roof designated and reserved for the future installation of a solar electric or solar thermal system. The solar zone for these uses must be located on the roof or overhang of the building (or on the roof or overhang of another structure located within 250 feet of the building) or on covered parking installed with the building, and must have a total area no less than 15% of the total roof area of the building excluding any skylight area. The solar zone requirement is applicable to the entire building, including mixed-occupancy. See the 2019 standards for additional requirements regarding the azimuth, shading, interconnection pathways, and electrical service panels of solar zones.

CCR Title 24, Part 11. In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as California's Green Building Standards (CALGreen), and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2016 standards became effective January 1, 2017.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements; stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 80% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs.

The California Building Standards Commission approved amendments to the voluntary measures of the CALGreen standards in December 2018. The 2019 CALGreen standards became effective January 1, 2020. As with the 2019 Title 24 standards, the 2019 CALGreen standards focus on building energy efficiency. The 2019 CALGreen standards are the current applicable standards. For nonresidential projects, some of the key mandatory CALGreen 2019 standards involve requirements related to bicycle parking, designated parking for clean air vehicles, electric vehicle (EV) charging stations, shade trees, water conserving plumbing fixtures and fittings, outdoor potable water use in landscaped areas, recycled water supply systems, construction waste management, excavated soil and land clearing debris, and commissioning (24 CCR Part 11). For high-rise residential buildings (i.e. more than four floors), the non-residential measures generally apply.

CCR Title 20. Title 20 of the CCRs requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Senate Bill 1. SB 1 (Murray) (August 2006) established a $3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the Public Resources Code, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the state to establish a self-sufficient solar industry. The goals included establishing solar energy systems as a viable mainstream option for both homes and businesses within 10 years of adoption, and placing solar energy systems on 50% of new homes within 13 years of adoption. SB 1, also termed "Go Solar California," was previously titled "Million Solar Roofs."

Assembly Bill 1470 (Solar Water Heating). This bill established the Solar Water Heating and Efficiency Act of 2007. The bill makes findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand. The bill defines several terms for purposes of the act. The bill requires the commission to evaluate the data available from a specified pilot program, and, if it makes a specified determination, to design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the state by 2017.

Renewable Energy and Energy Procurement

Senate Bill 1078. SB 1078 (Sher) (September 2002) established the Renewable Portfolio Standard program, which required an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010 (see SB 107, EO S-14-08, and EO S-21-09).

Senate Bill 1368. SB 1368 (September 2006), required the CEC to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission (CPUC).

Assembly Bill 1109. Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general-purpose lighting, to reduce electricity consumption 50% for indoor residential lighting and 25% for indoor commercial lighting.

Executive Order S-14-08. EO S-14-08 (November 2008) focused on the contribution of renewable energy sources to meet the electrical needs of California while reducing the GHG emissions from the electrical sector. This EO required that all retail suppliers of electricity in California serve 33% of their load with renewable energy by 2020. Furthermore, the EO

directed state agencies to take appropriate actions to facilitate reaching this target. The CNRA, through collaboration with the CEC and California Department of Fish and Wildlife, was directed to lead this effort.

Executive Order S-21-09 and Senate Bill X1-2. EO S-21-09 (September 2009) directed CARB to adopt a regulation consistent with the goal of EO S-14-08 by July 31, 2010. CARB was further directed to work with the CPUC and CEC to ensure that the regulation builds upon the Renewable Portfolio Standard program and was applicable to investor-owned utilities, publicly owned utilities, direct access providers, and community choice providers. Under this order, CARB was to give the highest priority to those renewable resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health and can be developed the most quickly in support of reliable, efficient, cost-effective electricity system operations. On September 23, 2010, CARB initially approved regulations to implement a Renewable Electricity Standard. However, this regulation was not finalized because of subsequent legislation (SB X1-2, Simitian, statutes of 2011) signed by Governor Brown in April 2011.

SB X1 2 expanded the Renewables Portfolio Standard by establishing a renewable energy target of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation (30 megawatts or less), digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location.

SB X1-2 applies to all electricity retailers in the state including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must meet the renewable energy goals previously listed.

Senate Bill 350. SB 350 (October 2015) further expanded the Renewable Portfolio Standard by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 included the goal to double the energy efficiency savings in electricity and natural gas final end uses (e.g., heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal.

Senate Bill 100. SB 100 (2018) increased the standards set forth in SB 350 establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

Mobile Sources

Assembly Bill 1493. AB 1493 (Pavley) (July 2002) was enacted in a response to the transportation sector accounting for more than half of California's CO_2 emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about

22% in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30%.

Heavy Duty Diesel. CARB adopted the final Heavy Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025, on December 31, 2014, to reduce particulate matter and oxides of nitrogen emissions from heavy-duty diesel vehicles. The rule requires particulate matter filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. The rule will require nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an Airborne Toxic Control Measure to limit idling of diesel-fueled commercial vehicles on December 12, 2013. This rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than 5 minutes at any location (13 CCR 2485).

Executive Order S-1-07. EO S-1-07 (January 2007, implementing regulation adopted in April 2009) sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020 (17 CCR 95480 et seq.). The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered.

Senate Bill 375. SB 375 (Steinberg) (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035 and to update those targets every 8 years. SB 375 requires the state's 18 regional metropolitan planning organizations to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP) that will achieve the GHG reduction targets set by CARB. If a metropolitan planning organization is unable to devise an SCS to achieve the GHG reduction target, the metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code, Section 65080(b)(2)(K), an SCS does not (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In September 2010, CARB adopted the first SB 375 targets for the regional metropolitan planning organizations. The targets for Southern California Association of Governments (SCAG) are an 8% reduction in emissions per capita by 2020 and a 13% reduction by 2035. Achieving these goals through adoption of a SCS is the responsibility of the metropolitan planning organizations. SCAG adopted its first RTP/SCS in April 2012. The plan quantified a 9% reduction by 2020 and a 16% reduction by 2035 (SCAG 2012). In June 2012, CARB accepted SCAG's quantification of GHG reductions and its determination the SCS, if implemented, would achieve SCAG targets. On April 4, 2016, the SCAG Regional Council adopted the 2016 RTP/SCS, which builds upon the progress made in the 2012 RTP/SCS. The updated RTP/SCS quantified an 8% reduction by 2020 and a 13% reduction by 2030 (SCAG 2016). In June 2016, CARB accepted SCAG's quantification of GHG reductions and its determination the SCS, if implemented, would achieve SCAG targets. In March 2018, CARB approved SCAG's updated targets of an 8% reduction by 2020 and a 19% reduction by 2030, effective October 1, 2018, which are consistent with the reduction targets from the Connect SoCal (2020–2045 RTP/SCS), adopted May 2020 (SCAG 2020).

Advanced Clean Cars Program and Zero-Emissions Vehicle Program. The Advanced Clean Cars program (January 2012) is a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2012). To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The Zero-Emissions Vehicle Program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of zero-emissions vehicles and plug-in hybrid electric vehicles in the 2018 to 2025 model years.

Executive Order B-16-12. EO B-16-12 (March 2012) required that state entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. It ordered CARB, CEC, CPUC, and other relevant agencies to work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve benchmark goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050. This directive did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

Assembly Bill 1236. AB 1236 (October 2015) (Chiu) required a city, county, or city and county to approve an application for the installation of electric vehicle charging stations, as defined, through the issuance of specified permits unless the city or county makes specified written findings based upon substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill provided for appeal of that decision to the planning commission, as specified. The bill provided that the implementation of consistent statewide standards to achieve the timely and cost-effective installation of electric vehicle charging stations is a matter of statewide concern. The bill required electric vehicle charging stations to meet specified standards. The bill required a city, county, or city and county with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that created an expedited and streamlined permitting process for electric vehicle charging stations, as specified. The bill also required a city, county, or city and county with a population of less than 200,000 residents to adopt this ordinance by September 30, 2017.

Water

Executive Order B-29-15. In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Solid Waste

Assembly Bill 939 and Assembly Bill 341. In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code, Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by 2000.

AB 341 (Chapter 476, Statutes of 2011 (Chesbro)) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle conducted several general stakeholder workshops and several focused workshops and in August 2015 published a discussion document titled AB 341 Report to the Legislature, which identifies five priority strategies that CalRecycle believes would assist the state in reaching the 75% goal by 2020, legislative and regulatory recommendations and an evaluation of program effectiveness (CalRecycle 2015).

AB 1826 Chesbro (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. The minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

Other State Actions

Senate Bill 97. SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Governor's Office of Planning and Research issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities (OPR 2008). The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The CNRA adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. The CNRA also acknowledges that a lead agency

may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009a).

With respect to GHG emissions, the CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

Executive Order S-13-08. EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009 (CNRA 2009b), and an update, Safeguarding California: Reducing Climate Risk, followed in July 2014 (CNRA 2014). To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: Agriculture, Biodiversity and Habitat, Emergency Management, Energy, Forestry, Ocean and Coastal Ecosystems and Resources, Public Health, Transportation, and Water. Issuance of the Safeguarding California: Implementation Action Plans followed in March 2016 (CNRA 2016). In January 2018, the CNRA released the Safeguarding California Plan: 2018 Update, which communicates current and needed actions that state government should take to build climate change resiliency (CNRA 2018).

Regional and Local

South Coast Air Quality Management District

Air districts typically act in an advisory capacity to local governments in establishing the framework for environmental review of air pollution impacts under CEQA. This may include recommendations regarding significance thresholds, analytical tools to estimate emissions and assess impacts, and mitigations for potentially significant impacts. Although air districts will also address some of these issues on a project-specific basis as responsible agencies, they may provide general guidance to local governments on these issues (SCAQMD 2008). As discussed in Section 4.6.3, Thresholds of Significance, the SCAQMD has recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects; however, these thresholds were not adopted.

Southern California Association of Governments

SB 375 requires metropolitan planning organizations to prepare an SCS in their RTP. The SCAG Regional Council adopted the 2012 RTP/SCS in April 2012 (SCAG 2012), and the 2016–2040 RTP/SCS (2016 RTP/SCS) was adopted in April 2016 (SCAG 2016). Both the 2012 and 2016 RTP/SCSs establish a development pattern for the region that, when integrated with the transportation network and other policies and measures, would reduce GHG emissions from transportation (excluding goods movement). Specifically, the 2012 RTP/SCS links the goals of sustaining mobility with the goals of fostering economic development; enhancing the environment; reducing energy consumption; promoting transportation-friendly development patterns; and encouraging all residents affected by

socioeconomic, geographic, and commercial limitations to be provided with fair access. The 2012 and 2016 RTP/SCSs do not require that local general plans, specific plans, or zoning be consistent with it but provide incentives for consistency for governments and developers. Because the current SCAQMD Air Quality Management Plan is based on the SCAG 2016 RTP/SCS demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by SCAG for their 2016–2040 RTP/SCS, the SCAG 2016 RTP/SCS is discussed in Section 4.6.4, Impacts Analysis. See Local, Southern California Association of Governments, for an additional discussion on SCAG.

On May 7, 2020 SCAG's Regional Council adopted the Connect SoCal (2020–2045 RTP/SCS). The Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. Connect SoCal charts a path toward a more mobile, sustainable and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura (SCAG 2020).

City of Arcadia General Plan

The City of Arcadia's General Plan, Chapter 6, Resource Sustainability Element, addresses GHG-reducing goals and policies as follows. It should be noted that reducing air quality has a co-benefit of reducing GHGs and the goals and policies listed in the Section 4.2 – Air Quality, therefore has some co-benefit for GHG reductions.

Goal RS-2: Reducing Arcadia's carbon footprint in compliance with SB 375 and AB 32

- **Policy RS-2.1:** Cooperate with the state to implement AB 32, which calls for reducing greenhouse gas emissions to 1990 levels by 2020, and Executive Order S-3-05, which calls for 1990 levels by 2020 and 80% below 1990 levels by 2050.
- **Policy RS-2.2:** Reduce per capita greenhouse gas emissions to 15% below 2005 levels by 2020, and total municipal greenhouse gas emissions to 15% below 2005 levels by 2020.
- **Policy RS-2.3:** Participate in regional strategies and plan to implement SB 375, and in particular, use the legislatively authorized incentives, such as grants and transportation funding and waivers to environmental assessments, to encourage infill and transit-oriented development.
- **Policy RS-2.4:** Pursue the strategies in the Land Use and Community Design Element to encourage transit-oriented development in established focused areas.
- **Policy RS-2.5:** Pursue the enhancement of bicycle and pedestrian infrastructure set forth in the Circulation and Infrastructure Element to help decrease vehicle miles traveled and vehicle trips. Policy
- **Policy-RS-2.6:** Coordinate land use, circulation, and infrastructure improvement efforts with the West San Gabriel Valley Planning Council, regional planning agencies, and surrounding municipalities.

Goal RS-3: Promoting and utilizing clean forms of transportation to reduce Arcadia's carbon footprint

Policy RS-3.1: Develop a City fleet that to the extent feasible uses clean, alternative fuel and consists of energy-efficient vehicles.

Policy RS-3.2: Incorporate energy-efficient vehicles into the City's transit system.

PolicyRS-3.3: Educate residents on methods of sustainable driving techniques such as: reducing excessive speeding, preventing car idling, regular car maintenance for maximizing fuel efficiency, and car pooling.

Policy RS-3.4: Promote residents' and business owners' awareness and education of traffic congestion's affect on air pollution and help create voluntary programs that reduce traffic throughout the City

4.6.3 Thresholds of Significance

The significance criteria used to evaluate Project impacts to GHG/climate change are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to GHG emissions would occur if the Project would:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project, such as the proposed Project, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change. In addition, while GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008), GHG emissions impacts must also be evaluated at a project level under CEQA.

The State CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the State CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009a). The State of California has not adopted emission-based thresholds for GHG emissions under CEQA. The Governor's Office of Planning and Research's Technical Advisory titled "CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act Review" states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2008). Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice." Section 15064.7(c) of the State CEQA Guidelines specifies that "when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other

public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

In October 2008, the SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects as presented in its Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008). This guidance document, which builds on the previous guidance prepared by the California Air Pollution Control Officers Association, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. However, in December 2008, the SCAQMD adopted an interim 10,000 MT CO_2e per-year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency (see SCAQMD Resolution No. 08-35, December 5, 2008).

The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

Tier 1 Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

Tier 2 Consider whether or not the proposed Project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

Tier 3 Consider whether the proposed Project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO_2e per year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO_2e per year), commercial projects (1,400 MT CO_2e per year), and mixed-use projects (3,000 MT CO_2e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO_2e per year would be used for all non-industrial projects. If the proposed Project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Tier 4 Consider whether the proposed Project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO_2e per service population for project level analyses and 6.6 MT CO_2e per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

Tier 5 Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

Because the proposed Project involves a mix of different land use, this analysis applies the SCAQMD screening threshold of 3,000 MT CO_2e per year for mixed-use projects for Tier 3. Per the SCAQMD guidance, construction emissions should be amortized over the operational life of the proposed Project, which is assumed to be 30 years (SCAQMD 2008). This impact analysis, therefore, adds amortized construction emissions to the estimated annual operational emissions and then compares operational emissions to the proposed SCAQMD threshold of 3,000 MT CO_2e per year for the Tier 3 analysis.

Approach and Methodology

Construction Emissions

CalEEMod Version 2020.4.0 (CAPCOA 2021) was used to estimate potential Project-generated GHG emissions during construction. Construction of the proposed Project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in Section 4.2.3, Thresholds of Significance (Approach and Methodology, Construction Emissions, in Section 4.2, Air Quality, are also applicable for the estimation of construction-related GHG emissions. As such, see Section 4.2.3 in Section 4.2, Air Quality, for a discussion of construction emissions calculation methodology and assumptions used in the GHG emissions analysis.

Operational Emissions

Emissions from the operational phase of the proposed Project were estimated using CalEEMod Version 2020.4.0. Operational year 2024 was assumed, following completion of construction. In addition to the proposed Project, exiting conditions were modeled for the currently occupied office and retail buildings located at 30 E Santa Clara Street, 25 Wheeler Avenue and 33 Wheeler Avenue (9,000 sf, 4,591 sf and 3,733 sf, respectively) to conduct an operational emissions netting analysis.

Area Sources. CalEEMod was used to estimate GHG emissions from the Project's area sources, which include operation of gasoline-powered landscape maintenance equipment, which produce minimal GHG emissions. See Section 4.2.3 in Section 4.2, Air Quality, for a discussion of landscaping equipment emissions calculations. Consumer product use and architectural coatings result in VOC emissions, which are analyzed in air quality analysis only, and little to no GHG emissions.

Energy Sources. The estimation of operational energy emissions was based on CalEEMod land use defaults and units or total area (i.e., square footage) of the proposed Project's land uses. The energy use (electricity or natural gas usage per square foot per year) from residential land uses is calculated in CalEEMod based on the Residential Appliance Saturation Study and the energy use from nonresidential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. Emissions are calculated by multiplying the energy use by the utility carbon intensity (pounds of GHGs per kilowatt-hour for electricity or 1,000 British thermal units for natural gas) for CO_2 and other GHGs. Annual natural gas and electricity emissions were estimated in CalEEMod using the emissions factors for Southern California Edison, which would be the energy provider for the proposed Project. In addition, the proposed project will include 100kW solar system onsite which was included in the CalEEMod analysis.

CalEEMod default energy intensity factors (CO_2, CH_4, and N_2O mass emissions per kilowatt-hour) for Southern California Edison were utilized for the project analysis. As explained in Section 4.6.2, Relevant Plans, Policies, and Ordinances, state SB X1 2 established a target of 33% from renewable energy sources for all electricity providers

in California by 2020 and Senate Bill 100 calls for further development of renewable energy, with a target of 60% by 2030. As such, GHG emissions associated with Project electricity demand would continue to decrease over time.

Mobile Sources. All details for criteria air pollutants discussed in Section 4.2.2 are also applicable for the estimation of operational mobile source GHG emissions. Regulatory measures related to mobile sources include AB 1493 (Pavley) and related federal standards. AB 1493 required that CARB establish GHG emission standards for automobiles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the state. In addition, the NHTSA and EPA have established corporate fuel economy standards and GHG emission standards, respectively, for automobiles and light-, medium-, and heavy-duty vehicles. Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from the proposed Project's motor vehicles. The effectiveness of fuel economy improvements was evaluated by using the CalEEMod emission factors for motor vehicles in 2024.

Solid Waste. The proposed Project would generate solid waste, and therefore, result in CO_2e emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste for the proposed Project.

Water and Wastewater Treatment. Supply, conveyance, treatment, and distribution of water for the proposed Project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the proposed Project requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use and associated electricity consumption from water use and wastewater generation were estimated using default values in CalEEMod.

4.6.4 Impacts Analysis

Threshold 4.7a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction Emissions

Construction of the proposed Project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road vendor trucks, and worker vehicles. The SCAQMD Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008) recommends that "construction emissions 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." Thus, the total construction GHG emissions were calculated, amortized over 30 years, and added to the total operational emissions for comparison with the GHG significance threshold of 3,000 MT CO2e per year. The quantification of emissions, therefore, is addressed in the operational emissions discussion following the estimated construction emissions.

CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 4.6.2, Thresholds of Significance. Construction of the proposed Project is anticipated to commence in June 2023 and reach completion in August 2025, lasting a total of 26 months. On-site sources of GHG emissions include off-road equipment and off-site sources including haul trucks, vendor trucks, and worker vehicles. Table 4.6-2 presents construction emissions for the proposed Project in 2023, 2025, and 2026 from on-site and off-site emission sources.

Table 4.6-2. Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
2023	679.89	0.06	0.06	697.77
2024	1071.97	0.09	0.05	1089.40
2025	343.18	0.02	0.02	348.32
			Total	**2,135.49**

Notes: CO_2 = carbon dioxide; CH_4 = methane; GHG = greenhouse gas; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix C-1 for complete results.

As shown in Table 4.6-2, the estimated total GHG emissions during construction of would be approximately 2,135 MT CO_2e over the construction period.

Operational Emissions

Long-term operations of the proposed Project would result in GHG emissions through mobile sources and area sources (landscape maintenance equipment); energy use (natural gas and generation of electricity consumed by the proposed Project); water supply, treatment, and distribution and wastewater treatment; and solid waste disposal. Annual GHG emissions from these sources were estimated using CalEEMod.

The estimated operational GHG emissions from Project area sources, energy consumption, mobile sources, solid waste, and water consumption and wastewater treatment associated with the proposed Project in 2026, existing land use emissions and net emissions are shown in Table 4.6-3. Details of the emission calculations are provided in Appendix C-1.

Table 4.6-3. Estimated Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Proposed Project				
Area	68.73	0.01	<0.01	69.24
Energy (natural gas and electricity)	718.44	0.04	0.01	722.34
Mobile	1,652.22	0.12	0.07	1,676.91
Solid waste	50.27	2.97	0.00	124.53
Water supply and wastewater	99.94	0.85	0.02	127.5
Construction (amortized over 30 years)	—	—	—	*71.18*
			Total Proposed Project Emissions	*2,791.70*
Existing Land Uses				
Area	*<0.01*	*<0.01*	*0.00*	*<0.01*
Energy (natural gas and electricity)	*49.59*	*<0.01*	*<0.01*	*49.86*
Mobile	*317.48*	*0.02*	*0.01*	*322.51*
Solid waste	*3.47*	*0.20*	*0.00*	*8.60*
Water supply and wastewater	*8.50*	*0.07*	*<0.01*	*10.85*
			Total Existing Emissions	*391.82*

Table 4.6-3. Estimated Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Net Change in Emissions				*2,399.88*
SCAQMD GHG Threshold				3,000
Exceeds thresholds?				**No**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
See Appendix C-1 for complete results.
[a] <0.01 = value less than reported 0.01 metric tons per year.

Table 4.6-3 indicates that the net GHG emissions associated with development of the proposed Project equal to 2,400 MT CO_2e would be below the SCAQMD GHG threshold of 3,000 MT CO_2e per year. Even without taking into account the removal of the existing land uses, the proposed Project's estimated emissions would be below the SCAQMD GHG threshold of 3,000 MT CO_2e per year. Therefore, the proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and this would represent a cumulatively less than significant impact.

Threshold 4.6b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Consistency with the Connect SoCal (2020–2045 RTP/SCS)

SCAG's Connect SoCal is a regional growth-management strategy that targets per capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region. The Connect SoCal incorporates local land use projections and circulation networks in city and county general plans. Typically, a project would be consistent with the RTP/SCS if the project does not exceed the underlying growth assumptions within the RTP/SCS. As discussed in Section 4.11, Population and Housing, the proposed Project would accommodate an expected 909 residents which would be counted within the overall population growth projections included in the Connect SoCal of 5,519 residents between 2020 and 2045 (see Table 4.11-2).

As stated in the Connect SoCal 2020–2045 RTP/SCS, there is no obligation by a jurisdiction to change its land use policies, General Plan, or regulations to be consistent with the RTP/SCS, and lead agencies have the sole discretion in determining a local project's consistency with the RTP/SCS (SCAG 2020a). Because there is no wholly reliable population, housing, or employment data after 2010, as the U.S. Census is conducted every ten years, all data for years prior to the 2020 Census should be viewed as projections or estimates. As demonstrated in Section 4.9, Land Use and Planning, the proposed Project would implement the guiding principles, goals and policies of SCAG's 2020–2045 RTP/SCS as they relate to livability, economic prosperity, and sustainability through the development of walkable, mixed use communities along major transportation corridors. The development of housing within 350 feet of transit (Metro's L Line Arcadia Station), thereby alleviating pressure on suburban and open space areas to develop, is fully supportive of SCAG's strategies, as summarized in Chapter 1 of SCAG's 2020–2045 RTP/SCS (SCAG 2020):

> Strategies, therefore, emphasize growth in areas rich with destinations and mobility options, promote diverse housing choices, leverage technology innovations, support implementation of sustainability policies and promote a green region. This more compact development pattern, combined with the identified transportation network improvements and strategies, results in

> improved pedestrian and bicycle access to community amenities, lowers average trip length and reduces vehicle miles traveled.

As stated in Chapter 3 of SCAG's 2020–2045 RTP/SCS (SCAG 2020):

> Our vision for the region incorporates a range of best practices for increasing transportation choices, reducing dependence on personal automobiles, further improving air quality and encouraging growth in walkable, mixed-use communities with ready access to transit infrastructure and employment. More and varied housing types and employment opportunities would be located in and near job centers, transit stations and walkable neighborhoods where goods and services are easily accessible via shorter trips.

Because the proposed Project would support SCAG's goals and strategies for growth in the region as described below and further described in Section 4.9, Land Use and Planning, and because the proposed Project would assist the development of new housing and improves the City's job/housing balance (as described in Section 4.11, Population and Housing), impacts related to population growth assumed in Connect SoCal would be less than significant.

The major goals of the Connect SoCal are outlined in Table 4.6-4, along with the proposed Project's consistency with them.

Table 4.6-4. Project Consistency with the Connect SoCal (SCAG 2020–2045 RTP/SCS)

RTP/SCS Goal	Proposed Project Consistency
Goal 1: Encourage regional economic prosperity and global competitiveness	*Consistent*. The proposed Project would result in the development of a mixed-use residential development within the City of Arcadia's Downtown. The Project site currently support existing office and commercial buildings, some of which would be demolished for the construction of new housing on site. Metro's L Line Arcadia Station is located within the Project site's vicinity, thereby connecting residents to the region's transportation network. Once constructed, the Project would continue to support the regional economic development. As described in Draft EIR Section 4.11, Population and Housing, the Project would facilitate a more balanced jobs-housing profile for a city considered to be a jobs-rich community. Therefore, the Project is consistent with this goal.
Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods	**Consistent.** The Project site is served by local and regional bus transit lines as well as light rail. Project development would increase transit accessibility of jobs and services within the Project site's vicinity. The Project site would bring residential development the City's Downtown, which contains a mixture of office and commercial development uses, thereby reducing travel demands for people. Further, the Project includes objectives to support walkability and increased pedestrian access to support connectivity with the nearby Metro L Line Arcadia Station. Therefore, the Project is consistent with this goal.
Goal 3: Enhance the preservation, security, and resilience of the regional transportation system	**Consistent.** The proposed Project would provide new living and working opportunities in close proximity to transit, thereby increasing ridership. Public transit that operates in the vicinity of the Project site includes the Metro L Line and multiple bus lines. The Metro L Line is a light rail line running between Azusa and East Los Angeles, with the closest station approximately 350 feet east of the Project site. The Project site is also

Table 4.6-4. Project Consistency with the Connect SoCal (SCAG 2020–2045 RTP/SCS)

RTP/SCS Goal	Proposed Project Consistency
	supported by service from Metro as well as Foothill Transit. As such, the proposed Project would support use of the transit system and would provide an enhancement to the existing transit infrastructure. The proposed Project would not otherwise alter or affect the security or resilience of the regional transportation system. Therefore, the Project is consistent with this goal
Goal 4: Increase person and goods movement and travel choices within the transportation system	**Consistent.** The Project site is served by existing and proposed pedestrian, bicycle, and mass-transit infrastructure and connectivity. One of the Project objectives is to promote pedestrian connectivity within the City's Downtown, thereby supporting the placement of mixed uses in an area well served by transit and within walking distance to residential areas and commercial amenities. As such, the Project would increase the accessibility to the transportation and increase the persons using the transit infrastructure. Therefore, the Project is consistent with this goal.
Goal 5: Reduce greenhouse gas emissions and improve air quality	***Consistent.*** The Project would support the use of the existing and proposed pedestrian, bicycle, and mass-transit infrastructure and connectivity. Less reliance on automobiles and support for multi-modal transportation would help reduce greenhouse gas emissions and improve air quality. Table 4.6-4 indicates that the net GHG emissions associated with development of the proposed Project would be below the SCAQMD GHG threshold of 3,000 MT CO2e per year. Therefore, the proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. One of the benefits of the proposed Project is to improve air quality by providing housing for those who work in the City so that they may reduce their vehicle miles traveled to the extent possible, which is further facilitated by the proximity to the Metro L Line Station. Therefore, the Project is consistent with this goal.
Goal 6: Support healthy and equitable communities	***Consistent.*** As detailed in Section 4.9, Land Use and Planning, the Project site is designated as Downtown Mixed Use, which allows for a mix of land uses that are within walking distance of one another. The Project would introduce new residential uses to the City's Downtown and include design features to provide sidewalks, paseo, and alleyways that are attractive to pedestrians. Thus, the Project would promote healthy, walkable communities. Further, the proposed Project would provide housing opportunities in a variety of sizes, types, and densities to support an equitable community. The proposed Project would include 26 affordable housing units through the utilization of SB 1818. The proposed affordable units would satisfy a portion of the City's mandated very low income units, as set forth by RHNA and the City's Housing Element. The proposed Project would contribute housing and employment opportunities to a jobs-rich community, thereby contributing to a more balanced local economy. Therefore, the Project is consistent with this goal.
Goal 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network	**Consistent**. The Project would comply with sustainability-focused measures such as building design energy efficiency that meets or exceeds Title 24 requirements, and roof structures to support solar panels. The installation of green infrastructure combined with high standards for energy-efficient buildings contained within the California Building Code, will ensure that Project meets regional goals for sustainability. In addition, the Project would increase density on a site with access to the region's transportation network and transit. Therefore, the Project is consistent with this goal.

Table 4.6-4. Project Consistency with the Connect SoCal (SCAG 2020–2045 RTP/SCS)

RTP/SCS Goal	Proposed Project Consistency
Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel	**Consistent.** The Proposed Project would include pedestrian improvements, bicycle parking facilities, and access to existing transit, all of which would encourage residents and employees of the Project to use alternative modes of transportation (as opposed to single-occupancy vehicles), which would in turn support more efficient travel in the area. Additionally, the Project site is located within an urbanized portion of the City and Los Angeles County with access to regional transportation systems that can use new transportation technologies and data driven solutions to provide more efficient travel. Therefore, the Proposed Project is consistent with this goal.
Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options	***Consistent***. The proposed Project would develop a mixed-use, pedestrian-oriented development with access to alternative modes of transportation. The Project would provide additional housing opportunities in a variety of housing sizes, types, and densities that support the goals of the City's Housing Element, including affordable housing units. To further facilitate multiple transportation options, the Project is proposed within the City's Downtown where residents do not need to use a car to access basic needs throughout the day. The residential units include studios, one- and two-bedroom units, and live-work units to encourage diverse housing types within the City. Therefore, the Project is consistent with this goal.
Goal 10: Promote conservation of natural and agricultural lands and restoration of habitats	***Consistent***. The proposed Project site is located in a highly urbanized area away from existing agricultural lands and habitat. Given the proposed Project would redevelop an existing, underutilized site, the proposed Project would not encroach upon agricultural lands and natural habitat. (See the Chapter 5, Other CEQA Considerations, for more discussion regarding agricultural and biological resources.) Therefore, the Project is consistent with this goal.

Source: SCAG 2020.

As shown in Table 4.6-4, the proposed Project would not conflict with any of the goals within SCAG's Connect SoCal. Therefore, the proposed Project would not conflict with the goal to improve air quality and GHG emissions in the region.

Consistency with the CALGreen

As discussed in Section 4.6.2, Relevant Plans, Policies, and Ordinances, 2019 CALGreen requirements are comprehensive and applicable to the proposed Project. The provisions of the CALGreen code apply to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure. In mixed occupancy buildings, such as the proposed Project, each portion of a building must comply with the specific green building measures applicable to each specific occupancy (CEC 2019). Table 4.6-5 below includes a listing of applicable mandatory measures that are relevant to the topic of GHG Emissions, although the listing is not exhaustive of all potentially relevant requirements.

Table 4.6-5. 2019 CALGreen Mandatory Measures Relevant to Greenhouse Gas Emissions

CALGreen Requirement
Residential Mandatory Measures
4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections

Table 4.6-5. 2019 CALGreen Mandatory Measures Relevant to Greenhouse Gas Emissions

CALGreen Requirement
4.106.4.1, 4.106.4.2, or 4.106.4.3 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625. 4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device. Or 4.106.4.2 New multifamily dwellings. If residential parking is available, ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.
Residential Building Environmental Quality
4.503.1 Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves, and fireplaces shall also comply with all applicable local ordinances.

Source: 24 CCR Part 11. 2019 California Green Building Standards Code

The proposed Project must comply with all relevant measures applicable to the types of structures to be built, including live-work units and residential. Therefore, the proposed Project would be implemented consistent with the requirements and CALGreen.

Consistency with CARB's Scoping Plan

The Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017) provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to projects, nor is it intended to be used for project-level evaluations.[12] Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. Table 4.6-6 highlights measures that have been, or will be, developed under the Scoping Plan and presents the proposed Project's consistency with Scoping Plan measures (CARB 2008). The proposed Project

[12] The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009b).

would comply with all regulations adopted in furtherance of the Scoping Plan to the extent that they are applicable to the proposed Project.

Table 4.6-6. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Transportation Sector		
Advanced Clean Cars	T-1	*Not applicable.* The advancement of clean cars cannot be implemented by the Project. Nonetheless, the Project would be required to provide electric vehicle (EV) parking in accordance with CALGreen requirements in effect at the time of building construction. The proposed Project's residents, employees and customers would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase. The proposed Project would not preclude the implementation of this measure.
Low Carbon Fuel Standard	T-2	*Not applicable.* This is a statewide measure that cannot be implemented by a project applicant or lead agency. Nonetheless, this standard would be applicable to the fuel used by vehicles that would access the proposed Project site (i.e., motor vehicles driven by the proposed Project's residents, employees and customers would use compliant fuels). The proposed Project would not preclude the implementation of this measure.
Regional Transportation-Related GHG Targets	T-3	*Not applicable.* The proposed Project is not related to developing GHG emission reduction targets. To meet the goals of SB 375, the Connect SoCal is applicable to the proposed Project, and Table 4.6-6 above includes a consistency discussion with Connect SoCal. The proposed Project would not preclude the implementation of this measure.
Advanced Clean Transit	N/A	*Not applicable.* The proposed Project would not prevent CARB from accelerating the use of advanced technologies in heavy-duty vehicles (e.g. buses) to meet air quality, climate, and public health goals. Nevertheless, the Project is within a Transit Priority Area in proximity to the L Line Station and would facilitate transit ridership. The proposed Project would not preclude the implementation of this measure.
Last-Mile Delivery	N/A	*Not applicable.* The proposed Project would not prevent CARB from increasing the deployment of zero-emission trucks for last-mile delivery services. The proposed Project would not preclude the implementation of this measure.
Reduction in VMT	N/A	Consistent. The Project site is within 350 feet of transit (Metro's L Line Arcadia Station) addition, the Project site's vicinity is served by existing public transit such as various bus routes (Metro Line 232, Metro Line 625, Beach Cities Line 109, LADOT Commuter Express 438, and LADOT Commuter Express 574) as well as the Metro C Line. The Metro C Line is a light rail line, which runs between Redondo Beach and Norwalk. The nearest station is the Mariposa Station, which is just over 0.5-mile from the Project site. which would help reduce the proposed Project's vehicle miles traveled (VMT).
Vehicle Efficiency Measures 1. Tire Pressure	T-4	Consistent. These standards would be applicable to the light-duty vehicles that would access the proposed Project site. Motor vehicles

Table 4.6-6. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
2. Fuel Efficiency Tire Program 3. Low-Friction Oil 4. Solar-Reflective Automotive Paint and Window Glazing		driven by the proposed Project's residents, employees, and customers would maintain proper tire pressure when their vehicles are serviced. The proposed Project's employees and customers would replace tires in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase. Motor vehicles driven by the proposed Project's employees and customers would use low-friction oils when their vehicles are serviced. The proposed Project's employees and customers would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase. In addition, the proposed Project would not prevent CARB from implementing this measure.
Ship Electrification at Ports (Shore Power)	T-5	*Not applicable.* The proposed Project has no nexus with port operations or policies, including electrification of ships. The proposed Project would not prevent CARB from implementing this measure.
Goods Movement Efficiency Measures 1.	T-6	*Not applicable.* The proposed Project has no nexus with port operations or policies, including port-related trucking, refrigeration unit transport, cargo handling, harbor craft maintenance, clean ships, vessel speeds, or any other goods movement strategy. The proposed Project would not prevent CARB from implementing this measure.
Heavy-Duty Vehicle GHG Emission Reduction • Tractor-Trailer GHG Regulation • Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)	T-7	*Not applicable.* The proposed Project introduces new residential land uses to the property does not involve operations of heavy duty vehicles. Heavy-duty vehicles used during construction activities would be required to comply with CARB GHG reduction measures. The proposed Project would not prevent CARB from implementing this measure.
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Proposed Project	T-8	*Consistent.* The proposed Project medium- and heavy-duty vehicles (e.g., delivery trucks) could take advantage of the vehicle hybridization action, which would reduce GHG emissions through increased fuel efficiency. The proposed Project would not prevent CARB from implementing this measure.
Medium and Heavy-Duty GHG Phase 2	N/A	*Not applicable.* The proposed Project would not prevent CARB from implementing this measure. However, all medium and heavy-duty vehicles which would access the proposed Project would be subject to this regulation.
High-Speed Rail	T-9	*Not applicable.* The proposed Project has no nexus with high speed rail operations or policies. The proposed Project would not prevent CARB from implementing this measure.
Electricity and Natural Gas Sector		
Energy Efficiency Measures (Electricity)	E-1	*Consistent.* The proposed Project would comply with the current Title 24 Building Energy Efficiency Standards. In addition, the proposed Project would not prevent CARB from implementing this measure.
Energy Efficiency (Natural Gas)	CR-1	*Consistent.* The proposed Project would comply with the current Title 24 Building Energy Efficiency Standards. In addition, the proposed Project would not prevent CARB from implementing this measure.

Table 4.6-6. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	*Not applicable.* The CSI-Thermal Program closed to new applications on July 31, 2020. The proposed Project would not prevent CARB from implementing this measure.
Combined Heat and Power	E-2	*Not applicable.* The proposed Project would not prevent CARB from implementing this measure.
Renewables Portfolio Standard (33% by 2020)	E-3	*Consistent*. The electricity used by the proposed Project would benefit from reduced GHG emissions resulting from increased use of renewable energy sources. The proposed Project also includes solar energy generation capacity on the Project roof. The proposed Project would not prevent CARB from implementing this measure.
Renewables Portfolio Standard (50% by 2050)	N/A	*Consistent*. The electricity used by the proposed Project would benefit from reduced GHG emissions resulting from increased use of renewable energy sources. The proposed Project also includes solar energy generation capacity on the Project roof. The proposed Project would not prevent CARB from implementing this measure.
SB 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	*Consistent*. The proposed Project would be required to meet at minimum, the applicable current CALGreen and Title 24 Building Energy Efficiency Standards regarding the installation of rooftop solar systems. The proposed Project also includes solar energy generation capacity on the Project roof. As set forth in 2019 Building Energy Efficiency Standards, low-rise and high-rise multi-family buildings, hotels, and nonresidential buildings must include a "solar zone on the roof or overhang of the building or on covered parking and must have a total area no less than 15% of the total roof area of the building excluding any skylight area. The solar zone requirement is applicable to the entire building, including mixed-occupancy." The proposed Project would not prevent CARB from implementing this measure.
Water Sector		
Water Use Efficiency	W-1	*Consistent.* The proposed Project must comply with all applicable CALGreen standards for water efficient fixtures and would not prevent CARB from implementing this measure.
Water Recycling	W-2	*Not applicable.* The proposed Project would not include water recycling facilities; however, the Project would not prevent CARB from implementing this measure.
Water System Energy Efficiency	W-3	*Not applicable.* This is applicable for the transmission and treatment of water, but it is not applicable for the proposed Project. The proposed Project would be required to meet at minimum, the applicable current CALGreen and Title 24 Building Energy Efficiency Standards. The proposed Project would not prevent CARB from implementing this measure.
Reuse Urban Runoff	W-4	*Not applicable.* The proposed Project would not include water recycling facilities; however, the Project would not prevent CARB from implementing this measure.

Table 4.6-6. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Renewable Energy Production	W-5	*Not applicable.* This is applicable for wastewater treatment systems. In addition, the proposed Project would not prevent CARB from implementing this measure.
Green Buildings		
State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	*Consistent.* The proposed Project would be required to be constructed in compliance with City of Arcadia Municipal Code and CALGreen requirements in effect at the time of building construction.
Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	*Consistent*. The proposed Project would be required to be constructed in compliance with City of Arcadia Municipal Code and CALGreen requirements in effect at the time of building construction.
Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	*Consistent*. The proposed Project would be required to be constructed in compliance with City of Arcadia Municipal Code and CALGreen requirements in effect at the time of building construction.
Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-1	*Consistent.* The proposed Project would be required to provide electric vehicle (EV) parking in accordance with CALGreen requirements in effect at the time of building construction.
Industry Sector		
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	*Not applicable.* The proposed Project would not prevent CARB from implementing this measure and does not include industrial uses.
Oil and Gas Extraction GHG Emission Reduction	I-2	*Not applicable.* The proposed Project does not involve oil and gas extraction; however, the Project would not prevent CARB from implementing this measure this measure and does not include industrial uses.
Reduce GHG Emissions by 20% in Oil Refinery Sector	N/A	*Not applicable.* The proposed Project does not involve oil and gas refinery operations; however, the Project would not prevent CARB from implementing this measure this measure and does not include industrial uses.
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	*Not applicable.* The proposed Project does not involve natural gas transmission and distribution; however, the Project would not prevent CARB from implementing this measure this measure and does not include industrial uses.
Refinery Flare Recovery Process Improvements	I-4	*Not applicable.* The proposed Project does not involve refinery flare recovery; however, the Project would not prevent CARB from implementing this measure this measure and does not include industrial uses.
Work with the Local Air Districts to Evaluate Amendments to Their Existing Leak Detection and Repair	I-5	*Not applicable.* The proposed Project does not involve industrial operations; however, the Project would not prevent CARB from implementing this measure this measure and does not include industrial uses.

Table 4.6-6. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Rules for Industrial Facilities to Include Methane Leaks		
Recycling and Waste Management Sector		
Landfill Methane Control Measure	RW-1	*Not applicable.* The proposed Project does not involve landfill operations; however, the Project would not prevent CARB from implementing this measure.
Increasing the Efficiency of Landfill Methane Capture	RW-2	*Not applicable.* The proposed Project does not involve methane capture from landfills; however, the Project would not prevent CARB from implementing this measure.
Mandatory Commercial Recycling	RW-3	*Consistent.* During both construction and operation of the proposed Project, the proposed Project would comply with all state regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act, as amended.
Increase Production and Markets for Compost and Other Organics	RW-3	*Not applicable.* The proposed Project does not involve composting; however, the Project would not prevent CARB from implementing this measure.
Anaerobic/Aerobic Digestion	RW-3	*Not applicable.* The proposed Project does not involve composting or waste management operations; however, the Project would not prevent CARB from implementing this measure.
Extended Producer Responsibility	RW-3	*Not applicable.* The proposed Project does not involve recycling production; however, the Project would not prevent CARB from implementing this measure.
Environmentally Preferable Purchasing	RW-3	*Not applicable.* The proposed Project does not involve recycling or waste purchasing; however, the Project would not prevent CARB from implementing this measure.
Forests Sector		
Sustainable Forest Target	F-1	*Not applicable.* The proposed Project does not involve forest management; however, the Project would not prevent CARB from implementing this measure.
High GWP Gases Sector		
Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Servicing	H-1	*Consistent.* The proposed Project's residents and employees would be prohibited by State law from performing air conditioning repairs and would be required to use professional servicing.
SF_6 Limits in Non-Utility and Non-Semiconductor Applications	H-2	*Not applicable.* The proposed Project would not prevent CARB from implementing this measure and does not include semiconductor operations.
Reduction of Perfluorocarbons (PFCs) in Semiconductor Manufacturing	H-3	*Not applicable.* The proposed Project would not prevent CARB from implementing this measure and does not include semiconductor manufacturing.
Limit High GWP Use in Consumer Products	H-4	*Consistent.* The proposed Project's residents and employees would use consumer products that would comply with the regulations that are in effect at the time of manufacture.

Table 4.6-6. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	*Consistent*. Motor vehicles driven by the proposed Project's residents, employees, and customers would comply with the leak test requirements during smog checks.
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	*Not applicable.* The proposed Project would not prevent CARB from implementing this measure. However, commercial stationary equipment refrigerant would be subject to this regulation.
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	*Not applicable.* The proposed Project would not prevent CARB from implementing this measure. However, commercial stationary equipment refrigerant would be subject to this regulation.
SF_6 Leak Reduction Gas Insulated Switchgear	H-6	*Not applicable.* The proposed Project would not prevent CARB from implementing this measure. In addition, the proposed Project does not include development of a switchgear.
40% Reduction in Methane and Hydrofluorocarbon (HFC) Emissions	N/A	*Not applicable.* The proposed Project would not prevent CARB from implementing this measure.
50% Reduction in Black Carbon Emissions	N/A	*Not applicable.* The proposed Project would not prevent CARB from implementing this measure. However, on-road vehicles accessing the proposed Project would be subject to this regulation.
Agriculture Sector		
Methane Capture at Large Dairies	A-1	*Not applicable.* The proposed Project would not prevent CARB from implementing this measure and does not include large dairies.

Source: CARB 2008.
Notes: GHG = greenhouse gas; CARB = California Air Resources Board; VMT = vehicle miles traveled; SB = Senate Bill; N/A = not applicable; SF_6 = sulfur hexafluoride.

Based on the analysis in Table 4.6-6, the proposed Project would be consistent with the applicable strategies and measures in the Scoping Plan.

Consistency with EO S-3-05 and SB 32

- **EO S-3-05.** This EO establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050.
- **SB 32.** This bill establishes for a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030.

This section evaluates whether the GHG emissions trajectory after proposed Project completion would impede the attainment of the 2030 and 2050 GHG reduction goals identified in EOs B-30-15 and S-3-05.

To begin, CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014, p. ES2). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update to the Climate Change Scoping Plan states the following (CARB 2014, p. 34):

> This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, EO B-30-15, and EO S-3-05. This is confirmed in the Second Update, which states the following (CARB 2017a, p. 7):

> The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasibility and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197.

Consistency with General Plan's Air Quality Element

The City of Arcadia's General Plan, Chapter 6, Resource Sustainability Element, addresses GHG-reducing goals and policies. A discussion of the proposed Project's consistency with these policies is presented below.

Goal RS-2: Reducing Arcadia's carbon footprint in compliance with SB 375 and AB 32

Policy RS-2.1: Cooperate with the state to implement AB 32, which calls for reducing greenhouse gas emissions to 1990 levels by 2020, and Executive Order S-3-05, which calls for 1990 levels by 2020 and 80% below 1990 levels by 2050.

Consistent. The proposed Project would support the use of the existing and proposed pedestrian, bicycle, and mass-transit infrastructure and connectivity. Less reliance on automobiles and support for multi-modal transportation would help reduce greenhouse gas emissions and improve air quality. Table 4.6-4 indicates that the net GHG emissions associated with development of the proposed Project would be below the SCAQMD GHG threshold of 3,000 MT CO2e per year. Therefore, the proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. One of the benefits of the proposed Project is to improve air quality by providing housing for those who work in the City so that they may reduce their vehicle miles traveled to the extent possible.

Policy RS-2.2: Reduce per capita greenhouse gas emissions to 15% below 2005 levels by 2020, and total municipal greenhouse gas emissions to 15% below 2005 levels by 2020.

Consistent. The proposed Project would support the use of the existing and proposed pedestrian, bicycle, and mass-transit infrastructure and connectivity. Less reliance on automobiles and support for multi-modal transportation would help reduce greenhouse gas emissions and improve air quality. Table 4.6-4 indicates that the net GHG emissions associated with development of the proposed Project would be below the SCAQMD GHG threshold of 3,000 MT CO2e per year. Therefore, the proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. One of the benefits of the proposed Project is to improve air quality by providing housing for those who work in the City so that they may reduce their vehicle miles traveled to the extent possible.

Policy RS-2.3: Participate in regional strategies and plan to implement SB 375, and in particular, use the legislatively authorized incentives, such as grants and transportation funding and waivers to environmental assessments, to encourage infill and transit-oriented development.

Not Applicable. The proposed Project would not prevent the City's Participation in regional strategies and plan to implement SB 375, and in particular, use the legislatively authorized incentives, such as grants and transportation funding and waivers to environmental assessments, to encourage infill and transit-oriented development.

Policy RS-2.4: Pursue the strategies in the Land Use and Community Design Element to encourage transit-oriented development in established focused areas.

Not Applicable. The proposed Project is a transit-oriented development within a Focus Area. The proposed Project supports the Policy and would not prevent the City from pursuing strategies in the Land Use and Community Design Element to encourage transit-oriented development in established focused areas.

Policy RS-2.5: Pursue the enhancement of bicycle and pedestrian infrastructure set forth in the Circulation and Infrastructure Element to help decrease vehicle miles traveled and vehicle trips. Policy

Consistent. The proposed Project would support the use of the existing and proposed pedestrian, bicycle, and mass-transit infrastructure and connectivity.

Policy-RS-2.6: Coordinate land use, circulation, and infrastructure improvement efforts with the West San Gabriel Valley Planning Council, regional planning agencies, and surrounding municipalities.

Not Applicable. The proposed Project would not prevent the City from coordinating land use, circulation, and infrastructure improvement efforts with the West San Gabriel Valley Planning Council, regional planning agencies, and surrounding municipalities.

Goal RS-3: Promoting and utilizing clean forms of transportation to reduce Arcadia's carbon footprint

Policy RS-3.1: Develop a City fleet that to the extent feasible uses clean, alternative fuel and consists of energy-efficient vehicles.

Not Applicable. The proposed Project would not prevent the City from developing a City fleet that to the extent feasible uses clean, alternative fuel and consists of energy-efficient vehicles.

Policy RS-3.2: Incorporate energy-efficient vehicles into the City's transit system.

Not Applicable. The proposed Project would not prevent the City from Incorporating energy-efficient vehicles into the City's transit system.

Policy RS-3.3: Educate residents on methods of sustainable driving techniques such as: reducing excessive speeding, preventing car idling, regular car maintenance for maximizing fuel efficiency, and car pooling.

Not Applicable. The proposed Project would not prevent the City from Incorporating energy-efficient vehicles into the City's transit system.

Policy RS-3.4: Promote residents' and business owners' awareness and education of traffic congestion's affect on air pollution and help create voluntary programs that reduce traffic throughout the City.

Consistent. The proposed Project is within a Transit Priority Area in proximity to the L Line Station and would facilitate transit ridership. The Project would support the use of the existing and proposed pedestrian, bicycle, and mass-transit infrastructure and connectivity.

As discussed in previously, total proposed Project net emissions, including operation and amortized construction, would be approximately 2,400 MT CO_2e per year, which is less than the SCAQMD significant threshold of 3,000 MT CO_2e per year. Furthermore, based on the considerations previously outlined, the proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no mitigation is required. Therefore, this impact would be less than significant.

4.6.5 Cumulative Impact Analysis

As discussed in Section 4.6.1, Existing Conditions, GHG emissions inherently contribute to cumulative impacts. As shown in Table 4.6-4, the proposed Project would not result in GHG emissions in exceedance of the SCAQMD significance threshold. Therefore, cumulatively, Project GHG emissions would be less than significant.

4.6.6 Mitigation Measures

No mitigation is required.

4.6.7 Level of Significance After Mitigation

Impacts from GHGs as a result of implementing the proposed Project would be less than significant. Therefore, no mitigation is required.

4.6.8 References

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4.7 Hazards and Hazardous Materials

This section describes the existing hazards and hazardous materials conditions of the Alexan Mixed-Use Development Project (Project) site and vicinity, and identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information sources used to prepare this section include review of a list of hazardous waste and substances sites (Cortese List) in accordance with California Government Code Section 65962.5, as well as information from the following appendix:

Appendix F-1: Phase I Environmental Site Assessment of 150 & 180 North Santa Anita Avenue, 30 East Santa Clara Street, and 25 & 33 Wheeler Avenue, Arcadia, California, APNs #5773-006-004, -005, -010, & -036, prepared by FREY Environmental, Inc.

Appendix F-2: Lead-Based Paint Testing Reports at 33 Wheeler Avenue, 25 Wheeler Avenue, and 30 East Santa Clara Street, Arcadia, California, prepared by Allstate Services.

Appendix F-3: Asbestos Survey Report of 33 Wheeler Avenue, 25 Wheeler Avenue, and 30 East Santa Clara Street, Arcadia, California, prepared by FREY Environmental, Inc.

Appendix F-4: Subsurface Soil and Soil Vapor Investigation, Alexan Arcadia Project, 150 & 180 North Santa Anita Avenue, 30 East Santa Clara Street, and 25 & 33 Wheeler Avenue, Arcadia, California, prepared by FREY Environmental, Inc.

Other sources consulted are listed in Section 4.7.8, References.

Comments received in response to the Notice of Preparation (NOP) are summarized in Table 1-1, Notice of Preparation and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft Environmental Impact Report (EIR). A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR.

4.7.1 Existing Conditions

Environmental Setting

The proposed Project is located in the City of Arcadia (City) within the County of Los Angeles. The Project site is located at 150 N Santa Anita Avenue, and is bound by Santa Clara Street to the north, existing commercial uses and an alleyway to the east, Wheeler Avenue to the south, and Santa Anita Avenue to the west. The Project site is currently zoned "Downtown Mixed Use." Existing structures on the Project site include a 2-story office building, two 1-story commercial buildings, and surface parking, which would be demolished as part of the proposed Project. The existing 8-story office building and 1-story bank drive-through on APN 5773-006-036 would remain in place. A 750 square foot café would be added in the office building lobby, which currently contains an existing coffee counter. The demolished buildings and site features would be replaced with a 7-story multi-family residential building with associated residential amenities, including an outdoor pool and recreation area, outdoor courtyard, gym, mail room, leasing offices, lounge, and lobby. Levels 1 and 2 of the proposed 7-story building would be parking, and along with two subterranean levels of parking.

According to the Phase I ESA, the Project site sits at an elevation of 495 feet above mean sea level; the natural topography of the area is generally flat with a southward slope. The Project site is surrounded by commercial, with retail and parking to the north, a post office to the east, a commercial parking lot and offices to the south, and a car dealership and medical plaza to the west. The Project site lies within the eastern San Gabriel Valley Groundwater Basin, bounded by the San Gabriel Mountains to the north, the San Jose Hills to the east, the Puente, Repetto, and Merced Hills to the south and west, and the Raymond Fault to the northwest.

Groundwater

According to the Phase I ESA, the Project site is located within the eastern San Gabriel Valley Groundwater Basin. There are no documented groundwater wells on the Project site (GAMA 2021). The nearest groundwater well is located approximately 0.22 miles northeast of the Project site and is used for "other water supply." Depth in this well is not reported. Soil investigations for a nearby petroleum-contaminated site (Chevron Service Station, 102 Huntington Drive E, 730 feet southeast) report soil borings completed up to 69 feet below ground surface (bgs) without encountering groundwater (Arc0adis 2020), indicating groundwater in the area is greater than 69 feet bgs.

Methane, Oil, and Gas

The Project site is not located within the vicinity of any oil and gas well fields. One idle well was identified approximately 0.75 miles to the southeast (CalGEM 2021). According to the Los Angeles County Department of Public Works (LADPW 2021), the Project site is not located within 300 feet of an oil or gas well or 1,000 feet of a methane producing site. There are no hazardous material pipelines located within 1 mile of the Project site (NPMS 2021).

Historical Site Uses

Western and Central Portion of the Project Site

According to the Phase I ESA, the north portion of Project site (APN 5773-006-036) was first developed in the 1920s with one commercial building present on the southwestern portion of the Project site (112 N Santa Anita Avenue) which was used for an animal feed business. Various commercial buildings were constructed and demolished between 1937 and 1971, including a dry cleaner/industrial cleaner (122 N Santa Anita Avenue), which was located on the northwestern portion of the Project site between 1949 and 1966. The current buildings located at 150 and 180 N Santa Anita Avenue were constructed in 1971.

Eastern Portion of the Project Site

According to the Phase I ESA, the northeastern portion of the Project site (APN 5773-006-010) was developed around 1928 with a small residential building which was demolished in the 1940s. In 1946 a large building was constructed on the eastern portion of the Project site (26 & 30 E Santa Clara Street) which was used as office and warehouse; it was later demolished in the early 1980s. The current office building at 30 E Santa Clara Street was constructed in 1987. The southeastern portion of the Project site (APNs 5773-006-004 and 5773-006-005) was first developed in 1937 with a residential building which was demolished in the 1970s. A second residential building was constructed in 1952 and was later demolished in 1959. The two current office buildings located at 25 and 33 Wheeler Avenue were constructed between 1954 and 1959.

Historical Use and Associated Hazards

Hazardous Materials, Volatile Organic Compounds

The Phase I ESA identified industrial laundry/dry cleaning facilities as a historical use of the Project site from 1949 to 1966. Three business names were identified at 122 N Santa Anita Avenue under this historical site use: Model Laundry and Linen Supply Co, Peerless Linen Rental Service, and Pur-O-serve Linen Supply. Records indicate that the cleaners used heavy machinery at the facility; records did not indicate the specific solvents used. Volatile organic compounds (VOCs), such as tetrachloroethylene (PCE), are common solvents used as part of the industrial cleaning process. Due to the associated solvents that are typically used within industrial cleaning processes, the historical cleaning use was identified as a recognized environmental condition (REC) and potential vapor encroachment condition (VEC). The footprint of the former laundry building is shown in the Phase I ESA and is almost entirely beneath the buildings at 150 and 180 N Santa Anita Avenue. No additional hazardous material or VOC impacts were identified by the Phase I ESA.

In response to these findings, a soil and soil vapor investigation was completed (Appendix F-4). The investigation focused on historical uses on and adjacent to the Project site which, based on the nature of the former businesses, have a high likelihood of resulting in hazardous material impacts to soil and/or soil vapor. Soil samples were collected at five-foot intervals from 1 to 15 feet bgs in seven locations, and dual-nested soil vapor probes were installed in five of these borings to collect soil vapor samples at 5 and 15 feet bgs. The locations of these boring are identified on Figure 4.7-1, Detected Concentrations of Benzene and PCE in Soil Vapor Above DTSC Screening Levels (SLs). Groundwater was not encountered. Samples were analyzed for typical contaminants of concern associated with the former cleaning operations and nearby historical operations (petroleum hydrocarbons, VOCs, and metals). Total petroleum hydrocarbons, VOCs, and metals were detected in shallow soil samples (1 and 5 feet bgs) at multiple locations, and benzene and PCE were detected in soil vapor samples.

The soil and soil vapor investigation compared soil results to DTSC SLs and EPA Regional Screening Levels (RSLs). Detected concentrations of contaminants of concern in soil were below applicable DTSC SLs and EPA RSLs for residential soils, except for arsenic, which was below the applicable DTSC Southern California Regional Background Concentration of 12 mg/kg. While the contaminant levels in soils did not exceed screening levels for State or Federal hazardous waste, petroleum hydrocarbon concentrations in some soil samples do profile as State-regulated non-hazardous waste and will require special transportation and offsite disposal. Soil vapor samples were compared to DTSC SLs and EPA RSLs (with attenuation factors applied) and SFBRWQCB Environmental Screening Levels (ESLs). Detected concentrations of benzene and PCE in soil vapor exceeded at least one screening level, indicating a potential vapor intrusion risk may be present. The lateral and vertical extent of soil vapor contamination was not assessed.

During the Phase I ESA site reconnaissance, two emergency backup generators were observed outside the southeast corner of the bank building at 150 N Santa Anita Avenue. According to the Project site representative, the generators operate on natural gas; however, each generator included a diesel fuel reservoir at the base, one generator was placed within secondary containment, and one generator also included a “diesel fuel” label.

Asbestos, Lead-Based Paint, and Universal Waste

According the Phase I ESA an asbestos removal was conducted in the 8-story bank building located at 180 N Anita Avenue in 2016[1]. Based on records included in the Phase I ESA, 0.46 tons of asbestos was disposed of offsite at a landfill. There is no documentation indicating whether all of the asbestos was removed from the building. Observations made during the Phase I ESA site reconnaissance identified hard-packed thermal system insulation within the office building at 150 N Anita Avenue. The hard-packed thermal system insulation material is assumed to contain asbestos.

In March 2021, lead-based paint (LBP) testing was conducted at 25 Wheeler Avenue, 30 E Santa Clara Street, and 33 Wheeler Avenue (Appendix F-2). These structures are scheduled for demolition as part of the proposed Project. LBP was not detected in any surface sample locations. In April 2021, an asbestos survey was completed on the same structures (Appendix F-3). Building materials located within each of the three buildings was found to contain asbestos, including interior flooring, carpet mastic, interior ceilings, HVAC seals, and roofing materials. A full summary of asbestos-containing materials (ACM) is provided in Appendix F-3.

Hazardous Material Contaminated Sites

California Government Code Section 65962.5 requires the California Environmental Protection Agency to compile a list of hazardous waste and substances sites (Cortese List). While the Cortese List is no longer maintained as a single list, the following databases provide information that meet the Cortese List requirements:

1. List of Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) Envirostor database (Health and Safety Codes 25220, 25242, 25356, and 116395)
2. List of Leaking Underground Storage Tank (LUST) Sites by County and Fiscal Year from the State Water Resources Control Board GeoTracker database (Health and Safety Code 25295)
3. List of solid waste disposal sites identified by the State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit (Water Code Section 13273[e] and 14 CCR Section 18051)
4. List of "active" Cease and Desist Orders and Cleanup and Abatement Orders from the State Water Resources Control Board (Water Code Sections 13301 and 13304)
5. List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by the DTSC

The Phase I ESA included an environmental database search in accordance with the American Standard for Testing and Materials (ASTM) Standard E 1527-13, which includes the above-listed Cortese List databases. A summary of the database search is included in the Phase I ESA (Appendix F). The database search identified 150 N Santa Anita Avenue and 180 N Santa Anita Avenue. These listings were administrative in nature, and were associated with regulated dental waste disposal, hazardous material storage at the Verizon Tower, asbestos removal (discussed above), and hazardous material handling associated with former businesses. These listings do not indicate a release to the environment and are therefore not considered to be contaminated sites.

[1] The Phase I ESA Report states the asbestos removal occurred in 2019, but the referenced EDR Report notes the asbestos removal as 2016. It is likely the year was reported in error within the report. This potential error does not change findings or impacts associated with the asbestos removal effort.

The Phase I ESA identified an Area of Concern (AOC) within 528 feet of the site for facilities which may handle petroleum hydrocarbons in quantities which may be of concern, and within 1,760 feet for non-petroleum products, such as solvents, in quantities which may be of concern (e.g. aboveground storage tanks, underground storage tanks). Ten sites were identified within these AOCs, and the Phase I ESA identified these as potential RECs and VECs based on the nature of the business and proximity to the Project site, although there is no documented release or contamination at these facilities. Due to the proximity of these sites and the nature of their business, the Phase I ESA recommended soil and soil vapor sampling to assess if there are impacts on the Project site. As these sites were identified as "potential RECs," Dudek followed up with a database review to determine if they are likely to impact the proposed Project:

Sites with Petroleum Hydrocarbons

- 214 N Santa Anita Avenue: This site was the former lumberyard (1950 – 1995), and has been an REI retail store since at least 2004. As observed in historical aerials (see Phase I ESA), the site was fully redeveloped to construct the REI store. No regulatory documents indicate impacts associated with former petroleum identified during this construction, and the UST is identified in the "historical UST database." REI has since reported hazardous waste generation associated with their operations, with no reported violations or releases. Based on the age of this listing, full site redevelopment, and the fact that groundwater is likely greater than 60 feet bgs, it is unlikely this former UST has impacted the environmental condition of the Project site.
- 23 Santa Clara Street: this site is also listed as Arcadia Lumber and is adjacent to the other former Arcadia Lumber site (214 N Santa Anita Avenue). This site address has a "removed file" with Los Angeles County Department of Public Works (LA DPW; LADPW 2021), indicating the permit is no longer active. There are no active listings on CalEPA Regulated Site Portal or LA DPW associated with this site. Based on this information, it is likely the UST was removed, and does not present a current potential impact to the Project site.
- 21 W Santa Clara Street: this site, Pacific Bell has a removed UST file with LA DPW (LADPW 2021). Pacific Bell also has a completed voluntary cleanup (GeoTracker 2021) which received regulatory closure in 1987, the details of which are not reported. The site is not currently listed on the CalEPA Regulated Site Portal, which indicates there is not active chemical storage on the site. Based on the available information, it does not appear this site has impacted the environmental condition of the Project site.
- 145-147 N Santa Anita Avenue: This site was a former parking lot which had two 1,000-gallon USTs. The last use of each tank was reported to be in 1978. As observed in historical aerials (Phase I ESA), the site has been redeveloped since 1978, and is now a Mercedes Benz dealership, construction of which began in 2015. Based on the age of this listing, full site redevelopment, and the fact that groundwater is likely greater than 60 feet bgs, it is unlikely this former UST has impacted the environmental condition of the Project site.
- 101 N Santa Anita Avenue: This is the current location of the Mercedes Benz dealership. They have active permits for aboveground petroleum storage, chemical storage, and generation of hazardous waste associated with their automotive service center. According to the CalEPA Regulated Site Portal (CalEPA 2021), site operations began in 2016. Various violations are noted from 2016 and 2019, all administrative in nature (missing paperwork or improper implementation of tank testing), and all of which were returned to compliance with regulatory inspection. Based on this information, this listing does not likely impact the environmental condition of the Project site.

Sites with Solvents

- One site, 149/151 N Santa Anita Avenue, is located adjacent to the Project site to the west. As discussed above, this site was part of the redevelopment for the present-day Mercedes Benz dealership, which was constructed in 2015. While it is unlikely there are residual impacts due to former dry cleaning operations, due to recent redevelopment and current development standards and environmental evaluation requirements, there is a potential that impacts are present. As discussed in the Historical Site Uses section, the Project site also has potential impacts on the western side due to former laundry operations. As this historical use was on the western side of the Project site, and 149/151 is located adjacent to the west of the Project site, any impacts from either site will be identified during the soil and soil vapor survey (recommended in the Phase I ESA).
- The other sites, 231 N 1st Avenue, 104 N 1st Avenue, and 408 N Santa Anita Avenue, are all greater than 500 feet from the Project site. As groundwater is likely greater than 60 feet bgs, and these sites are not adjacent to the Project site, it is unlikely they have impacted the environmental condition of the Project site. Additionally, these sites are not listed in the LA DPW site or the CalEPA Regulated Site Portal, indicating they do not have active chemical storage activities.

Schools

There are no current or proposed schools located within 0.25-mile of the Project site (CSCD 2021; CDE 2021). The nearest schools are First Avenue Middle School, 301 S 1st Avenue, located 0.31 miles south of the Project site, and Rancho Learning Center Alternative School, 150 South Third Avenue, located 0.41 miles southeast of the Project site.

Airports

The nearest airport is San Gabriel Valley Airport, located approximately 3.47 miles south of the Project site. The Project site is not located within any of the designated safety zones for the airport, as defined in the airport layout plans (AECOM 2015).

Fire Hazards and Emergency Response

The Project site is located in the City of Arcadia, a highly urbanized area that is not subject to wildfire, and is therefore not designated a Very High Fire Hazard Severity Zone (CAL FIRE 2011). Arcadia is located within a Local Responsibility Area for fire hazards. Arcadia Fire Department is the local agency for fires, environmental safety, and emergency response.

The City of Arcadia has an Emergency Preparedness Program, the purpose of which is to prepare for and respond effectively to major emergencies. The Program is led by the Arcadia Fire Department Battalion Chief, who is also the Emergency Preparedness Coordinator. The City of Arcadia General Plan includes Safety Elements which designate policies for safe hazardous material handling, fire prevention procedures, and emergency response (Arcadia 2010).

Los Angeles County Department of Public Works as published disaster routes for each city within its jurisdiction (LAPDW 2008). The City of Arcadia is located within LA DPW Disaster Management Area D. The Project site is not located on a designated disaster route. The nearest disaster routes are Huntington Drive to the south and I-210 to the north.

4.7.2 Relevant Plans, Policies, and Ordinances

Federal

U.S. Environmental Protection Agency

Title 40 USC, Chapter 1, Subchapter I, Parts 260-265 – Solid Waste Disposal Act/ Federal Resource Conservation and Recovery Act of 1976

The Solid Waste Disposal Act, as amended and revised by the Resource Conservation and Recovery Act (RCRA), establishes requirements for the management of solid wastes (including hazardous wastes), landfills, USTs, and certain medical wastes. The statute also addresses program administration; implementation and delegation to the states; enforcement provisions and responsibilities; and research, training, and grant funding. Provisions are established for the generation, storage, treatment, and disposal of hazardous waste, including requirements addressing generator record keeping, labeling, shipping paper management, placarding, emergency response information, training, and security plans.

Title 40 USC, Chapter 1, Subchapter I, Part 273 – Universal Waste

This regulation governs the collection and management of widely generated waste, including batteries, pesticides, mercury-containing equipment, and bulbs. This regulation streamlines the hazardous waste management standards and ensures that such waste is diverted to the appropriate treatment or recycling facility.

Title 40 USC, Chapter 1, Subchapter D, Part 112 – Oil Pollution Prevention

Oil Pollution Prevention regulations require the preparation of a Spill Prevention, Control, and Countermeasure (SPCC) Plan if oil is stored in excess of 1,320 gallons in aboveground storage (or have a buried capacity of 42,000 gallons). SPCC regulations place restrictions on the management of petroleum materials and, therefore, have some bearing on hazardous materials management.

Title 40 USC, Chapter 1, Subchapter C, Part 61 – National Emission Standards for Hazardous Air Pollutants, Subpart M – National Emission Standard for Asbestos

This regulation established National Emission Standards for Hazardous Air Pollutants (NESHAP) and names ACM as one of these materials. ACM use, removal, and disposal are regulated by the U.S. Environmental Protection Agency (USEPA) under this law. In addition, notification of friable ACM removal prior to a proposed demolition project is required by this law.

Title 42 U.S. Code of Federal Regulations, Chapter 116 – Emergency Planning and Community Right-to-Know Act

The Emergency Planning and Community Right-to-Know Act provides for public access to information about chemical hazards. The Emergency Planning and Community Right-to-Know Act and its regulations included in United States Code (USC) Title 40 USC Parts 350–372 establish four types of reporting obligations for facilities storing or managing specified chemicals: emergency planning, emergency release notification, hazardous chemical storage reporting requirements, and toxic chemical release inventory. USEPA maintains a database, termed the Toxic Release Inventory, which includes information on reportable releases to the environment.

Title 15 USC, Chapter 53, Subchapter I, Section 2601 et seq. – Toxic Substances Control Act of 1976

The Toxic Substances Control Act of 1976 empowers USEPA to require reporting, record-keeping, and testing, as well as to place restrictions on the use and handling of chemical substances and mixtures. This regulation phased out the use of asbestos and ACM in new building materials and also sets requirements for the use, handling, and disposal of ACM as well as for lead-based paint (LBP) waste. As discussed above, USEPA has also established NESHAP, which govern the use, removal, and disposal of ACM as a hazardous air pollutant and mandate the removal of friable ACM before a building is demolished and require notification before demolition. In addition to asbestos, ACM, and LBP requirements, this regulation also banned the manufacturing of polychlorinated biphenyls (PCBs) and sets standards for the use and disposal of existing PCB-containing equipment or materials.

Regional Screening Levels

The USEPA provides regional screening levels (RSLs) for chemical contaminants to provide comparison values for residential and commercial/industrial exposures to soil, air, and tap water (drinking water). RSLs are available on the USEPA's website and provide a screening level calculation tool to assist risk assessors, remediation project managers, and others involved with risk assessment and decision-making. RSLs are also used when a site is initially investigated to determine if potentially significant levels of contamination are present to warrant further investigation. In California, the DTSC's Human and Ecological Risk Office (HERO) incorporated the USEPA RSLs into the HERO human health risk assessment. HERO created Human Health Risk Assessment Note 3, which incorporates HERO recommendations and DTSC-modified screening levels (DTSC-SLs) based on review of the USEPA RSLs. The DTSC-SL should be used in conjunction with the USEPA RSLs to evaluate chemical concentrations in environmental media at California sites and facilities.

U.S. Department of Labor, Occupational Safety and Health Administration

Title 29 USC, Part 1926 et seq. – Safety and Health Regulations for Construction

These standards require employee training; personal protective equipment; safety equipment; and written procedures, programs, and plans for ensuring worker safety when working with hazardous materials or in hazardous work environments during construction activities, including renovations and demolition projects and the handling, storage, and use of explosives. These standards also provide rules for the removal and disposal of asbestos, lead, LBP, and other lead materials. Although intended primarily to protect worker health and safety, these requirements also guide general facility safety. This regulation also requires that an engineering survey is prepared prior to demolition.

Title 29 USC, Part 1910 et seq. – Occupational Safety and Health Standards

Under this regulation, facilities that use, store, manufacture, handle, process, or move hazardous materials are required to conduct employee safety training; inventory safety equipment relevant to potential hazards; have knowledge on safety equipment use; prepare an illness prevention program; provide hazardous substance exposure warnings; prepare an emergency response plan, and prepare a fire prevention plan.

U.S. Department of Transportation

Title 49 USC, Part 172, Subchapter C – Shipping Papers

The Department of Transportation established standards for the transport of hazardous materials and hazardous wastes. The standards include requirements for labeling, packaging, and shipping hazardous materials and hazardous wastes, as well as training requirements for personnel completing shipping papers and manifests.

Federal Aviation Administration

Title 14 USC, Chapter 1, Subchapter E, Part 77 – Aeronautics and Space – Safe, Efficient Use, and Preservation of the Navigable Airspace

This regulation establishes requirements for notifying the Federal Aviation Administration (FAA) of certain construction activities and alterations to existing structures, in order to ensure there are no obstructions to navigable airspace. For example, projects that include construction or alteration exceeding 200 feet in height above ground level are required to notify the FAA.

Federal Response Plan

The Federal Response Plan of 1999, as amended in 2003 (FEMA 2003), is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that (1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; (2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and (3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a presidential declaration of a major disaster or emergency.

International Fire Code

The International Fire Code (IFC), created by the International Code Council, is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The IFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The IFC and the International Building Code use a hazard classification system to determine what measures are required to protect against structural fires. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, IFC employs a permit system based on hazard classification. The IFC is updated every 3 years.

State

California Unified Program for Management of Hazardous Waste and Materials

California Health and Safety Code, Division 20, Chapter 6.11, Sections 25404–25404.9 – Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

Under the California Environmental Protection Agency, the DTSC and Enforcement and Emergency Response Program administer the technical implementation of California's Unified Program, which consolidates the

administration, permit, inspection, and enforcement activities of several environmental and emergency management programs at the local level. CUPAs implement the hazardous waste and materials standards. This program was established under the amendments to the California Health and Safety Code (HSC) made by Senate Bill 1082 in 1994. The programs that make up the Unified Program are as follows:

- Aboveground Petroleum Storage Act Program
- Area Plans for Hazardous Materials Emergencies
- California Accidental Release Prevention Program
- Hazardous Materials Release Response Plans and Inventories (Hazardous Materials Business Plans [HMBPs])
- Hazardous Material Management Plan and Hazardous Material Inventory Statements
- Hazardous Waste Generator and On-site Hazardous Waste Treatment (Tiered Permitting) Program
- Underground Storage Tank Program

The CUPA for the Project site is the Los Angeles County Fire Department, Health Hazardous Materials Division.

Title 19 CCR, Chapter 2, Subchapter 3, Sections 2729-2734/California HSC Division 20, Chapter 6.95, Sections 25500–25520

This regulation requires the preparation of an HMBP by facility operators. The HMBP identifies the hazards, storage locations, and storage quantities for each hazardous chemical stored on-site. The HMBP is submitted to the CUPA for emergency planning purposes. The Project site is currently subject to these requirements and there is an HMBP in place.

Hazardous Waste Management

Title 22 CCR, Division 4.5 – Environmental Health Standards for the Management of Hazardous Waste

In California, the DTSC regulates hazardous wastes. These regulations establish requirements for the management and disposal of hazardous waste in accordance with the provisions of the California Hazardous Waste Control Act and federal RCRA. As with federal requirements, waste generators must determine if their wastes are hazardous according to specified characteristics or lists of wastes. Hazardous waste generators must obtain identification numbers; prepare manifests before transporting waste off-site; and use only permitted treatment, storage, and disposal facilities. Standards also include requirements for record keeping, reporting, packaging, and labeling. Additionally, while not a federal requirement, California requires that hazardous waste be transported by registered hazardous waste transporters.

In addition, Chapter 31 – Waste Minimization, Article 1 – Pollution Prevention and the Hazardous Waste Source Reduction and Management Review of these regulations require that generators of 12,000 kilograms per year of typical, operational hazardous waste evaluate their waste streams every four years and, as applicable, select and implement viable source reduction alternatives. This Act does not apply to non-typical hazardous waste, including ACM and PCBs, among others.

Title 22 California HSC, Division 20, Chapter 6.5 – California Hazardous Waste Control Act of 1972

This legislation created the framework under which hazardous wastes must be managed in California. It provides for the development of a state hazardous waste program (regulated by DTSC) that administers and implements the provisions of the federal RCRA program. It also provides for the designation of California-only hazardous wastes and development of standards that are equal to or, in some cases, more stringent than, federal requirements. The Certified Unified Program Agencies (CUPA) is responsible for implementing some elements of the law at the local level.

Human Health Risk Assessment Note 3 –DTSC-Modified Screening Levels

Human Health Risk Assessment Note Number 3 presents recommended screening levels (derived from the USEPA RSLs using DTSC-modified exposure and toxicity factors) for constituents in soil, tap water, and ambient air. The DTSC-SL should be used in conjunction with the USEPA RSLs to evaluate chemical concentrations in environmental media at California sites and facilities.

Aboveground and Underground Petroleum Storage Tanks

Title 22 California HSC, Division 20, Chapter 6.67, Sections 25270 to 25270.13 – Aboveground Petroleum Storage Act

This law applies if a facility is subject to SPCC regulations under Title 40 USC Part 112, or if the facility has 10,000 gallons or more of petroleum in any or combination of ASTs and connecting pipes. If a facility exceeds these criteria, it must prepare a SPCC plan.

Low-Threat Underground Storage Tank Case Closure Policy

This policy applies to petroleum UST sites subject to Chapter 6.7 of the Health and Safety Code. This policy establishes both general and media-specific criteria. If both the general and applicable media-specific criteria are satisfied, then the leaking UST case is generally considered to present a low threat to human health, safety and the environment. This policy recognizes, however, that even if all of the specified criteria in the policy are met, there may be unique attributes of the case or site-specific conditions that increase the risk associated with the residual petroleum constituents. In these cases, the regulatory agency overseeing corrective action at the site must identify the conditions that make case closure under the policy inappropriate.

Regional Water Boards and local agencies have been directed to review all cases in the petroleum UST Cleanup Program using the framework provided in this policy. These case reviews shall, at a minimum, include the following for each UST case:

1. Determination of whether or not each UST case meets the criteria in this policy or is otherwise appropriate for closure based on a site-specific analysis.
2. If the case does not satisfy the criteria in this policy or does not present a low-risk based upon a site-specific analysis, impediments to closure shall be identified.
3. Each case review shall be made publicly available on the State Water Board's GeoTracker web site in a format acceptable to the Executive Director.

Environmental Cleanup Levels

Environmental Screening Levels

Environmental Screening Levels (ESLs) provide conservative screening levels for over 100 chemicals found at sites with contaminated soil and groundwater. They are intended to help expedite the identification and evaluation of potential environmental concerns at contaminated sites. The ESLs were developed by San Francisco Bay Regional Water Quality Control Board; however, they are used throughout the state. While ESLs are not intended to establish policy or regulation, they can be used as a conservative screening level for sites with contamination. Other agencies in California currently use the ESLs (as opposed to RSLs). In general, the ESLs could be used at any site in the State of California, provided all stakeholders agree (SFBRWQCB 2019). In Dudek's recent experience, regulatory agencies in the Southern California region use ESLs as regulatory cleanup levels. The ESLs are not generally used at sites where the contamination is solely related to a LUST; those sites are instead subject to the Low-Threat Underground Storage Tank Closure Policy.

California Integrated Waste Management Board

Title 14 CCR, Division 7, Chapter 8.2 – Electronic Waste Recovery and Recycling Act of 2003

This regulation sets requirements regarding the use and disposal of hazardous substances in electronics. When discarded, the DTSC considers the following materials manufactured before 2006 to be hazardous waste: cathode ray tube devices, liquid crystal display (LCD) desktop monitors, laptop computers with LCD displays, LCD televisions, plasma televisions, and portable DVD Players with LCD screens.

California Department of Transportation/California Highway Patrol

Title 13 CCR, Division 2, Chapter 6

California regulates the transportation of hazardous waste originating or passing through the state. The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) have primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies. CHP enforces materials and hazardous waste labeling and packing regulations that prevent leakage and spills of material in transit and provides detailed information to cleanup crews in the event of an incident. Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are all part of the responsibility of CHP. CHP conducts regular inspections of licensed transporters to ensure regulatory compliance. Caltrans has emergency chemical spill identification teams at locations throughout the state. Hazardous waste must be regularly removed from generating sites by licensed hazardous waste transporters. Transported materials must be accompanied by hazardous waste manifests.

Occupational Safety and Health

Title 8 CCR – Safety Orders

Under the California Occupational Safety and Health Act of 1973, the California Occupational Safety and Health Administration (CalOSHA) is responsible for ensuring safe and healthful working conditions for California workers. CalOSHA assumes primary responsibility for developing and enforcing workplace safety regulations in Title 8 of the California Code of Regulations (CCR). CalOSHA hazardous substances regulations include requirements for safety training, availability of safety equipment, hazardous substance exposure warnings, and emergency action and fire

prevention plan preparation. CalOSHA also enforces hazard communication program regulations, which contain training and information requirements, including procedures for identifying and labeling hazardous substances. The hazard communication program also requires that Material Safety Data Sheets be available to employees and that employee information and training programs be documented.

In Division 1, Chapter 4, Subchapter 4 – Construction Safety Orders of Title 8, construction safety orders are listed and include rules for demolition, excavation, explosives work, working around fumes and vapors, pile driving, vehicle and traffic control, crane operation, scaffolding, fall protection, and fire protection and prevention, among others.

CalOSHA Asbestos and Carcinogen Unit enforces asbestos standards in construction, shipyards, and general industry. This includes identification and removal requirements of asbestos in buildings, as well as health and safety requirements of employees performing work under the Asbestos-In-Construction regulations 8 CCR 1529. Only a CalOSHA-Certified Asbestos Consultant can provide asbestos consulting (as defined by the Business and Professions Code, 7180–7189.7, and triggered by the same size and concentration triggers as for registered contractors). These services include building inspection, abatement project design, contract administration, supervision of site surveillance technicians, sample collection, preparation of asbestos management plans, and clearance air monitoring.

Asbestos and Air Quality

Enforcement of the NESHAP Regulation, HSC Section 39658(b)(1)

The California Air Resources Board is responsible for overseeing compliance with the federal Asbestos NESHAPs in Los Angeles County. The Asbestos NESHAP Program enforces compliance with the federal NESHAP regulation for asbestos and investigates all related complaints, as specified by HSC Section 39658(b)(1). Of the 35 air districts in California, 16 of these districts do not have an asbestos program in place. In these "non-delegated" districts, a demolition/renovation notification is required for compliance with the Asbestos NESHAP. (This notification is not equivalent to a permit.) The California Air Resources Board reviews and investigates the notifications. The program also administers two annual statewide asbestos NESHAP task force meetings for air districts and USEPA to facilitate communication and enforcement continuity, and assists USEPA in training district staff to enforce the asbestos NESHAP.

Contractors State License Board

The California Department of Consumer Affairs Contractors State License Board manages the licensing of asbestos abatement contractors.

Lead-Based Paint

The California Department of Public Health enforces lead laws and regulations related to the prevention of lead poisoning in children, prevention of lead poisoning in occupational workers, accreditation and training for construction-related activities, lead exposure screening and reporting, disclosures, and limitations on the amount of lead found in products. Accredited lead specialists are required to find and abate lead hazards in a construction project and to perform lead-related construction work in an effective and safe manner. The specific regulations are as follows:

California Health and Safety Code Sections 124125 to 124165

Declared childhood lead exposure as the most significant childhood environmental health problem in the state. Established the Childhood Lead Poisoning Prevention Program and instructed it to continue to take steps necessary to reduce the incidence of childhood lead exposure in California.

California Health and Safety Code Sections 105275 to 105310

Reaffirmed California's commitment to lead poisoning prevention activities; provided the California Department of Public Health with broad mandates on blood lead screening protocols, laboratory quality assurance, identification and management of lead exposed children, and reducing lead exposures.

California Health and Safety Code Section 105250

Establishes a program to accredit lead-related construction training providers and certify individuals to conduct lead-related construction activities.

California Civil Code Section 1941.1; California Health and Safety Code Sections 17961, 17980, 124130, 17920.10, 105251 to 105257

Deems a building to be in violation of the State Housing Law if it contains lead hazards, and requires local enforcement agencies to enforce provisions related to lead hazards. Makes it a crime for a person to engage in specified acts related to lead hazard evaluation, abatement, and lead-related constructions courses, unless certified or accredited by the Department. Permits local enforcement agencies to order the abatement of lead hazards or issue a cease and desist order in response to lead hazards.

California Civil Code Sections 1102 to 1102.16

Requires the disclosure of known lead-based paint hazards upon sale of a property.

California Education Code Sections 32240 to 32245

Implemented a lead poisoning prevention and protection program for California schools for a survey to ascertain risk factors that predicted lead contamination in public schools. The survey was completed in 1998. Findings of the survey are under Materials and Products.

California Labor Code Sections 6716 to 6717

Provides for the establishment of standards that protect the health and safety of employees who engage in lead-related construction work, including construction, demolition, renovation, and repair.

California Health and Safety Code Sections 116875 to 116880

Requires the use of lead-free pipes and fixtures in any installation or repair of a public water system or in a facility where water is provided for human consumption.

California Health and Safety Code Sections 105185 to 105197

Establishes an occupational lead poisoning prevention program to register and monitor laboratory reports of adult lead toxicity cases, monitor reported cases of occupational lead poisoning to ascertain lead poisoning sources, conduct investigations of take-home exposure cases, train employees and health professionals regarding occupational lead poisoning prevention, and recommended means for lead poisoning prevention.

California Building Standards Commission

Title 24 of the CCR – California Building Standards Code

The California Building Standards Code is a compilation of three types of building standards from three different sources:

- Building standards that have been adopted by state agencies without change from building standards contained in national model codes;
- Building standards that have been adopted and adapted from the national model code standards to meet California conditions; and
- Building standards, authorized by the California legislature, that constitute extensive additions not covered by the model codes that have been adopted to address particular California concerns.

Among other rules, the Code contains requirements regarding the storage and handling of hazardous materials. The Chief Building Official at the local government level (i.e., City of Arcadia) must inspect and verify compliance with these requirements prior to issuance of an occupancy permit.

California Building Code – Chapter 7A

This chapter of the California Building Code establishes minimum standards for buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area to resist the intrusion of flames or burning embers projected by a vegetation fire.

California Forestry and Fire Protection

2010 Strategic Fire Plan for California

Public Resources Code Sections 4114 and 4130 authorize the State Board of Forestry to establish a fire plan that establishes the levels of statewide fire protection services for State Responsibility Area lands. These levels of service recognize other fire protection resources at the federal and local level that collectively provide a regional and statewide emergency response capability. In addition, California's integrated mutual aid fire protection system provides fire protection services through automatic and mutual aid agreements for fire incidents across all ownerships. The California Fire Plan is the state's road map for reducing the risk of wildfire through planning and prevention to reduce firefighting costs and property losses, increase firefighter safety, and to contribute to ecosystem health.

California State Fire Marshal

Title 19 CCR, Division 1, Chapter 10 – Explosives

This regulation addresses the sale, transportation, storage, use, and handling of explosives in California. Requirements for obtaining permits from the local Fire Chief having jurisdiction and blasting guidelines (such as blasting times, warning devices, and protection of adjacent structures and utilities) are also explained in Chapter 10 of Title 19.

California Emergency Services Act

Under the Emergency Services Act (California Government Code, Section 8550 et seq.), the State of California developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous materials or hazardous waste is an integral part of the plan, which is administered by the Governor's Office of Emergency Services. The Office of Emergency Services coordinates the responses of other agencies, including the EPA, California Highway Patrol, Regional Water Quality Control Boards, air quality management districts, and county disaster response offices.

California Accidental Release Prevention Program

Similar to the USEPA Risk Management Program, the California Accidental Release Prevention (CalARP) Program (19 CCR 2735.1 et seq.) regulates facilities that use or store regulated substances, such as toxic or flammable chemicals, in quantities that exceed established thresholds. Under the regulations, industrial facilities that handle hazardous materials above threshold quantities are required to prepare and submit an HMBP to the local CUPA via the California Environmental Reporting System. As part of the HMBP, a facility is further required to specify applicability of other state regulatory programs. The overall purpose of CalARP is to prevent accidental releases of regulated substances and reduce the severity of releases that may occur. The CalARP Program meets the requirements of the USEPA Risk Management Program, which was established pursuant to the Clean Air Act Amendments.

California Dig Alert

California Government Code 4216

In accordance with California Government Code 4216.2, an excavator planning to conduct an excavation shall notify the appropriate regional notification center of the intent to excavate between 2 and 14 calendar days prior to excavation activities. When the excavation is proposed within 10 feet of a "high priority subsurface installation," which includes high pressure natural gas and petroleum pipelines, the operator of the high priority subsurface installation shall notify the excavator of the existing of the installation and set up an onsite meeting to determine actions required to verify location and prevent damage to the installation. The excavator shall not begin excavating until the onsite meeting is complete.

Regional and Local

South Coast Air Quality Management District

Rule 1403: Work Practice Requirements for Asbestos

South Coast Air Quality Management District Rule 1403 governs work practice requirements for asbestos in all renovation and demolition activities. The rule includes requirements for asbestos surveying, notifications, ACM removal procedures, schedules, handling and clean-up procedures, and storage, disposal, and landfill requirements for waste materials. All operators are also required to maintain records and use appropriate labels, signs, and markings.

City of Arcadia General Plan

Hazardous Materials and Waste Management Element

The City of Arcadia has adopted multiple goals associated with hazardous material and waste management in order to assist in meeting state, federal, and county goals. The City's General Plan was created to further enforce federal, state, and local laws and promote public awareness for proper handling and disposal of household hazardous wastes. The following policies have been adopted by the City (Arcadia 2010).

Policy S-4.1: Adopt and strictly enforce the most current regulations governing hazardous waste management.

Policy S-4.2: Minimize exposure of the environment, critical facilities, and residences to hazardous materials.

Policy S-4.3: Ensure that all businesses and hazardous materials transportation services within the City adhere to the requirements of the City's hazardous material plans and programs.

Policy S-4.4: Provide a high level of public awareness of all County and City household hazardous waste programs and activities.

Emergency Services

The City of Arcadia's General Plan also includes goals associated with emergency services, including fire protection. The City's main strategies for public health and safety are 1) prevent disasters and 2) develop responses that minimize the extent of distress due to disasters. The following policies have been adopted by the City (Arcadia 2010), and pertain to the proposed Project.

Policy S-5.1: Involve Police and Fire Department personnel as an integral part of the new development and redevelopment review process.

Policy S-5.2: Integrate new technologies and crime and fire prevention concepts into the design and construction of new, remodeled, and replaced development.

Policy S-5.3: Maintain fire and police stations, facilities, and services sufficient to meet high public safety standards.

Policy S-5.4: Monitor the development of technology for fire and law enforcement services, and acquire and use the latest technology and funding permits.

Policy S-5.5: Maintain a high level of community engagement in crime prevention and community safety.

Policy S-5.9: Provide a full range of services intended to instill a sense of safety and well being in the community, including emergency medical service, fire prevention and education, protection from fire hazards, hazardous materials, domestic terrorism, and urban search and rescue.

Policy S-5.11: Require new development projects to pay their fair share of costs associated with any necessary increases in public safety equipment, facilities, and staffing to provide life safety protection.

4.7.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts related to hazards and hazardous materials are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to hazards and hazardous material would occur if the Project 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 65762.5 and, as result, would it create a significant hazard to the public or the environment.
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area.
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

4.7.4 Impacts Analysis

Threshold 4.7a Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Short-Term Construction Impacts

As discussed in Chapter 3, Project Description, the proposed Project includes the following:

- Demolition of the structures on the Project site, except the 8-story office building and 1-story bank drive through within APN 5773-006-036, which would remain in place.
- Four of the existing parcels will be merged into two legal lots and a portion of the eastern alley will be vacated.
- Construction of a 7-story multi-family residential building containing 319 dwelling units within 2.96 gross acres. This would include a mix of studios, one-bedroom units, two-bedroom units, and live-work units. The residential units would be on levels 2 through 7. Included residential amenities would be located on levels 1, 2, 3, and 7 of the building.
- Construction of aboveground parking (within levels 1 and 2 of the residential building) and subterranean parking (2 levels) beneath the residential building.
- Construction of an outdoor plaza between the existing 8-story office building and the proposed residential building.
- Renovation of 750 square feet of space within the lobby of the first floor of the existing 8-story office building for an approximately 750 square-foot café. Currently, the lobby contains a coffee counter.

Construction would require the use of heavy equipment and machinery. Hazardous materials that may be used during construction and demolition activities of the proposed Project include, but are not limited to, gasoline, diesel fuel, lubricants, grease, adhesives, welding gases, solvents, paints, and vehicle and equipment-maintenance related materials. These materials would be stored in designated construction staging areas within the boundaries of the Project site and the construction contractor must ensure that they would be transported, handled, used, stored, and disposed of in accordance with all applicable federal, state, and local laws and regulations. Proper use, handling, and storage of materials must be conducted in accordance with the manufacturer's specifications and applicable local, state, and federal law. The use of these hazardous materials for their intended purpose would not pose a significant risk to the public or environment. Many of the anticipated construction materials may be recycled. Hazardous wastes that cannot be recycled would be transported by a licensed hazardous waste hauler following manifest procedures disposed of at an appropriately permitted offsite facility. The use and handling of these substances are subject to applicable federal, state, and local health and safety laws and regulations, as summarized in Section 4.7.2, Relevant Plans, Policies, and Ordinances, which would minimize health risk to the public associated with hazardous materials.

As noted in the asbestos survey, each of the three buildings scheduled for demolition contain asbestos. Lead-based paint was not identified. Additionally, many commercial buildings contain small amounts of polychlorinated biphenyls (PCBs), mercury, and other universal wastes in such items as light fixtures and thermostats. Demolition of structures that contain asbestos or other hazardous materials/wastes could result in a hazard during transport and disposal of the construction debris, if not properly identified and managed. MM-HAZ-1 requires proper abatement of asbestos and identification and abatement of other hazardous materials and universal wastes prior to demolition and construction activities. This will include the area scheduled for renovation within the 8-story office building. With implementation of MM-HAZ-1, impacts associated with the routine transport of asbestos, universal wastes, and hazardous materials for offsite disposal during construction would be less than significant with mitigation incorporated.

Long-Term Operational Impacts

The operational phase of the proposed Project would not be expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Hazardous materials would be limited to use of commercially available cleaning products, landscaping chemicals and fertilizers, and various other

commercially available substances. Such chemicals are typically used in an urban environment, and when used in accordance with manufacturer's recommendations and applicable regulations, do not result in a risk to human health or the environment. The routine transport, use, and/or disposal of these substances would be subject to applicable federal, state, and local health and safety laws and regulations, as summarized in Section 4.7.2, which would minimize health risk to the public associated with hazardous materials. Therefore, impacts would be less than significant and no mitigation is required.

Threshold 4.7b Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Short-Term Construction Impacts

As discussed above, the proposed Project has the potential to expose the public and the environment to hazards associated with on-site releases of hazardous materials including asbestos, PCB-containing items, and universal wastes present in the buildings scheduled for demolition. Management of hazardous materials and waste during pre-demolition abatement activities would be addressed by MM-HAZ-1. Hazardous materials present in the 8-story office building, including the items identified for the Verizon Wireless cell tower and dental offices, are not expected to be impacted by construction, as this building is not scheduled for demolition, and renovation would only occur on the first floor lobby area which does not contain these hazardous items. However, as noted above, MM-HAZ-1 would be implemented in the areas scheduled for renovation. Construction activities would not be conducted in areas where hazardous materials are stored, and impacts associated with existing hazardous materials would be managed under MM-HAZ-1, therefore impacts would be less than significant with mitigation incorporated.

As discussed in the Phase I ESA, Soil and Soil Vapor Investigation, and in Section 4.7.1, Existing Conditions, the northwestern portion of the Project site, in the approximate footprint of the current bank drive through, was a laundry facility from approximately 1949 to 1966. This historical activity (and potentially other surrounding industrial activities) has resulted in soil and soil vapor contamination on the Project site. Concentrations of contaminants of concern in soils do not exceed DTSC SLs for residential use; however, they do profile as regulated non-hazardous waste, the transportation and disposal of which is regulated by the State. Should these materials be transported offsite without proper handling procedures, this could result in a foreseeable upset or accident condition involving the release of hazardous materials to the environment. MM-HAZ-2 requires a soil management plan (SMP) be prepared to properly handle, transport, and dispose of contaminated soils removed from the Project site.

The Soil and Soil Vapor Investigation also identified elevated concentrations of benzene and PCE in soil vapor above applicable residential screening levels (see Figure 4.7-1). These detected concentrations are also above applicable screening levels for a commercial/industrial setting. Therefore, a potential accident condition could occur during excavation and earth moving activities exposing onsite construction workers to contaminated soil vapor. The SMP required by MM-HAZ-2 will also include health and safety procedures, including breathing zone monitoring, to prevent exposure of onsite workers to elevated concentrations of benzene and PCE.

With adherence to federal, state, and local laws and regulations, and implementation of MM-HAZ-1 and MM-HAZ-2, short-term construction impacts associated with potential upset and accident conditions involving the release of hazardous materials to the environment would be less than significant with mitigation incorporated.

Long-Term Operational Impacts

According to the Los Angeles County Department of Public Works (LADPW 2021), the Project site is not located within 300 feet of an oil or gas well or 1,000 feet of a methane-producing site; therefore, methane impacts are not anticipated.

The Soil and Soil Vapor Investigation identified concentrations of benzene and PCE in soil vapor above applicable residential screening levels, which indicates a potential vapor intrusion risk to proposed residential structures to be constructed on the Project site. MM-HAZ-3 requires vapor mitigation be designed and implemented for new structures on the Project site, which will reduce the potential for vapor intrusion to a less than significant level. MM-HAZ-3 also includes indoor air monitoring following construction and occupancy to verify implemented vapor intrusion mitigation measures are adequately mitigation vapor intrusion. PCE and benzene concentrations were detected in soil vapor above DTSC SLs for commercial exposure near the existing commercial buildings. These buildings are proposed to stay operational and the current commercial use would not change as part of the proposed Project. Construction would include excavation of soils and construction of new buildings on the central and western sides of the Project site. These activities are not anticipated to exacerbate existing soil vapor conditions beneath the existing buildings to remain, as the Project site is already completely paved and covered with buildings, therefore pathways of soil vapor exposure in current buildings would not likely change. Additionally, the likely source of soil vapor contamination on the Project site is beneath the existing northwestern building (the site of former laundry facilities), and would not likely be exacerbated or disturbed during construction activities. While there are detected concentrations of PCE and benzene above commercial exposure levels near the buildings to remain as part of the proposed Project, these conditions are currently present on the Project site, and would not likely be exacerbated by construction and operation of the proposed Project. As such, no mitigation is proposed with regard to continued commercial operation of the existing western buildings. With implementation of MM-HAZ-3 Project operational impacts are not anticipated to create a foreseeable upset or accident condition that would release hazardous materials to the environment, and impacts are less than significant with mitigation incorporated.

Threshold 4.7c Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

There are no current or proposed public or private K–12 schools located within 0.25 miles of the Project site. Therefore, the Project would not emit hazardous emissions or handle hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school, and no impacts would occur.

Threshold 4.7d Would the Project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65762.5 and, as a result, would it create a significant hazard to the public or the environment?

The Project site is not listed on or adjacent to a Cortese List site, nor has the Project site been impacted by a Cortese List site. Therefore, the Project would not create a significant hazard to the public or the environment due to its location of a hazardous materials site included on the list compiled under Government Code Section 65762.5, and no impact would occur.

Threshold 4.7e For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?

The Project site is not located within 2 miles of a public use airport, nor is it located within an airport land use plan. Therefore, the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area, and no impact would occur.

Threshold 4.7f Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Short-Term Construction Impacts

Construction of the proposed Project would occur completely within the Project site and would not require road closures. Additionally, the Project site is not located on a designated disaster evacuation route. The City of Arcadia Safety Element Policies S-5.1, S-5.2, and S-5.11 require police and fire department personnel to be involved in the development review process, integration of new technologies for crime and fire prevention in new development and require new developments to pay for costs associated with increased public safety needs. As such, review of the proposed Project as it relates to emergency response and emergency evacuation would be an integral part of the review process within the City of Arcadia, and deficiencies would be remedied, and costs accounted for. As such, impacts would be less than significant.

Long-Term Operational Impacts

The proposed Project would increase residential density at the Project site. As noted above, review of the proposed Project as it relates to emergency response and emergency evacuation would be an integral part of the review process within the City of Arcadia in accordance with policies set forth in the General Plan, Safety Element, and deficiencies would be remedied, and costs accounted for. As such, impacts would be less than significant.

Threshold 4.7g Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The proposed Project is located in a highly urbanized area and is not located within an area of high wildfire hazard. Therefore, people and structures would not be subject to significant risks related to wildland fires, and no impacts would occur.

4.7.5 Cumulative Impact Analysis

For cumulative analysis, the hazardous materials geographic scope is generally restricted to the area immediately surrounding the Project site as the potential for risk is limited to the area immediately surrounding an affected hazardous material site or risk generator. However, other topics associated with human health and safety such as transportation of hazardous materials, wildfire, or airport safety can expand through the surrounding region.

As described above, there are a variety of hazardous material and public health and safety issues that are relevant and applicable to the Project. Many potential impacts related to hazardous materials and public health and safety risks would be minimized due to compliance with federal, state, and local regulatory requirements. These legal

requirements and regulations, as detailed in Section 4.7.2, minimize potential for health and safety risks. Further, mitigation measures are required to reduce potentially significant impacts related to soil contamination.

Cumulative Projects would also be subject to federal, state, and local regulations related to hazardous materials and other public health and safety issues. In a manner similar to the proposed Project, adherence to these regulatory requirements would reduce incremental impacts associated with public exposure to health and safety hazards in each of the affected Project areas. Additionally, most hazardous material and safety-related risks are localized, generally affecting a specific site and immediate surrounding area, thus minimizing the potential for an impact to combine with another Project to create a cumulative scenario. Additionally, implementation of MM-HAZ-1 through MM-HAZ-3 would ensure that Project-related activities would not result in significant impacts; therefore, the proposed Project would not contribute to a cumulatively considerable environmental impact related to hazards and hazardous materials.

Because cumulative Projects would be fully regulated, thus reducing potential for public safety risks, cumulative impacts associated with exposure to hazards and hazardous materials would be less than significant. Through mitigation and compliance with regulatory requirements, the construction or operation of the proposed Project itself would not create significant human or environmental health or safety risks that could combine with other Project impacts to create a significant and cumulatively considerable impact. For these reasons, the proposed Project would not result in cumulatively considerable impacts related to hazards and hazardous materials.

4.7.6 Mitigation Measures

MM-HAZ-1 **Demolition and Abatement Procedures.** Prior to the issuance of a demolition permit, the Project applicant/developer or their designated contractor shall ensure that the demolition contractor's contract specifications incorporate abatement procedures for the removal of materials containing asbestos, as identified in previous surveys, and identification and removal of polychlorinated biphenyls, hazardous material, hazardous wastes, and universal waste items. All abatement work shall be done in accordance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District. Confirmation of adequate removal of such materials shall be provided to the City prior to the issuance of a building permit.

MM-HAZ-2 **Contaminated Soil Management.** Prior to the issuance of a grading permit, the Project applicant/developer or their designated contractor shall prepare a soil management plan (SMP) that outlines the proper screening, handling, characterization, transportation, and disposal procedures for contaminated soils on site. The SMP shall include health and safety and training procedures for workers who may come in contact with contaminated soils. The health and safety procedures shall also include periodic breathing zone monitoring and monitoring for VOCs using a handheld organic vapor analyzer and include required actions to be taken if concentrations of VOCs exceed applicable screening levels for health and safety of onsite workers. The SMP will be based on the findings of the Soil and Soil Vapor Investigation prepared for the Project, will outline areas of known or suspected soil contamination, and will be implemented by the applicant or their designated contractor for all confirmed and suspected contaminated soils which require excavation

and offsite disposal. Contaminated soil shall be managed and disposed of in accordance with applicable federal, state, and local regulations.

MM-HAZ-3 **Vapor Mitigation.** Prior to the issuance of a grading permit, vapor mitigation design features shall be implemented in accordance with the Department of Toxic Substances Control (DTSC) Vapor Intrusion Mitigation Advisory for all future residential buildings and enclosed structures. The construction contractor shall incorporate vapor mitigation design features into building plans that reduce potential vapor intrusion in buildings and enclosed structures on the Project site below DTSC Screening Levels. Vapor mitigation systems may be passive or active in nature, so long as they are designed to prevent vapor contamination on the Project site in accordance with applicable DTSC regulations at the time the systems are designed. Vapor mitigation systems must be reviewed and approved by the permitting agency(ies) (City of Arcadia, County of Los Angeles) prior to construction and prior to issuance of certificate of occupancy. Operation of the Project shall maintain functionality of these features as required to continue protection from vapor intrusion. Following completion of construction and occupancy of the buildings, indoor air monitoring will occur semiannually for one year to verify implemented measures are functioning properly and adequately mitigating vapor intrusion to below residential DTSC Screening Levels. Results shall be submitted to the City of Arcadia for confirmation of the adequacy of the designed systems. If indoor air samples reveal vapor intrusion occurring at levels above applicable DTSC Screening Levels, modifications shall be made, as necessary, to the designed system to improve the efficacy in reducing vapor intrusion to below applicable screening levels.

4.7.7 Level of Significance After Mitigation

The abatement of hazardous materials identified on the Project site would remove the potential for exposure of the public and the environment to accidental release of hazardous materials, as required by MM-HAZ-1. Contaminated soil would be properly managed, transported, and disposed of by following the SMP prepared in accordance with MM-HAZ-2. New structures would be designed and constructed with vapor mitigation measures to prevent intrusion of contaminated soil vapor into the buildings as required by MM-HAZ-3. With mitigation measures MM-HAZ-1, MM-HAZ-2, and MM-HAZ-3, impacts would be less than significant.

4.7.8 References

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Sample Location	Depth (feet bgs)	Concentration (µg/m³) Benzene	PCE
MP1	5	ND	480
	15	ND	410

Sample Location	Depth (feet bgs)	Concentration (µg/m³) Benzene	PCE
MP4	5	ND	410
	15	ND	330

Sample Location	Depth (feet bgs)	Concentration (µg/m³) Benzene	PCE
MP2	5	ND	260
	15	ND	240

Sample Location	Depth (feet bgs)	Concentration (µg/m³) Benzene	PCE
MP3	5	ND	62

Sample Location	Depth (feet bgs)	Concentration (µg/m³) Benzene	PCE
MP5	5	ND	47
	15	5.9	50

SOURCE: City of Arcadia 2021, NearMap 2021, Subsurface Soil and Soil Vapor Investigation, Frey Environmental, Inc., July 22, 2021 (EIR Appendix F4)

DUDEK

0 50 100 Feet

FIGURE 4.7-1

Detected Concentrations of Benzene and PCE in Soil Vapor Above DTSC SLs

Alexan Mixed-Use Development Project

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4.8 Hydrology and Water Quality

This section describes the existing hydrology and water quality conditions of the Alexan Mixed-Use Development Project (Project) site and vicinity, identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, and references. Information contained in this section is based on the following appendix:

Appendix H-1 Conceptual Hydrology and Low Impact Development Report for Residential Apartment Project- Alexan Arcadia, prepared by Psomas

Appendix H-2 Due Diligence Report of Existing Infrastructure, prepared by Psomas

Appendix D-1 Geotechnical Investigation. Alexan Arcadia Proposed Multi-Family Residential Development, 150 North Santa Anita Avenue, Arcadia, California.

Other sources consulted are listed in Section 4.8.8, References.

Comments received in response to the Notice of Preparation (NOP) are summarized in Table 1, Notice of Preparation and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft Environmental Impact Report (EIR). A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR.

4.8.1 Existing Conditions

Surface Water

Los Angeles River Watershed

The Project site is located within the Rio Hondo Watershed, a hydraulic subarea of the larger 834 square mile Los Angeles River Watershed (County of Los Angeles 2021a). The Los Angeles River Watershed is one of the largest in the region and is also one of the most diverse in terms of land use patterns. Approximately 324 square miles of the watershed are covered by forest or open space land including the area near the headwaters which originate in the Santa Monica, Santa Susana, and San Gabriel Mountains. The rest of the watershed is intensely urbanized and the river itself is highly modified, having been lined with concrete along most of its length by the U.S. Army Corps of Engineers (LARWQCB 2014).

Rio Hondo Watershed Subarea

The Rio Hondo subarea drains to the Rio Hondo River, then into the Los Angeles River, and finally out to the Pacific Ocean near the Port of Long Beach. In addition to the Rio Hondo, the watershed subarea includes Alhambra Wash, Rubio Wash, Eaton Wash, Arcadia Wash and Santa Anita Wash. Municipalities that fall within the boundaries of the Rio Hondo Subarea Watershed Area include Pasadena, Arcadia, Montebello, El Monte, Monterey Park, Rosemead, Alhambra, Monrovia, San Gabriel, Temple City, South El Monte, San Marino, Sierra Madre, Duarte, Irwindale, Bradbury, South Pasadena, and Los Angeles County (County of Los Angeles 2021b). Figure 4.8-1, Rio Hondo Watershed Subarea, depicts the boundaries of the watershed in relation to the Project site as well as the greater Los Angeles River Watershed.

Water Quality

Existing, potential or intermittent beneficial uses for the Arcadia Wash, the Santa Anita Wash, and the Rio Hondo Channel, where stormwaters from the City are discharged and for the underlying groundwater basins in the City (Raymond and San Gabriel Valley groundwater basins) include: domestic water supply (MUN); industrial activities (IND); industrial process dependent upon water quality (PROC); agricultural supply (AGR); groundwater recharge (GWR); Water Recreation (REC-1, REC-2); warm water ecosystems (WARM); cold water ecosystems (COLD); terrestrial ecosystems (WILD); rare, threatened or endangered species (RARE); and wetland ecosystems (WET) (LARWQCB 2014). Under Clean Water Act Section 303(d), the State of California is required to develop total maximum daily loads (TMDLs), which define how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. TMDLs have been established for impaired water bodies in throughout California. The Rio Hondo/San Gabriel River Water Quality Group (RH/SGRWQG) identified one impaired water body (Peck Road Park Lake) as well as two impaired receiving waters (Rio Hondo Reach 3 and the Sawpit Wash) within the Rio Hondo subwatershed (RH/SGRWQG 2016)

Storm Drainage

Storm drainage in the City is provided by curbs and gutters along streets, which direct storm water into the catch basins, pipes, and washes that run southerly in or near the City (City of Arcadia 2010). Throughout the City, there are over four miles of City-maintained storm management facilities which connect to regional flood-control and runoff conveyance facilities (City of Arcadia 2013). According to the Rio Hondo/San Gabriel River Water Quality Group's (RH/SGRWQG) Enhanced Watershed Management Program (EWMP) Management Plan (2016), there are at least 150 structural and/or institutional best management practices (BMPs) currently being implemented in the City of Arcadia.[1] These include BMPs related to green infrastructure (e.g., infiltration trenches, cultic storm filters, infiltration facilities, and infiltration drywells), and source control (e.g., gross pollutant separators an catch basin inserts, screens, and filters), as well as institutional BMPs (e.g., covered trash bins, enhanced street sweeping, dog parks, and signage and stenciling) (RH/SGRWQG 2016).

As discussed in the Due Diligence Report of Existing Infrastructure (Appendix H-2), the Project site currently drains via surface runoff into the adjacent Wheeler Avenue to the south and then west along Wheeler Avenue as gutter flow until it discharges into one of two site adjacent catch basins at the northeastern corner of the of the Wheeler Avenue and Santa Anita Avenue intersection (County of Los Angeles 2021c). There is an additional Project site adjacent curb opening catch basin located on the southeast corner of the Santa Clara Street and Santa Anita Avenue intersection. There is also one existing storm drain near the Project site that is maintained by the Los Angeles County Flood Control District (LACFCD). This existing storm drain is a 30-inch reinforced concrete pipe (RCP) that flows north to south below Santa Anita Avenue (County of Los Angeles 2021c). The storm drain is approximately 274 feet west of the Project centerline, and approximately 65 feet west of the western Project site boundary (Santa Anita Avenue frontage). This drain then continues south along Santa Anita Avenue until Huntington Avenue where it turns east and discharges into the Arcadia Wash MS4 outfall, located on Huntington Avenue slightly north of the Arcadia City Hall. Under existing conditions, there are no stormwater infiltration systems (i.e., drywells) installed on the Project site.

[1] According to the RH/SGRWQG Management Plan (2016), there were 306 BMPs reported within the City of Arcadia, however, due to the methodologies behind the record keeping, some of the BMPs identified in the City of Arcadia may have been double counted. As such, this Draft EIR assumes the conservative total of only 150 BMPs.

Table 4.8.1, Peak Flow Rate Under Existing Conditions, shows the existing peak stormwater flow rate on the Project site. The flow rate was calculated using the County of Los Angeles approved and provided Hydrocalc software, based on the 50-year storm event.

Table 4.8-1 Peak Flow Rates under Existing and Proposed Conditions

Size (Acres)	Existing Peak Flow Rate (Q50) (CFS)
2.13 *	8.81

Source: Appendix H-1
CFS = cubic feet per second
* Acreage is only included for the portions of the Project site area where improvements are proposed

Groundwater

The Project Site is located above the Main San Gabriel Groundwater Basin (Main Basin), an adjudicated basin which occupies most of the San Gabriel Valley. It encompasses approximately 107,000 acres and stores approximately 10.4 million acre-feet of water (Watermaster 2020). The Main Basin serves as a natural storage reservoir, transmission system, and filtering medium for wells. It also provides approximately 85 percent of the overall water supply needs of nearly 1.4 million residents overlying the basin (Watermaster 2021).

The Main Basin is an adjudicated basin that requires supplemental recharge in order to replenish and maintain ground water levels. The Main San Gabriel Basin Watermaster (Watermaster) was established as the governing body in 1973 and oversees basin management. The major sources of natural recharge to are infiltration of rainfall on the valley floor and runoff from the nearby mountains, however, a two-decade-long dry period has resulted in low rainfall, minimal runoff, and limited recharge. In 1983, the operational groundwater elevation was 294 feet above mean sea level (amsl), which is the highest level recorded since the basin was adjudicated. In 2018 the groundwater elevation was 169 feet amsl, which represents a historic low (Watermaster 2020). As a result, Main Basin recovery depends largely on Watermaster management actions, including purchasing and importing supplemental State Water Project (SWP) waters. Water is purchased from the Upper San Gabriel Valley Municipal Water District, Three Valleys Municipal Water District, and the San Gabriel Valley Metropolitan Water District.

Since establishment of the Watermaster, groundwater recharge (local and imported water) in the Main Basin has averaged about 150,000 acre-feet per year. The Watermaster established an Operating Safe Yield (OSY) for 2020 of 150,000 acre-feet, however, annual pumping production in 2019-20 was approximately 183,300 acre-feet. Consequently, the Replacement Water obligation including withdrawal from producer cyclic storage, was about 37,200 acre-feet (Watermaster 2020).

Four areas of the Main Basin are Superfund Sites. Contaminants such as Trichloroethylene, Perchloroethylene, Carbon Tetrachloride, Perchlorate, N-Nitrosodimethylamine, and 4-Dioxane impact Whittier Narrows, Puente Basin, Baldwin Park and El Monte areas. There is currently an ongoing effort to clean up the Baldwin Park Operable Unit, whereby responsible parties have agreed to pay tens of millions of dollars towards research, cost recovery, and treatment plant construction

Flooding

The Federal Emergency Management Agency (FEMA) provides flood hazard and risk data to help guide mitigation actions. Flood mapping is an important part of the National Flood Insurance Program, as it is the basis of National Flood Insurance Program regulations and flood insurance requirements. The Project site is not located within a

FEMA-designated Special Flood Hazard Areas and is designated as Zone X (an area of minimal flooding potential) (Appendix H-2).

4.8.2 Relevant Plans, Policies, and Ordinances

Federal

National Flood Insurance Program

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 mandate FEMA to evaluate flood hazards. FEMA provides flood insurance rate maps for local and regional planners to promote sound land use and floodplain development, identifying potential flood areas based on the current conditions. To delineate a flood insurance rate map, FEMA conducts engineering studies referred to as flood insurance studies. Using information gathered in these studies, FEMA engineers and cartographers delineate Special Flood Hazard Areas on flood insurance rate maps.

Clean Water Act

The Clean Water Act (CWA) (33 USC 1251 et seq.), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Key sections of the act are as follows:

- Sections 303 and 304 provide for water quality standards, criteria, and guidelines. Under Section 303(d) of the CWA, the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives and establish TMDLs for each pollutant/stressor. No impaired water bodies are located in the Dockweiler Subwatershed.
- Section 401 (Water Quality Certification) requires an applicant for any federal permit that proposes an activity that may result in a discharge to waters of the United States to obtain certification from the state that the discharge will comply with other provisions of the act. As there are no federal jurisdictional waters within the Project site, no water quality certification under CWA Section 401 would be required.
- Section 402 establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program is administered by the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs), which have several programs that implement individual and general permits related to construction activities, municipal stormwater discharges, and various kinds of non-stormwater discharges. State and regional water quality related permits and approvals, including NPDES permits, are discussed below.
- Section 404 establishes a permit program for the discharge of dredged or fill material into waters of the United States. This permit program is jointly administered by the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency. As there are no federal jurisdictional waters within the Project site, the proposed Project would not require a permit under CWA Section 404.

Numerous agencies have responsibilities for administration and enforcement of the CWA. At the federal level this includes the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers. At the state level, with the exception of tribal lands, the California Environmental Protection Agency and its sub-agencies, including the SWRCB, have been delegated primary responsibility for administering and enforcing the CWA in California.

Federal Antidegradation Policy

The Federal Antidegradation Policy (40 CFR 131.12) requires states to develop statewide antidegradation policies and identify methods for implementation. Pursuant to the Code of Federal Regulations (CFR), 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.

State

Porter-Cologne Water Quality Act (California Water Code)

The Porter–Cologne Act (codified in the California Water Code, Section 13000 et seq.) is the primary water quality control law for California. Whereas the CWA applies to all waters of the United States, the Porter–Cologne Act applies to waters of the state, which includes isolated wetlands and groundwater in addition to federal waters. This act is implemented by the SWRCB and the nine RWQCBs. In addition to other regulatory responsibilities, the RWQCBs have the authority to conduct, order, and oversee investigation and cleanup where discharges or threatened discharges of waste to waters of the state could cause pollution or nuisance, including impacts to public health and the environment.

The act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the state. California Water Code Section 13260 subdivision (a) requires that any person discharging waste or proposing to discharge waste, other than to a community sewer system that could affect the quality of the waters of the state, to file a Report of Waste Discharge with the applicable RWQCB. For discharges directly to surface water (waters of the United States), an NPDES permit is required, which is issued under both state and federal law. For other types of discharges, such as waste discharges to land (e.g., spoils disposal and storage), erosion from soil disturbance, or discharges to waters of the state (such as groundwater and isolated wetlands), waste discharge requirements (WDRs) are required and are issued exclusively under state law. WDRs typically require many of the same BMPs and pollution control technologies as required by NPDES-derived permits.

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 (State Board Resolution No. 68-16) in 1968. Unlike the Federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the state (e.g., isolated wetlands and groundwater), 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 discharge to that water body shall not unreasonably affect present or anticipated beneficial use of such water resources.

California Toxics Rule

The U.S. Environmental Protection Agency has established water quality criteria for certain toxic substances via the California Toxics Rule. The California Toxics Rule established 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 each RWQCB as having beneficial uses protective of aquatic life or human health.

NPDES and WDR Permits

NPDES and WDR programs regulate construction, municipal, and industrial stormwater and non-stormwater discharges under the requirements of the CWA and the Porter–Cologne Water Quality Control Act. The Construction Stormwater Program is administered by the SWRCB, while the Municipal Stormwater Program and other WDRs are administered by the Los Angeles RWQCB. Table 4.8-2 lists the water-quality-related permits that would apply directly or indirectly (through implementing City ordinances) to the Project, each of which is further described below.

Table 4.8-2. State and Regional Water Quality-Related Permits and Approvals

Program / Activity	Order Number/ NPDES Number	Permit Name	Affected Area
Construction Stormwater Program	2009-0009-DWQ/ CAS000002, as amended	NPDES [1] General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit)	Statewide
Municipal Stormwater Program	Los Angeles RWQCB Order No. R4-2012-0175-A01 / CAS004001	Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges (Los Angeles County MS4 Permit)	Coastal Watersheds of Los Angeles County, except those discharges originating from the City of Long Beach MS4
Discharge of Groundwater from Construction and Project Dewatering to Surface Waters	Los Angeles RWQCB Order No. Order No. R4-2018-0125	Waste Discharge Requirements for Discharge of Groundwater from Construction and Project Dewatering to Surface Waters in the Coastal Watersheds of Los Angeles and Ventura Counties	Coastal Watersheds of Los Angeles and Ventura Counties

Note:
[1] NPDES = National Pollutant Discharge Elimination System

Construction General Permit (SWRCB Order 2009-0009-DWQ, as amended)

Pursuant to CWA Section 402(p), requiring regulations for permitting of certain storm water discharges, the SWRCB has issued a statewide General Permit for Stormwater Discharges Associated with Construction Activity and Land Disturbance Activities (Order No. 2010-0014-DWQ, adopted by the SWRCB on November 16, 2010, and effective February 14, 2011).

Under this Construction General Permit, discharges of storm water from construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for storm water discharges or be covered by the Construction General Permit. Coverage under the Construction General Permit is accomplished by completing and filing permit registration documents, which include a Notice of Intent and Stormwater Pollution Prevention Plan (SWPPP), prior to the commencement of construction activity. SWPPPs incorporate erosion control, sediment removal, and construction waste management control measures during construction, site stabilization measures in the short-term post-construction period, and may identify BMPs for post-construction land use.

Dischargers must file a Notice of Termination when construction is complete and final stabilization has been reached or ownership has been transferred. The discharger must certify that all state and local requirements have been met in accordance with this Construction General Permit. For construction to be found complete, the

discharger must install post-construction storm water management measures and establish a long-term maintenance plan.

California Water Plan

Required by the California Water Code Section 10005(a), the California Water Plan, 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 California Water Plan, which is 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 California Water Plan also identifies and evaluates existing and proposed statewide demand management and water supply augmentation programs and projects to address the state's water needs.

The goal for the California Water Plan Update is to meet California Water Code requirements. This plan received broad support among those participating in California's water planning, and is a useful document for the public, water planners throughout the state, legislators, and other decision-makers.

California Green Building Standards Code

The California Green Building Standards Code (CALGreen Code), Part 11 of the California Building Standards Code (Title 24) is designed to improve public health, safety, and general welfare by using design and construction methods that reduce the negative environmental impact of development and to encourage sustainable construction practices. The CALGreen Code provides mandatory direction to developers of all new construction and renovations of residential and non-residential structures with regard to all aspects of design and construction, including, but not limited to, site drainage design, stormwater management, and water use efficiency. Required measures are accompanied by a set of voluntary standards designed to encourage developers and cities to aim for a higher standard of development.

California Building Code

Pursuant to California Government Code Section 50022.2, the California Building Code, 2019 Edition, published at Title 24, Part 2, of the California Code of Regulations, including Appendices F, H, I, and J has been adopted by reference into the El Segundo Municipal Code (ESMC), subject to the amendments, additions and deletions set forth below.

Section J101.7, Storm Water Control Measures, requires the owner and permittee of any property on which grading has been performed and that requires a grading permit must put into effect and maintain all precautionary measures necessary to protect adjacent water courses and public private property from damage by erosion, flooding, and deposition of mud, debris and construction-related pollutants originating from the site during, and after, grading and related construction activities. Furthermore, the owner and permittee are responsible for putting into effect and maintaining appropriate measures necessary to prevent any change in cross-lot surface drainage that may adversely affect any adjoining property as a result of grading and/or construction-related activities. Such measures to prevent any adverse cross-lot surface drainage effects on adjoining property are required whether shown on approved grading plans or not.

Section J113.1, General, requires that all BMPs shall be installed before grading begins and as grading progresses, all BMPs shall be updated as necessary to prevent erosion and control structures related pollutants from discharging from the site. All BMPs shall be maintained in good working order to the satisfaction of the building official unless final grading approval has been granted by the building official and all permanent drainage and erosion control systems, if required, are in place.

Section J113.2 Storm Water Pollution Prevention Plan (SWPPP), requires that when requested by the building official, no grading permit shall be issued unless the plans for such work include a SWPPP with details of BMPs, including desilting basins or other temporary drainage or control measures, or both, as may be necessary to control structures-related pollutants which originate from the site as a result of structures related activities.

Section J113.3, Wet Weather Erosion Control Plan (WWECP), requires that in addition to the SWPPP, where a grading permit is issued and it appears that the grading will not be completed prior to November 1, then on or before October 1 the owner of the site on which the grading is being performed shall file or cause to be filed with the building official a WWECP, which includes specific BMPs to minimize the transport of sediment and protect public and private property from the effects of erosion, flooding or the deposition of mud, debris, or structures related pollutants. The BMPs shown on the WWECP shall be installed on or before October 15. The plans shall be revised annually or as required by the building official to reflect the current site conditions.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) was signed into law in 2014. SGMA requires governments and water agencies of high- and medium-priority groundwater basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically overdrafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline for achieving sustainability. Through SGMA, the California Department of Water Resources provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form Groundwater Sustainability Agencies (GSAs) to manage basins sustainably and requires those GSAs to adopt Groundwater Sustainability Plans for crucial groundwater basins in California.

Regional and Local

Water Quality Control Plan, Los Angeles Region

The California legislature has assigned the primary responsibility to administer and enforce statutes for the protection and enhancement of water quality, including the Porter–Cologne Act and portions of the CWA, to the SWRCB and its nine RWQCBs. The SWRCB provides state-level coordination of the water quality control program by establishing statewide policies and plans for implementation of state and federal regulations. The nine RWQCBs throughout California adopt and implement Basin Plans that recognize the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems. The Los Angeles RWQCB is responsible for the protection of the beneficial uses of waters within the coastal watersheds of Los Angeles and Ventura counties, including the Project site.

The Water Quality Control Plan Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Los Angeles RWQCB Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through

the plan (California Water Code Sections 13240–13247) (LARWQCB 2014). The Los Angeles RWQCB Basin Plan must conform to the policies set forth in the Porter-Cologne Act as established by the SWRCB in its state water policy. The Porter-Cologne Act also provides the RWQCBs with authority to include within their basin plan water discharge prohibitions applicable to particular conditions, areas, or types of waste. The Los Angeles RWQCB Basin Plan is continually being updated to include amendments related to implementation of TMDLs of potential pollutants or water quality stressors, revisions of programs and policies within the Los Angeles RWQCB Region, and changes to beneficial use designations and associated water quality objectives.

Municipal Stormwater Permit (Los Angeles RWQCB Order No. R4-2012-0175-A01, as amended), NPDES Permit No. CAS004001

The 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 (MS4 Permit) covers 88 cities and most of the unincorporated areas of Los Angeles County. Under the MS4 Permit, the Los Angeles County Flood Control District is designated as the Principal Permittee. The Permittees are the 88 Los Angeles County cities and Los Angeles County. Collectively, these (including the City of Los Angeles) are the "Co-Permittees." The Principal Permittee helps to facilitate activities necessary to comply with the requirements outlined in the MS4 Permit but is not responsible for ensuring compliance of any of the other Permittees.

The Los Angeles RWQCB adopted WDRs for MS4 discharges within the Coastal Watersheds of Los Angeles County on June 18, 1990 (Order No. 90-079; NPDES Permit No. CA0061654). The WDRs were later amended on December 13, 2001 (Order No. 01-182; NPDES Permit No. CAS004001, as amended). The current MS4 Permit (Order No. R4-2012-0175; NPDES Permit No. CAS004001) was adopted on November 8, 2012 and became effective on December 28, 2012.

The MS4 Permit contains effluent limitations, receiving water limitations, minimum control measures, and TMDL provisions, and outlines the process for developing watershed management programs, including the Enhanced Watershed Management Program (EWMP). The MS4 Permit incorporates the TMDL waste load allocations applicable to dry- and wet-weather as water quality-based effluent limitations and/or receiving water limitations. The MS4 Permit adopts low-impact development (LID) principles and requires development and redevelopment projects to incorporate stormwater management strategies with goals to mitigate the impacts of increased runoff and stormwater pollution as close to its source as possible. LID promotes the use of natural infiltration systems, evapotranspiration, and the reuse of stormwater. The goal of these LID practices is to remove nutrients, bacteria, and metals from stormwater while also reducing the quantity and intensity of stormwater flows. Through the use of various infiltration strategies, LID is aimed at minimizing impervious surface area. Where infiltration is not feasible, the use of bioretention, rain gardens, green roofs, cisterns, and rain barrels that will store, evaporate, detain, and/or treat runoff may be used.

Enhanced Watershed Management Program

The County of Los Angeles and all other cities in the Los Angeles River Watershed are responsible for the implementation of watershed improvement plans or Enhanced Watershed Management Programs (EWMP) to improve water quality and assist in meeting the TMDL milestones. In response to the Phase I Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit, Order No. R4-2012-0175, the Rio Hondo/San Gabriel River Water Quality Group (RH/SGRWQG) was formed and subsequently developed an Enhanced Watershed Management Program (EWMP) (RH/SGRWQG 2016). The RH/SGRWQG is comprised of the Cities of Arcadia, Azusa, Bradbury, Duarte, Monrovia, Sierra Madre, the County of Los Angeles, and the Los Angeles County Flood Control

District (LACFCD). The EWMP addresses water quality priorities in portions of the Rio Hondo and San Gabriel River, and their respective tributaries. A comprehensive stormwater management plan that optimizes stormwater and financial resources was produced and implemented through the EWMP process. The EWMP integrates existing planning efforts and identifies additional opportunities for water quality enhancement through both programmatic and structural controls. In addition, the EWMP incorporates multi-benefit projects that improve water quality, as well as providing aesthetic, recreational, water supply, and/or community enhancements (RH/SGRWQG 2016).

Low-Impact Development Standards Manual

The County of Los Angeles prepared the 2014 LID Standards Manual (LACDPW 2014) to comply with the requirements of the NPDES MS4 Permit for stormwater and non-stormwater discharges from the MS4, within the coastal watersheds of Los Angeles County (CAS004001, Order No. R4- 2012-0175), henceforth referred to in this document as the 2012 MS4 Permit. The LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of Los Angeles County with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges. The LID Standards Manual is an update and compilation of the following documents:

- Development Planning for Storm Water Management: A Manual for the Standard Urban Storm Water Mitigation Plan (September 2002)
- Technical Manual for Stormwater Best Management Practices in the County of Los Angeles (2004 Design Manual, February 2004)
- Stormwater Best Management Practice Design and Maintenance Manual (2010 Design Manual, August 2010)
- Low Impact Development Standards Manual (February 2014)

The LID Standards Manual addresses the adverse impacts of stormwater runoff from development and urban runoff on natural drainage systems, receiving waters, and other water bodies. It is intended to minimize pollutant loadings from impervious surfaces by requiring development projects to incorporate properly designed, technically appropriate BMPs and other LID strategies. The Manual is intended to minimize erosion and other hydrologic impacts on natural drainage systems by requiring development projects to incorporate properly designed, technically appropriate hydromodification control development principles and technologies.

Arcadia General Plan

Policy CI-9.10: Support regional efforts to use recycled water to recharge groundwater basins.

Goal CI-11: Storm drain infrastructure that minimizes regional and localized flood hazards

Policy CI-11.5: Require developers to pay the full costs associated with storm drain system improvements needed specifically to service their development, as well as fair-share costs for enhancements identified in the Capital Improvement and Equipment Plan.

Policy RS-4.1: Continue to participate in regional programs that protect water resources in Arcadia.

Policy RS -4.2: Address state-of-the-science approaches to water supply, demand, and conservation as part of regular updates to the City's Urban Water Management Plan, including the possibility of using reclaimed water as part of a groundwater basin recharge strategy.

Policy RS-4.4: Maintain a high level of groundwater recharge capacity within formal recharge facilities belonging to the City.

Policy RS-4.9: Incorporate Low Impact Development (LID) strategies into new construction and city projects.

Policy RS-4.10: Fulfill the City's responsibilities relative to the requirements of the County's NPDES permit program by enforcing regulations aimed at reducing groundwater and urban runoff pollution.

Policy RS-4.12: Require the installation of efficient irrigation systems (e.g., drip irrigation, soil moisture sensors and automatic irrigation systems) which minimize runoff and evaporation, and which maximize the water that will reach the plant roots.

Arcadia Municipal Code

Chapter 5, Part 5, Division 4, Water Efficient Landscaping

Section 7554.4, Plan Check Requirements, requires that, as part of the broader general permitting process, a Landscape Design Plan, and a Landscape Documentation Package be prepared by a licensed landscape architect that incorporates efficient use of water and BMPs into landscape project design. The design plan, at a minimum, shall identify location, installation details, and 24-hour retention or infiltration capacity of any applicable stormwater BMPs that encourage on-site retention and infiltration of stormwater. Project shall adhere to any applicable stormwater technical requirements issued by the City of the regional Water Quality Control Board.

Section 7554.6, Soil and Grading Requirements, requires that a soil management report be completed in order to reduce runoff, and that a comprehensive grading plan, prepared by a civil engineer, be prepared and submitted to the City for approval. The grading deign plan must indicate finished configurations and elevations of the landscape area, including drainage patterns and stormwater retention improvements

Section 7554.9, Stormwater Management and Rainwater Retention, encourages that stormwater BMPs be implemented into landscape and grading design plans to minimize runoff and increase on-site rainwater retention and infiltration. This section requires that all planted landscapes have frailable soil to maximize water retention and infiltration, and that all projects adhere to any applicable stormwater technical requirements issued by the City of the regional Water Quality Control Board.

Chapter 8, Stormwater Management and Discharge Control

A stated in Section 7811 of the City's Municipal Code, the purpose of Chapter 8 is to ensure the future health, safety, and general welfare of citizens by:

a. Eliminating nonstormwater discharges to the municipal separate storm drain.
b. Controlling the discharge from spills, dumping or disposal of materials other than stormwater to municipal separate storm drains.
c. Reducing pollutants in stormwater discharges to the maximum extent practicable.

The intent is to protect and enhance the water quality of our watercourses, water bodies, wetlands and receiving waters of the United States in a manner pursuant to and consistent with the Clean Water Act. General provisions related to stormwater management and discharge are listed below.

Section 7820, Discharges Prohibited/Illegal Discharges, states that except as otherwise conditionally authorized by the Permit, no person shall: (1) discharge nonstormwater to the City's storm drain system or to receiving waters except in compliance with the requirements of this Chapter; (2) cause, allow or facilitate any prohibited discharge; (3) discharge, cause, allow or facilitate any discharge that may cause or threaten to cause a condition of pollution or nuisance as defined in Water Code section 13050, that may cause, threaten to cause or contribute to an exceedance of any water quality standard in any Statewide Water Quality Control Plan, California Toxics Rule, or Basin Plan, or that may cause or contribute to the violation of any receiving water limitation. This section also defines and lists prohibited discharges, as well as exceptions to discharge prohibition.

Section 7823, Best Management Practices Authorized and Required, relates to operational stormwater management and discharge BMPs, and requires that new development and redevelopment projects comply with all relevant guidelines or requirements adopted by the any Federal, State, regional, and/or City. In addition, the applicant or its designee must submit documentation demonstrating coverage by and compliance with any applicable permit, including copies of any notice of intent, SWPPPs, inspection reports, monitoring results, and other information deemed necessary to assess compliance with City code or any NPDES Construction General permit. Each discharger identified in any individual NPDES permit relating to stormwater discharges must comply with and undertake all activities required by such permit. Responsible parties for any new or redevelopment project are also required to enter into an agreement for the operation and maintenance of any structural control measures and to record such agreement with the Los Angeles County Recorder's office. Specific operational BMPs required include: (1) Keeping any paved sidewalks free of dirt or litter to the maximum extent practicable; (2) ensuring that any parking lot over 25 spaces be maintained and cleaned in such a manner that does not result in the discharge of pollutants to the storm drain system; (3) requiring that all hazardous substance and material are properly stored, and; (4) Requiring that all drainage facilities, including catch basins, culverts and parkway drains, are cleaned between May 1st and September 30th of each year, or as needed to keep sumps below 40% full of material(s).

Section 7827, Control of Runoff Required, Construction Activity Stormwater Measures, requires that, prior to obtaining a grading or building permit, each operator of any construction activity must submit evidence to the Director that all applicable permits have been obtained, including but not limited to the State Water Board's Construction Permit, State Water Board 401 Water Quality Certification. Each operator of any construction activity shall implement an erosion and sediment control plan and BMPs required by the Director to ensure that discharges of pollutants are effectively prohibited and will not cause or contribute to an exceedance of water quality standards. Section 7827 also states that a Storm Water Pollution Prevention Plan (SWPPP), prepared in accordance with the Construction General Permit, may be substituted for an erosion and sediment control plan, and that construction and grading activities shall comply with applicable laws and regulatory documents, including all applicable City ordinances and the City's Permit regulating discharges into and from the storm drain system.

4.8.3 Thresholds of Significance

The significance criteria used to evaluate the Project's impacts to hydrology and water quality are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to hydrology and water quality would occur if the Project 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 the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
   i. result in substantial erosion or siltation on or off site;
   ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;
   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.

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

4.8.4 Impacts Analysis

Threshold 4.8a Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Short-Term Construction Impacts

Site grading would require a combination of "cut and fill" earthwork to create a building/parking structure pad and to accommodate two levels of subterranean parking. Grading is estimated to result in approximately 57,200 cubic yards of excavation/export (or "cut") and 200 cubic yards of import fill for site rebalancing. Final grading plans would be approved by the City Engineer before the City issues grading permits.

Grading and construction would potentially result in short-term erosion and associated siltation that could lead to adjacent storm drain infrastructure. Erosion-induced sedimentation affects water quality and interferes with photosynthesis; oxygen exchange; and the respiration, growth, and reproduction of aquatic species. Additionally, other pollutants, such as nutrients, trace metals, and hydrocarbons, can attach to sediment and be transported to downstream drainages which could contribute to the degradation of water quality. Other pollutants that could affect surface-water quality during the construction phase include petroleum products (gasoline, diesel, oil, and grease), hydrocarbons from asphalt paving, construction equipment leaks, paints and solvents, detergents, fertilizers, and pesticides (including insecticides, fungicides, herbicides, and rodenticides).

In accordance with the State NPDES Construction General Permit and WDR Permit, as established by the Porter-Cologne Water Quality Act, the development of an acre or more of land must file a notice of intent with the SWRCB, followed by development of a site-specific SWPPP for construction activities (Section 7827, General Control of Runoff Required, Construction Activity, City of Arcadia Municipal Code). The property owner/developer must comply with the Construction General Permit applicable at the time a grading permit is issued. As previously discussed, the SWPPP must include erosion- and sediment-control BMPs that will meet or exceed measures required by the determined risk level of the Construction General Permit, as well as BMPs that control the other potential construction-related pollutants. A Construction Site Monitoring Program that identifies monitoring and sampling requirements during construction is a required component of the SWPPP. The SWPPP is required to identify BMPs that protect stormwater runoff and ensure avoidance of substantial degradation of water quality. Typical BMPs that could be incorporated into the SWPPP to protect water quality include, but are not limited to, the following:

- Diverting off-site runoff away from the construction site
- Placing perimeter straw wattles to prevent off-site transport of sediment

- Using drop inlet protection (filters and sandbags or straw wattles), with sandbag check dams within paved areas
- Regular watering of exposed soils to control dust during demolition and construction
- Implementing specifications for demolition/construction waste handling and disposal
- Using contained equipment wash-out and vehicle maintenance areas
- Maintaining erosion and sedimentation control measures throughout the construction period
- Stabilizing construction entrances to avoid trucks from imprinting soil and debris onto adjoining roadways
- Training, including for subcontractors, on general site housekeeping
- Vegetating landscaped/vegetated swale areas as soon as feasible following grading activities

Incorporation of required BMPs for temporary materials and waste storage and handling during construction, and equipment and vehicle maintenance and fueling would reduce the potential discharge of polluted runoff from construction sites, consistent with the State NPDES Construction General Permit and the AMC requirements for construction activities.

As set forth in Section 7800 of the Municipal Code, the Project must ensure the future health, safety, and general welfare of citizens by: (a) eliminating non-stormwater discharges to the municipal separate storm drain; (b) controlling the discharge from spills, dumping or disposal of materials other than stormwater to municipal separate storm drains; and (c) reducing pollutants in stormwater discharges to the maximum extent practicable. Section 7820 of the Municipal Code prohibits the discharge of non-stormwater into the City's storm drain system, unless a discharge permit, which meets the City's requirements, is obtained. Section 7827 of the AMC specifically requires that all proposed development and/or redevelopment Project protect water quality by either (a) implementing an erosion and sediment control plan and all applicable BMPs to ensure discharge of pollutants are effectively prohibited or (b) preparing a SWPPP in accordance with the Construction General Permit. The proposed Project would adhere to all applicable stormwater management and discharge control regulations, and, as such, is not anticipated to violate any water quality standard or waste discharge requirement during operation.

As discussed in Section 4.5, Geology and Soils, of this EIR, the historical high groundwater levels in the Project vicinity have been interpreted at 100-150 feet below the ground surface, and as such, excavation activities associated with the subterranean parking garage are not expected to encounter groundwater. However, perched groundwater conditions are dependent on seasonal precipitation, land use, among other factors, and may vary as a result. Additionally, the Project proposes to install drywells to satisfy low impact development requirements (as further discussed below), which are anticipated to reach depths of 42 feet; therefore, it is possible that the construction of the drywells could encounter perched groundwater (Appendix H-1).

In the event that groundwater is encountered during excavations, the Project applicant/developer would be required by existing regulatory requirements to procure a dewatering permit from the Los Angeles RWQCB for pumping and disposal of groundwater. Groundwater dewatering would be controlled in compliance with the Waste Discharge Requirements for the Discharge of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2018-0125, NPDES No. CAG994004). This permit requires permittees to conduct monitoring of dewatering discharges and adhere to effluent and receiving water limitations contained within the permit so that the water quality of surface waters is protected.

Application for the permit would involve collecting and analyzing groundwater samples to determine its constituents. In the event that contamination is identified, the permit would include specific types of treatment requirements to ensure compliance with the discharge standards. The permit also establishes requirements for initial and

continuous groundwater testing throughout the dewatering process to ensure that the water remains suitable for discharge and that the impacts of dewatering discharges do not constitute a significant and adverse impact to downstream waters.

Compliance with existing regulations would prevent violation of water quality standards and minimize the potential for contributing sources of polluted runoff. Therefore, compliance with existing regulations would ensure that the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface quality from demolition and construction activities. Impacts would be less than significant, and no mitigation is required.

Long-Term Operational Impacts

The primary source of surface water pollution from long-term operations on the Project site would be incidental spills of vehicle oils in parking garages. Certain metals, along with nutrients and pesticides from landscape areas, could also be present in stormwater runoff, although on-site landscaping would be minimal. During storm events, pollutants from paved areas lacking proper stormwater controls and BMPs could enter the municipal storm drain system. Between periods of rainfall, surface pollutants tend to accumulate, and runoff from the first significant storm of the year ("first flush") would likely have the largest concentration of pollutants. Such discharges would potentially violate state/federal antidegradation policies, the California Toxics Rule, and water quality objectives as established in the Los Angeles RWQCB Basin Plan.

However, Project design, construction, and operation would be required to be completed consistent with the RH/SGRWQG EWMP, and in accordance with the City Stormwater Management and Discharge Control Ordinance, Municipal NPDES Permit, and the County of Los Angeles Low Impact Development Best Management Practices Handbook (LID Manual), with the goal of reducing the amount of pollutants in stormwater and urban runoff (City of Arcadia 2021). The LID Manual requires that that post-construction stormwater runoff from new developments be infiltrated, evapotranspired, captured and reused, and/or treated through a high efficiency BMP onsite for the 85th percentile storm event, or 0.75 inches of precipitation, whichever is greater.

The LID Manual requires that BMPs be designed and implemented to manage and capture stormwater runoff. Infiltration systems are the first priority type of BMP improvements, as such systems provide percolation and infiltration of stormwater into the ground, which not only reduces the volume of stormwater runoff entering the MS4, but also contributes to groundwater recharge in some areas. The second priority BMP is capturing and reusing stormwater onsite for either landscape irrigation or toilet flushing. Proposed drainage for the proposed Project would include stormwater treatment features, in accordance with the City and County LID requirements. According to a review of the 2011-2012 MS4 Annual Report for the RH/SGRWQG EWMP area, at least 150 BMPs were reported within the City of Arcadia, including green infrastructure, source control, and institutional BMPS.

Based on the Geotechnical Investigation, prepared by Geocon West, Inc (see Appendix E-2), the Conceptual Hydrology and LID Report (Appendix H-1) determined that infiltration is feasible for stormwater treatment. Two drywells and one four-foot diameter primary settling chamber are proposed to be constructed on the Project site, located in the south side of the basement parking lot, which would be able to capture the required runoff volume and treat that volume as quickly as it enters the drywell system.

The existing infiltration rate for the site is 13.83 inches/hour with a design infiltration of 6.92 inches/hour. [2] Based on this data, the Project requires a mitigation volume of 7,592 cubic feet. A drywell with a diameter of 6 feet and an infiltration depth of 42 feet would provide a disposal rate of 0.07091 cubic feet per second (cfs) and would result in a disposal volume of 24,505 cubic feet over a 96-hour period. As a result, the 96-hour infiltration volume for the combined wells would be 49,010 cubic feet. Based on the total mitigated volume of 7,592 cubic feet, after subtracting the volume infiltrated as quickly as it enters the drywell of 6,577 cubic feet, the remaining volume is 1,015 cubic feet. The storage provided in the drywell system would be 1,062 cubic feet, which is adequate to accommodate the mitigated volume.

In addition to the drywells and settling chamber, the Project includes street-level overflow curb drain outlets that would discharge into the Wheeler Street curb gutter and run west to the catch basin on the northeast corner of Wheeler Avenue and North Santa Anita Avenue. Table 4.8-3 summarizes the peak flow rate values under proposed condition based on the 50-year storm event.

Table 4.8-3 Peak Flow Rate Change Under Proposed Conditions

Size (Acres)	Existing Peak Flow Rate (Q_{50}) (CFS)	Proposed Peak Flow Rate (Q_{50}) (CFS)	Peak Flow Change (CFS)
2.13 *	8.81	8.08	-.73

Source: Appendix H-1
Notes:
CFS = cubic feet per second
* Acreage is only included for the portions of the Project site area where improvements are proposed

Table 4.8.3 shows that the existing peak flow rate value of 8.81 cubic feet per second (cfs) would decrease by .73 cfs under proposed conditions, resulting in a proposed or post-Project peak flow rate value of 8.08 cfs. The post-Project condition is depicted in Figure 4.8-2, Proposed Drainage Conditions, which shows the conceptual location of the drywells, settling chamber, and overflow pipes to the existing storm drain system, which would contribute to the peak flow rate reduction under proposed conditions. Because the peak flow rate would be reduced in the proposed condition, it is understood that the existing City storm drains would not be negatively affected by implementation of the proposed Project.

Once the water quality volume is met through the drywells, the "higher flows" would enter overflow pipes, which would discharge stormwater to the local storm drain system. The proposed peak flow rate that would be used to design the overflow piping is the reduced peak flow rate of 8.08 cfs generated after infiltration. As presented in Appendix H-1, under the proposed infiltration system, the volume infiltrated in 96 hours is approximately six times the required mitigated volume and the volume infiltrated as it enters the drywells are nearly equal to the mitigated volume. Therefore, the drywells and settling chamber to be constructed as part of the Project would result in the treatment of the entire required volume for the Project site and the elimination of pollutant runoff up to the 50-year storm event.

The implementation of LID features would, to the maximum extent practicable, reduce the discharge of pollutants into receiving waters, including inadvertent release of pollutants (e.g., hydraulic fluids and petroleum); improper management of hazardous materials; and trash and debris during Project operations. In accordance with all

[2] The design infiltration rate is the corrected in-situ infiltration rate and has been calculated in accordance with the Boring Percolation Test Procedure in the County of Los Angeles Department of Public Works Geotechnical and Materials Engineering Division (GMED) *Guidelines for Geotechnical Investigation and Reporting, Low Impact Development Stormwater Infiltration*.

applicable state and local regulations, including General Plan Policy RS-9,[3] Project source controls to improve water quality would be provided for outdoor trash storage/waste areas and outdoor loading/unloading areas. As a result of compliance with existing regulations, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality during the long-term Project operations. Impacts would be less than significant, and no mitigation is required.

Threshold 4.8b Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The amount of impervious area under proposed Project conditions would remain at 95%, which is the same as under existing conditions. As discussed under Threshold 4.8a, as the soil zones encountered on site are suitable for infiltration of stormwater, the proposed Project would incorporate drywells to facilitate infiltration in compliance with applicable LID requirements. The Project site is not currently used for groundwater infiltration, either by spreading or by groundwater injection. As discussed under Threshold 4.8a, the 96-hour infiltration volume for the combined wells would be 49,010 cubic feet. As such, upon construction and operation of the drywells, groundwater recharge at the site would increase in comparison to existing conditions. [4]

As described under Threshold 4.8a, the proposed Project is not anticipated to encounter groundwater during excavation for the subterranean parking garage. However, perched groundwater conditions may vary over time, and in the unlikely event that groundwater is encountered during excavations, the Project applicant/developer would be required by existing regulatory requirements to procure a dewatering permit from the Los Angeles RWQCB for pumping and disposal of groundwater. Groundwater dewatering would be controlled in compliance with the Waste Discharge Requirements for the Discharge of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2018-0125, NPDES No. CAG994004). Temporary dewatering, if required, would be short-term and would not substantially interfere with groundwater supplies.

Additionally, the Project site is above the Main San Gabriel Basin (Groundwater Basin 4-013), which has been designated as Very Low Priority with respect to establishment of a GSA and completion of a Groundwater Sustainability Plan (SGMA 2020). (Potable water supplies required to supply the proposed Project are discussed in Section 4.15, Utilities and Service Systems.) Therefore, the proposed Project would not substantially decrease groundwater supplies. Impacts would be less than significant, and no mitigation is required.

Threshold 4.8c Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

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

[3] As shown in Section 4.9.2 of this document, General Plan Policy RS-4.9 requires Low Impact Development (LID) strategies to be incorporated into new construction.

[4] According to the Geotechnical Investigation (Appendix E-1) infiltration of stormwater would not induce excessive hydro-consolidation, would not create a perched groundwater condition, would not affect soil structure interaction of existing or proposed foundations due to expansive soils, would not saturate soils supported by existing retaining walls, and would not increase the potential for liquefaction. In addition, the installation of the stormwater infiltration system (i.e., drywells and settlement chamber) would be observed and approved in writing by Geotechnical Engineer.

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;

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?

The proposed Project site is fully developed in the existing condition and is located in a highly urbanized portion of Arcadia, surrounded by developed properties. Implementation of the proposed Project would not alter the existing drainage patterns on the site such that downstream streams or rivers would be affected. The Project would infiltrate stormwater in accordance with all applicable LID regulations, as described under Threshold 4.8a, and would continue to outflow into the existing storm drain system. No naturalized drainages or creeks would be affected. According to the Conceptual Hydrology and LID Report, total impervious surface area and post-project runoff are anticipated to be the same as under existing conditions, as described under Threshold 4.8a. Therefore, the Project would not substantially alter the existing drainage pattern of the site, including through the alteration of the course of a stream or river or through the addition of impervious surfaces. Impacts would be less than significant, and no mitigation is required.

Threshold 4.8d In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No areas within the City of Arcadia are designated 100-year flood zones (City of Arcadia 2010a). According to the Federal Emergency Management Agency (FEMA), the Project is located within Zone X, which is an area of Minimal Flood Hazard (FEMA 2021). Therefore, the Project site is not located within an area that would be subject to flooding.

The Project is, however, located in the Santa Anita Dam flood inundation zone. Approximately half of the City of Arcadia is located within the dam inundation zone. Failure of the Santa Anita Dam would lead to inundation of a large eastern section of the City. At capacity, floodwaters from the dam would travel down Santa Anita Canyon to about Orange Grove Avenue and then spread across the eastern half of the city from Arcadia Wash. To comply with state dam safety regulations, the water level behind the dam is restricted to be no higher than an elevation of 1,230 feet above mean sea level, to meet the California Division of Safety of Dams seismic safety requirements and to reduce the potential magnitude of downstream flooding (City of Arcadia 2010). According to the General Plan Safety Element, flood hazards in the City are well addressed by existing storm control infrastructure. Seismic retrofit of the Santa Anita Dam, which was built in 1927, was scheduled to begin in Spring of 2021 to improve public safety and prevent flood damage to downstream communities (LACDPW 2019). Dam failure potential is low and the extent of inundation would depend on the amount of water stored at the time of failure. Seismic upgrades will further reduce already low potential for flooding due to dam failure at the Project site, and the proposed Project would not exacerbate potential risks associated with dam failure.

The Project site is not located near a body of water or close to the ocean and as a result, is not susceptible to tsunamis or seiches (DOC 2021). In the unlikely event that the site were to be flooded as a result of dam failure, the risk of release of pollutants due to inundation of the Project site is low, as the proposed sites primary uses (i.e., residential) would not include storage of hazardous materials or hazardous waste. Existing state, regional and local regulations related to emergency preparedness would be sufficient to address potential hazards associated with

floods, tsunamis, or seiches, which have not been identified as hazards for the Project site. Therefore, Project impacts would be less than significant, and no mitigation is required.

Threshold 4.8e Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties is the Water Quality Control Plan (WQMP) for the Los Angeles Region, which includes the City of Arcadia. The Basin Plan: (i) identifies beneficial uses for surface waters and groundwaters, (ii) includes the narrative and numerical water quality objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy, and (iii) describes implementation programs and other actions that are necessary to achieve the water quality objectives established in the Basin Plan (LARWQCB 2019). As previous discussed, the existing, potential or intermittent beneficial uses for the Arcadia Wash, the Santa Anita Wash, and the Rio Hondo Channel, where stormwaters from the City are discharged and for the underlying groundwater basins in the City (Raymond and San Gabriel Valley groundwater basins) include: domestic water supply (MUN); industrial activities (IND); industrial process dependent upon water quality (PROC); agricultural supply (AGR); groundwater recharge (GWR); Water Recreation (REC-1, REC-2); warm water ecosystems (WARM); cold water ecosystems (COLD); terrestrial ecosystems (WILD); rare, threatened or endangered species (RARE); and wetland ecosystems (WET) (LARWQCB 2019).

With compliance with applicable regulations, the proposed Project does not include any facilities or land uses that could generate pollutants that could result in substantial water quality impacts. As discussed in Threshold 3.8(a), compliance with the City's Stormwater Management requirements would protect the water quality of watercourses in a manner pursuant to and consistent with the Federal Clean Water Act, and pursuant to the NPDES CGP No. 2009-0009-DWQ. Restrictions in this Ordinance are applicable to both construction activities and operations. Additionally, compliance with CGP issued by the SWRCB would require implementation of BMPs during construction to address the potential for pollutants from entering downstream waters. The Project's potential to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality would be less than significant and no mitigation is required.

As previously discussed, the proposed Project would comply with applicable water quality regulatory requirements, including implementation of a SWPPP, stormwater BMPs, and LID design, which would minimize potential off-site surface water quality impacts and contribute to a reduction in water quality impacts within the Rio Hodo Watershed subarea and the overall Los Angeles River Watershed. In addition, with compliance with these regulatory requirements, the Project would reduce potential water quality impairment of surface waters such that existing and potential beneficial uses of key surface water drainages throughout the jurisdiction of the Los Angeles RWQCB Basin Plan would not be adversely impacted. As a result, the Project would not conflict with or obstruct the Los Angeles RWQCB Basin Plan.

With respect to groundwater management, SGMA empowers local agencies to form GSAs to manage basins sustainably and requires those GSAs to adopt Groundwater Sustainability Plans for crucial groundwater basins in California. A GSA has not been established for the Main San Gabriel Basin, as it is not considered a high priority basin. Further, the Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. As a result, the Project would not conflict with or obstruct this sustainable groundwater management plan. Impacts would be less than significant, and no mitigation is required.

4.8.5 Cumulative Impact Analysis

Water Quality

The geographic context for the analysis of cumulative impacts associated with water quality is the Los Angeles River Watershed and the Rio Hondo Watershed subarea, which is already largely urbanized with impervious surfaces. The analysis accounts for all anticipated cumulative growth within this geographic area, which includes the list of related projects, as provided in Table 2-3, List of Cumulative Projects, in Chapter 2, Environmental Setting, of this EIR. The cumulative effect of past projects—both point sources of pollution and non-point sources caused by urbanization—have resulted in substantial water quality problems in the region's major waterways. Cumulative development could add new sources of stormwater runoff. Construction activities associated with development could temporarily increase the amount of exposed surfaces that could contribute to sediments in stormwater runoff. Additionally, materials associated with construction activities could be deposited on surfaces and carried to receiving waters in stormwater runoff.

Although the land surrounding the Project site is largely developed with impervious surfaces, continued redevelopment within the Project area could slightly increase the amount of impervious surfaces that could increase stormwater runoff rates and amounts, as well as changes in land use that may increase the amount of pollutants in stormwater runoff. Typical pollutants of concern would be associated with the construction phase (e.g., sediment, fuels, litter), private vehicle use (e.g., any leakage of grease/oils), landscaping/grounds work (e.g., improper/excessive use of pesticides, herbicides, and/or fertilizers), and/or trash (e.g., due to improper waste disposal). The release of such pollutants, however, would be minimized through compliance with terms and conditions of the NPDES permit, CALGreen Code, California Building Code, AMC, and the ordinance codes of other authorities in the region—which all require implementation of a SWPPP for development and redevelopment projects. In summary, all cumulative development would be subject to existing regulatory requirements to protect water quality and minimize increases in stormwater runoff. For example, the NPDES permit requires the City to effectively prohibit non-stormwater discharges from within its boundaries and to comply with the NPDES permit and to specifically prohibit certain discharges.

Every two years, the Los Angeles RWQCB must reevaluate water quality within its geographic region and identify those water bodies not meeting water quality standards. For those impaired water bodies, a TMDL must be prepared and implemented to reduce pollutant loads to levels that would not contribute to a violation of water quality standards. All development within the Los Angeles River Watershed would be subject to the water quality standards outlined in the Basin Plan and would comply with any established TMDLs. The continuing review process would ensure that cumulative development within the watershed would not substantially degrade water quality.

In addition, the Project would comply with existing and future regulations to protect water quality, including the Construction General Permit. Compliance with existing regulations would prevent violation of water quality standards and minimize the potential for contributing additional sources of polluted runoff. Therefore, Project impacts associated with water quality standards and polluted runoff would be less than significant, and the Project would not contribute considerably to cumulative impacts.

Drainage

The Los Angeles River Watershed is already largely urbanized with impervious surfaces. Cumulative development within the City could potentially increase the amount of impervious surfaces that could cause or contribute to storm drain system capacity exceedance, alter the existing storm drain system, and/or require construction of new or

expanded facilities. However, new development within the watershed would be subject to the same requirements for LID infrastructure and BMPs to address the potential for increased runoff from development sites. All projects must comply with current state and local environmental regulations, such as the AMC mandates. Potential impacts to drainage associated with the Project would be less than significant, and the Project would not contribute considerably to cumulative impacts.

4.8.6 Mitigation Measures

The Project would not result in potentially significant impacts to hydrology or water quality, and no mitigation is required.

4.8.7 Level of Significance After Mitigation

No mitigation is required.

4.8.8 References

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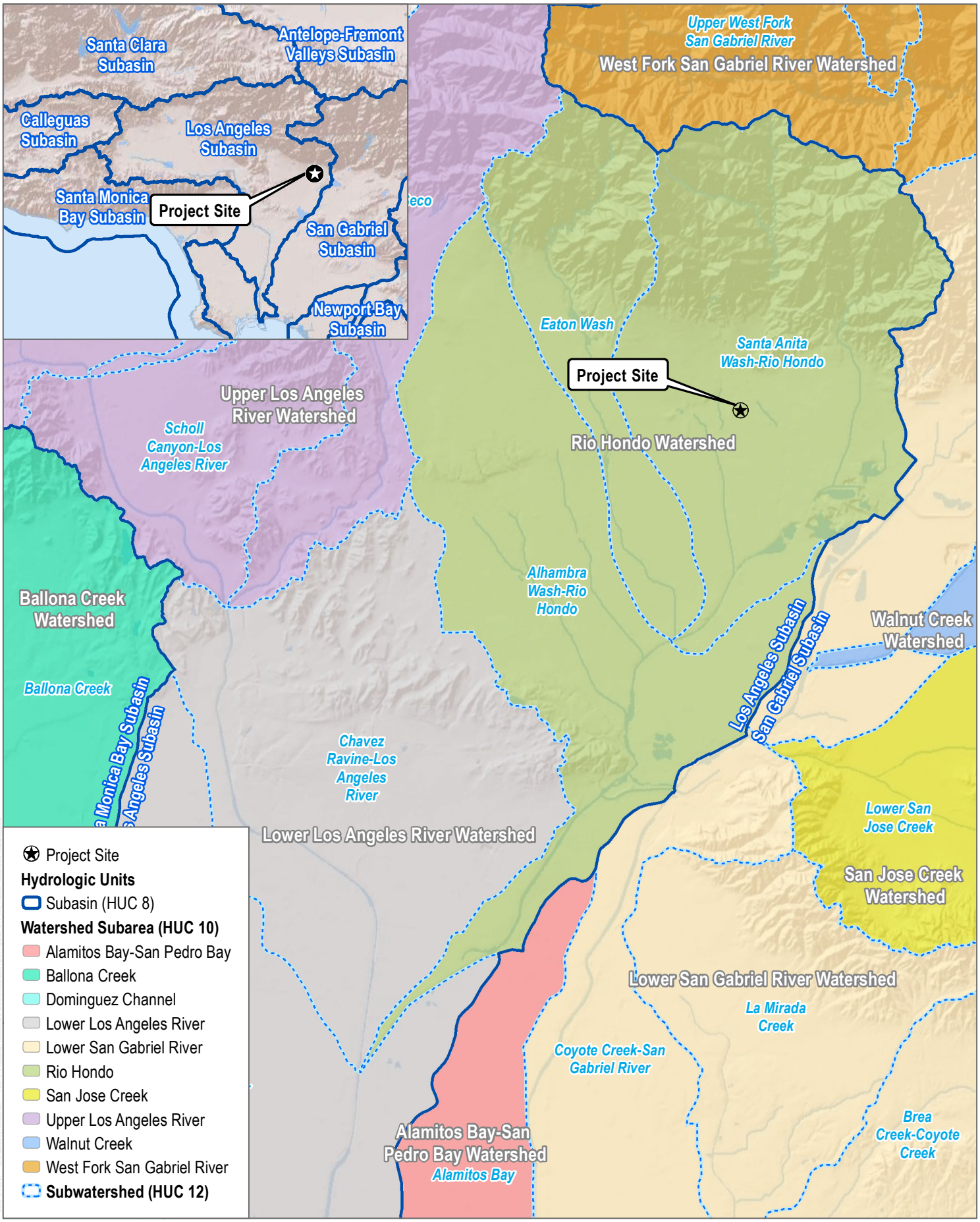

SOURCE: USGS WBD 2021

DUDEK

0 7,000 14,000 Feet

FIGURE 4.8-1

Rio Hondo Watershed Subarea

Alexan Mixed-Use Development Project EIR

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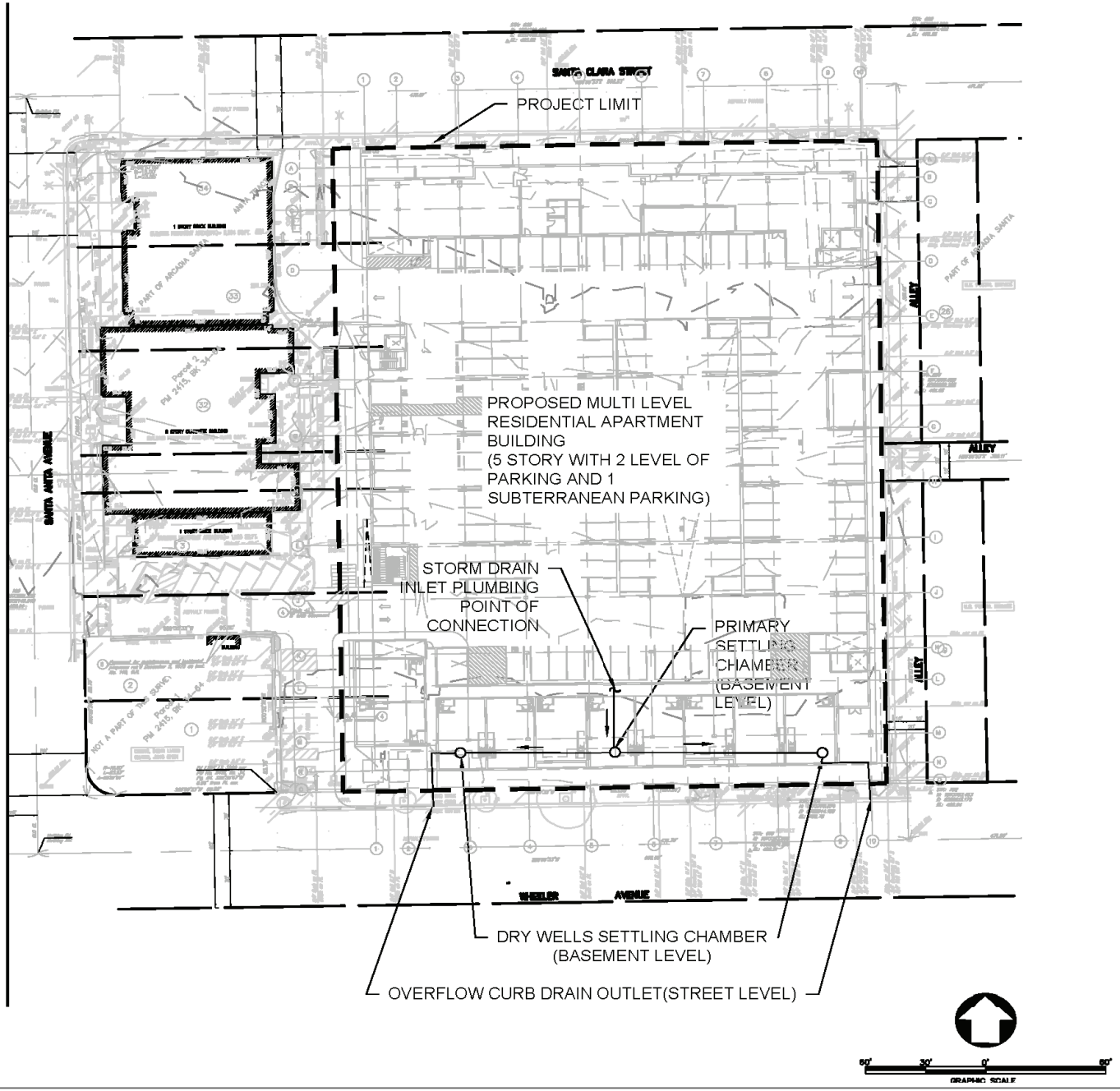

SOURCE: PSOMAS 2021

DUDEK

FIGURE 4.8-2

Proposed Drainage Conditions

Alexan Mixed-Use Development Project

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4.9 Land Use and Planning

This section describes the existing land use and planning conditions of the Alexan Mixed-Use Development Project (Project) site and vicinity, and identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, and references. Information contained in this section is based on review of local, regional, and statewide policies and regulations encompassing the Project site, including the Southern California Association of Government's (SCAG) Regional Transportation Plan/Sustainable Communities Plan (RTP/SCS; also known as Connect SoCal), the City of Arcadia General Plan, and the City of Arcadia Municipal Code (AMC).

Other sources consulted are listed in Section 4.9.8, References.

Comments received in response to the Notice of Preparation (NOP) are summarized in Table 1, Notice of Preparation and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft Environmental Impact Report (EIR). A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR.

4.9.1 Existing Conditions

Citywide Conditions

The City is generally characterized as an urbanized and built-out community within the San Gabriel Valley of Los Angeles County. The City contains distinct and identifiable areas: residential communities, Downtown, and development associated with the Westfield Santa Anita Mall. A majority of the City consists of single-family residential neighborhoods, while within the City's center includes a mixture of mixed-use development in the City's Downtown as well as recreational development such as the Santa Anita Park, Arcadia County Park, and hiking trails within the foothills of the San Gabriel Mountains.

Existing Project Site Conditions

The Project site encompasses approximately 2.95 gross acres and consists of four parcels located in the eastern portion of the City of Arcadia with the following Assessor Parcel Numbers (APN): 5773-006-036, 5773-006-010, 5773-006-004, and 5773-006-005. The Project site is bound by Santa Clara Street to the north, existing commercial uses and an alleyway to the east, Wheeler Avenue to the south, and Santa Anita Avenue to the west. Regional access is via Interstate (I) 210 to Santa Anita Avenue.

The four parcels listed above include existing commercial and office space, and associated surface parking. Specifically, the Project site is bound by Santa Clara Street to the north, existing commercial uses and an alley to the east, Wheeler Avenue to the south, and Santa Anita Avenue to the west. Figure 2-1, Regional Location and Vicinity Map, included in Chapter 2, Environmental Setting of this Draft EIR, provides the Project boundaries in the context of the surrounding community and jurisdictions.

As shown in Chapter 2, Environmental Setting of this Draft EIR, Figure 2-3 and Figure 2-4 show the Project site's existing zoning and general plan designations, respectively. As shown in Figure 2-3, the City's General Plan identifies the site as Downtown Mixed Use. According to the City's General Plan, the Downtown Mixed Use (DMU) designation permits service and retail uses, commercial businesses, professional offices, and residential uses within the City's downtown, at a maximum floor area ratio (FAR) of 1.0 (in which only commercial square footage is counted in

calculation of FAR) and a maximum unit density of up to 80 dwelling units per acre (City of Arcadia 2018). As shown in Figure 2-4, the zoning for the Project site is also DMU (City of Arcadia 2021).

Surrounding Land Uses

The City contains a diverse mix of land uses, including a mixture of single- and multi-family residential neighborhoods, regional commercial, and office land uses. As shown in Chapter 2, Environmental Setting of this Draft EIR, Figure 2-2, Surrounding and Nearby Land Uses, provides an overview of nearby land uses. Figure 2-3, Project Site General Plan Designation, and Figure 2-4, Project Site Zoning, show the Project site's and surrounding land uses' existing zoning and general plan designations, respectively. The Project site is surrounded by a variety of land uses, including residential, recreational, and commercial retail uses, as follows:

- **Land Uses to the North**: North of the Project site across Santa Clara Street is a commercial use (REI store) and associated surface parking lot. To the northeast is the Metro L Line Station and associated parking garage. To the northwest is surface parking and commercial land uses. The nearest multi-family residential land use is approximately 0.20-mile to the north and the nearest single-family residential land use is located approximately 0.15-mile to the northwest of the Project site. Current zoning north of the Project site includes Downtown Mixed Use (DMU), General Commercial (C-G), and Commercial Manufacturing (C-M).
- **Land Uses to the East:** Land uses immediately east include a United States Postal Service building and associated surface parking, followed by multi-family residential and commercial uses approximately 200 feet to the east of the Project site. Current zoning east of the Project site includes DMU.
- **Land Uses to the South:** Immediately south of the Project site is a City-owned surface parking lot across Wheeler Avenue, and a medical office complex to the southeast of the Project site. Further south includes various retail and restaurant uses located along Huntington Drive. The nearest multi-family residential land use is located approximately 0.12-mile to the south of the Project site. The Arcadia County Park followed by the Santa Anita Golf Course are located to the southwest of the Project site. Current zoning south of the Project site includes DMU, Central Business District (CBD), and High-Density Residential (HDR).
- **Land Uses to the West:** The Project site is bordered by Santa Anita Avenue to the west. A car dealership, retail, and office land uses, accompanied by surface parking lots, are located across Santa Anita Avenue. Farther east are single-family residences. Current zoning east of the Project site include Regional Commercial (R-C), General Commercial (C-G), Downtown Mixed Use (DMU), and Low Density Residential (R-1).

4.9.2 Relevant Plans, Policies, and Ordinances

Federal

There are no federal plans, policies, or ordinances applicable to the land use considerations of the proposed Project.

State

Senate Bill 1818 (Government Code 65915)

Senate Bill (SB) 1818 amended the State Density Bonus program (Government Code 65915) and became effective on January 1, 2005. See discussion for Section 9103.15, Density Bonuses for Affordable and Senior Housing, of the Arcadia Development Code, below.

Senate Bill 375

The adoption of California's Sustainable Communities and Climate Protection Act SB 375 (Steinberg, Chapter 728, Statutes of 2008) on September 30, 2008, aligns with the goals of regional transportation planning efforts, regional greenhouse gas (GHG) reduction targets, and land use and housing allocations. SB 375 requires Metropolitan Planning Organizations, such as SCAG, to adopt an SCS or Alternative Planning Strategy within their regional transportation plan to demonstrate achievement of GHG reduction targets. In compliance with SB 375, SCAG has adopted an SCS that covers all of the City of Arcadia, as well as other cities and counties.

Regional and Local

Regional Transportation Plan/Sustainable Communities Strategy

SCAG is the designated Metropolitan Planning Organizations for six Southern California counties (Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial), and is federally mandated to develop plans for transportation, growth management, hazardous waste management, and air quality. The City of Arcadia is one of the many jurisdictions that fall under SCAG.

The 2016–2040 RTP/ SCS was adopted in April 2016, and presents the land use and transportation vision for the region through the year 2040, providing a long-term investment framework for addressing the region's challenges. The RTP/SCS includes goals to increase mobility and enhance sustainability for the region's residents and visitors. The RTP/SCS encompasses three principles to improve the region's future: mobility, economy, and sustainability. The RTP/SCS provides a regional investment framework to address the region's transportation and related challenges, while enhancing the existing transportation system and integrating land use into transportation planning. The RTP/SCS recommends local jurisdictions accommodate future growth within existing urbanized areas, particularly near existing transit, to reduce vehicle miles traveled, congestion, and GHG emissions. The RTP/SCS approach to sustainably manage growth and transportation demand would reduce the distance and barriers between new housing, jobs, and services and would reduce vehicle travel and GHG emissions. Overall, the strategies and policies in the RTP/SCS are projected to exceed the GHG emission-reduction targets set forth by the California Air Resources Board under SB 375 (SCAG 2016).

The Final 2020–2045 RTP/SCS (also referred to as Connect SoCal) presents the land use and transportation vision for the SCAG region through 2045. The following are the 2020 RTP/SCS goals: (1) encourage regional economic prosperity and global competitiveness; (2) improve mobility, accessibility, reliability, and travel safety for people and goods; (3) enhance the preservation, security, and resilience of the regional transportation system; (4) increase person and goods movement and travel choices within the transportation system; (5) reduce greenhouse gas emissions and improve air quality; (6) support healthy and equitable communities; (7) adapt to a changing climate and support an integrated regional development pattern and transportation network; (8) leverage new transportation technologies and data-driven solutions that result in more efficient travel; (9) encourage development of diverse housing types in areas that are supported by multiple transportation options; (10) promote conservation of natural and agricultural lands and restoration of habitats (SCAG 2020a). On September 3, 2020, the Regional Council formally adopted Connect SoCal and the addendum to the Connect SoCal Program EIR (SCAG 2020b).

Regional Housing Needs Assessment

In accordance with Government Code Section 65584, projected housing needs for each city and county in the Southern California region are prepared by SCAG under a process known as the Regional Housing Needs Assessment (RHNA). RHNA allocates regional housing needs by income level among member jurisdictions.

At the time of drafting this EIR, the City of Arcadia, among all other jurisdictions within the SCAG region are required to update their respective Housing Elements to accommodate the 6th cycle of RHNA, which covers the planning period of October 2021 through October 2029 (City of Arcadia 2021). SCAG's allocation for Arcadia is 3,214 units. The 3,214 housing units for Arcadia are out of the anticipated total regional construction need of 1,341,827 units (89,616 of which are in the San Gabriel Valley in the SCAG region). Based on SCAG's determination of existing need and projected needs, which considers anticipated vacancies and projected household growth, the City has been allocated 3,214 new housing units, which includes 1,102 very low-income units, 570 low income units, 605 moderate income units, and 937 above moderate units (City of Arcadia 2021). See Section 4.11, Population and Housing, of this Draft EIR for more discussion.

City of Arcadia General Plan

The City of Arcadia adopted its General Plan on November 16, 2010. A General Plan is intended to provide direction for future development of the City. It represents a formal expression of community goals and desires, provides guidelines for decision making about the City's development, and fulfills the requirements of California Government Code Section 65302 requiring local preparation and adoption of General Plans. The General Plan should be viewed as a dynamic guideline to be refined as the physical environment of the City's changes. The City of Arcadia General Plan (General Plan) includes the following mandated and optional elements, applicable to the proposed Project: Land Use and Community Design Element, Economic Development Element, Circulation and Infrastructure Element, Housing Element, Resource Sustainability Element, Parks, Recreation, and Community Resources Element, Safety Element, and Noise Element. According to the Land Use Element, buildout projections for the 2010 General Plan analyzed existing trends until 2035.

Land Use and Community Design Element

A land use element is a required element of the General Plan, specified in Government Code Section 65302(a). Arcadia's Land Use and Community Design Element has the broadest scope of all the General Plan elements. It is intended to portray the future direction of the City, the way the community would like to see it. The Land Use and Community Design Element is a guide for the future, as stated in the goals, objectives, policies, and program statements. By State law, the City's other ordinances and plans, for example the Development Code, must be consistent with the General Plan, and therefore with the Land Use and Community Design Element. The Land Use goals and policies will influence the character of the City more than any other single element of the General Plan (City of Arcadia 2010).

Economic Development Element

The Economic Development Element is concerned with the economic health of the City. It focuses on the expansion and maintenance of Arcadia's economic base and on the enhancement of the City's business climate. Economic development goals and policies direct City activities toward maximizing the City's economic development potential. The Economic Development Element is an optional element in Arcadia's General Plan. Government Code Section 65303 enables cities to adopt optional general plan elements. Arcadia elected to include an Economic

Development Element because it focuses on issues significant to Arcadia's future that are not addressed elsewhere (City of Arcadia 2010).

Circulation and Infrastructure Element

State law (Government Code Section 65302[b]) requires that the General Plan include "a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan." Circulation elements are also required to include "a plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan. The Circulation and Infrastructure Element identifies a system capable of responding to growth occurring consistent with the policies and Land Use Plan presented in the Land Use and Community Design Element. The Circulation and Infrastructure Element identifies physical improvements that will be needed to attain the goals and objectives, as well as alternative techniques to improve the City's circulation and infrastructure systems. The circulation system is one of the most important of all urban systems in determining the form and quality of the Arcadia environment. The circulation modes used, location of routes, operational policies and the operating levels of service influence the nature of urban development, the physical organization of the City, and can enhance or limit the social and economic activity within the City. Additionally, this element addresses both the transportation network and utilities infrastructure necessary for urban services. This element underscores the importance of many of the existing infrastructure plans that are currently in place (Water Master Plan, Sewer Master Plan, Capital Improvement and Equipment Plan, etc.) and identifies the necessity to constantly update and evaluate these plans, as well as current services, as to provide the highest quality water, sewer, storm water, and waste services that will meet the needs of a dynamic Arcadia (City of Arcadia 2010).

Housing Element

The Housing Element is one of the seven required General Plan elements mandated by state law. State law requires that each jurisdiction's Housing Element consist of "identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled program actions for the preservation, improvement and development of housing." The Housing Element must analyze and plan for housing for all segments of the community (City of Arcadia 2013).

This Housing Element covers the Planning Period from October 2014 to October 2021, consistent with the state-mandated update required for all jurisdictions within the SCAG region. The Housing Element of the City's General Plan for the 2014–2021 cycle was adopted by the City Council in December 2013. As discussed above, at the time of drafting this EIR, the City of Arcadia is required to update its Housing Element to accommodate the 6th cycle of RHNA, which covers the planning period of October 2021 through October 2029 (City of Arcadia 2021). See Section 4.14, Population and Housing, of this EIR for more discussion.

Resource Sustainability Element

A General Plan is required to have a Conservation Element to guide the "conservation, development, and utilization of natural resources" of the City (Government Code Section 65302[d]). In Arcadia, resource issues of concern are air quality, water quality and water resource conservation, energy conservation, waste management and recycling, sustainable building practices, management of hillside resources, and management of mineral resources. The Resource Sustainability Element considers the effects of land use and development on natural resources, and

specifically addresses air quality, water quality and water resource conservation, energy conservation, waste management and recycling, mineral resources, and the management of hillside areas (City of Arcadia 2010). The Resource Sustainability Element includes programs and policies to promote community-wide conservation, and requires new development to incorporate sound conservation principles and mitigate any negative environmental impacts consequent to development within or bearing upon the City.

Parks, Recreation, and Community Resources Element

Section 65302(e) of the California Government Code requires the adoption of an open space element as part of the general plan. The Parks, Recreation, and Community Resources Element addresses open space lands used for active recreation (parks) and enjoyment of nature, recreation programs, and the broad range of community, cultural, and educational resources and services Arcadia offers. This element addresses not just open spaces but the broad range of community, cultural, and educational resources and services that Arcadia offers, such as the Civic Center with the adjoining athletic field (City of Arcadia 2010).

Safety Element

The Safety Element is one of the General Plan elements required by State law. The Safety Element is concerned with identifying and avoiding or mitigating hazards present in the environment that may adversely affect property and lives. Government Code Sections 65302(g) and 65302(f) identify several issues to consider in such planning efforts, as does California Health and Safety Code Section 56050.1.The purpose of the Safety Element is to reduce death, injuries, property damage, and economic and social dislocation resulting from natural and human-caused hazards such as urban fire, flooding, mudslides, and earthquakes(City of Arcadia 2010).

Noise Element

Government Code Section 65302(f) requires that the general plan contain a noise element that "identifies and appraises noise problems in the community." The Noise Element identifies significant sources of noise in Arcadia and establishes policies and programs to protect people from excessive noise exposure (City of Arcadia 2010). The Noise Element is intended to be used as a guide in public and private development matters related to outdoor noise. The Noise Element will serve as an aid in defining acceptable land uses and as a guideline for compliance with California Noise Insulation Standards.

City of Arcadia Municipal Code

Article IX, Division and Use of Land

The Development Code is intended to regulate the use and development of land within the City consistent with the City of Arcadia General Plan. It is also the intent of the Development Code to promote orderly development; protect the public health, safety, and general welfare; protect the character, social diversity, and economic vitality of neighborhoods and business districts; and ensure that new uses and development benefit the City.

9101.03.020 - Establishment of Zones

The Development Code is the primary tool used by the City to carry out the goals, objectives, and policies of the General Plan. It is intended that all provisions of the Development Code be consistent with the General Plan and that any development, land use, or subdivision approved in compliance with these regulations will also be consistent with the General Plan. Zones have been established to classify, regulate, and restrict the uses of land

and buildings; regulate and restrict the height and bulk of buildings; regulate the area of yards and other open spaces about buildings; and regulate the density of people.

9103.15 – Density Bonuses for Affordable and Senior Housing

This section of the City's Development Code codifies the requirements of California State Government Code Sections 65915 through 65918. The program offers incentives for the development of affordable housing for low-income, moderate-income, and senior citizen households. Where regulations are not specifically addressed in this Section or where conflicts exist between these provisions and the provisions of Government Code Sections 65915 through 65918, the provisions of the Government Code, as they may be amended over time, apply.

9105.03 – Tentative Map Filing and Processing

A Tentative Parcel Map is prepared for the purpose of dividing a legal lot into four or fewer lots and prepared in compliance with the provisions of Government Code Sections 66410 et seq.

9107.19 - Site Plan and Design Review

The purpose of this section of the City's Development Code is to provide a process for the appropriate review of development projects. The intent is to ensure that all approved site and structural development respects physical and environmental characteristics of the site; ensures safe and convenient access and circulation; provides high quality design practices; maintains distinct neighborhood and/or community identity; minimizes negative visual impacts; provides adequate dedication of land for public purposes; among others.

2018 City Center Design Plan

On November 15, 2016, the City of Arcadia (City) approved an Initial Study/Mitigated Negative Declaration (MND) for a Development Code Text Amendment; General Plan Amendment; and Zone Change, which involved comprehensive updates to various chapters of the Arcadia Municipal Code and to create a new Development Code; to expand the Downtown Mixed Use (DMU) area; and a Zoning Map Amendments to achieve consistency between the Development Code and General Plan Amendment. These approvals were made in order to implement changes to the allowable residential density and building height within the Downtown Mixed Use (DMU) and Central Business District (CBD) zones. Specifically, the General Plan Amendment increased the maximum residential density in the DMU from 50 dwelling units/acre (du/ac) to 80 du/ac and increased the maximum height from 50 feet to 55 feet. Additionally, any new development within the DMU and CBD would be subject to compliance with the City Center Design Plan.

4.9.3 Thresholds of Significance

The significance criteria used to evaluate the Project's impacts to land use and planning are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to land use and planning would occur if the Project would:

a) Physically divide an established community.
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.

4.9.4 Impacts Analysis

Threshold 4.9a Would the project physically divide an established community?

The physical division of an established community typically refers to the construction of a linear feature (e.g., a major highway or railroad tracks) or removal of a means of access (e.g., a local road or bridge) that would impair mobility within an existing community or between a community and outlying area.

The Project site currently consists of a 2-story office building, two 1-story commercial buildings, an 8-story office building, a 1-story bank drive-through and surface parking. Access to the Project site is provided on Santa Clara Street to the north, Wheeler Avenue to the south, an alleyway to the east, and Santa Anita Avenue to the west.

The proposed Project involves construction of a multi-family residential development and the demolition of some of the existing structures on the site, including the 2-story office building, the two 1-story commercial buildings, and surface parking. As described in the Section 3.7, Discretionary Actions, the Project includes a Tentative Parcel Map which would merge lots on site as well as a portion of the alley would be vacated to accommodate the Project. Implementation of the Project would result in a 7-story multi-family residential building, consisting of 319 dwelling units. An outdoor plaza would be constructed between the 8-story office tower and the residential building and would include outdoor lounge areas with benches and seating. Within the existing 8-story office building, which currently contains a coffee counter, approximately 750 square feet of the southern portion of the building footprint would be converted from office lobby space into a café at ground level. The Project would also construct two above-ground parking areas, within Levels 1 and 2 of the building, and up to two subterranean parking levels.

Under the existing condition, the Project site is developed land and is not used as a connection or thoroughfare between established communities. Instead, connectivity within the area surrounding the Project site is facilitated via local roadways. The proposed Project would not result in the construction of new driveways; rather, the Project would allow for access via existing driveways on Santa Anita Avenue, Santa Clara Street, Wheeler Avenue, and an alleyway. Further, the alleyway adjacent to the eastern boundary of the Project site would be partially converted into a pedestrian paseo through the installation of removeable bollards, which would facilitate the Project's objectives of connectivity to the City's Downtown. Therefore, the Project does not include the construction of a new roadway that would impair mobility within the existing Project site or the surrounding area. Rather, the Project would increase access at existing driveways and pedestrian/transit connectivity. As such, the Project would not impede movement within the Project site, within an established community, or from one established community to another.

Therefore, impacts associated with the division of an established community would be less than significant. No mitigation is required.

Threshold 4.9b Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

To evaluate the proposed Project's impacts related to land use and planning, this analysis examines the Project's consistency with both regional and local plans, policies, and regulations that regulate land uses within the Project site's vicinity. These plans are as follows:

- SCAG's Connect SoCal (2020–2045 RTP/SCS)
- City of Arcadia General Plan

- City of Arcadia Municipal Code

Connect SoCal (SCAG 2020–2045 RTP/SCS)

SCAG's Connect SoCal is a regional growth-management strategy that targets per capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region. The Connect SoCal incorporates local land use projections and circulation networks in city and county general plans. Typically, a project would be consistent with the RTP/SCS if the project does not exceed the underlying growth assumptions within the RTP/SCS. As discussed in Section 4.11, Population and Housing, the proposed Project would result in approximately 909 residents, which would estimate approximately 1.5% of the 2045 SCAG estimate for the City's projected total population. Additionally, it is likely that the proposed residential units would accommodate a combination of existing residents and new residents that either currently work within the City and/or new residents that would be hired as a result of projected employment generation within the City.

Furthermore, the proposed Project is estimated to generate a net loss of 20 employees as compared to existing conditions (see Section 4.11, Population and Housing). This indicates that the proposed Project would not outpace regional infrastructure, since the SCAG RTP/SCS is used for local and regional planning purposes. Furthermore, as demonstrated in Table 4.9-1, the proposed Project would implement the guiding principles, goals, and policies of SCAG's 2020–2045 RTP/SCS as they relate to livability, economic prosperity, and sustainability through the development of a mixed-use residential development. The development of the proposed Project within proximity to transit would thereby alleviating pressure on suburban and open space areas to develop, is fully supportive of SCAG's strategies. The major goals of the Connect SoCal are outlined in Table 4.9-1, along with the proposed Project's consistency with them.

Table 4.9-1. Project Conflicts with the Connect SoCal (SCAG 2020–2045 RTP/SCS)

RTP/SCS Goal	Potential Project Conflicts
Goal 1: Encourage regional economic prosperity and global competitiveness	**No Conflict.** The proposed Project would result in the development of a mixed-use residential development within the City of Arcadia's Downtown. The Project site currently support existing office and commercial buildings, some of which would be demolished for the construction of new housing on site. Metro's L Line Arcadia Station is located within the Project site's vicinity, thereby connecting residents to the region's transportation network. Once constructed, the Project would continue to support the regional economic development. As described in Draft EIR Section 4.11, Population and Housing, the Project would contribute housing opportunities, including affordable housing, for a city considered to be a jobs-rich community. Therefore, the Project is consistent with this goal.
Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods	**No Conflict.** The Project site is served by local and regional bus transit lines as well as light rail. Project development would increase transit accessibility of jobs and services within the Project site's vicinity. The Project site would bring residential development the City's Downtown, which contains a mixture of office and commercial development uses, thereby reducing travel demands for people. Further, the Project includes objectives to support walkability and increased pedestrian access to support connectivity with the nearby Metro light rail station. Therefore, the Project is consistent with this goal.

Table 4.9-1. Project Conflicts with the Connect SoCal (SCAG 2020–2045 RTP/SCS)

RTP/SCS Goal	Potential Project Conflicts
Goal 3: Enhance the preservation, security, and resilience of the regional transportation system	**No Conflict.** The proposed Project would provide new living and working opportunities in close proximity to transit, thereby increasing ridership. Public transit that operates in the vicinity of the Project site includes the Metro L Line and multiple bus lines. The Metro L Line is a light rail line running between Azusa and East Los Angeles, with the closest station approximately 350 feet east of the Project site. The Project site is also supported by service from Metro as well as Foothill Transit. As such, the proposed Project would support use of the transit system and would provide an enhancement to the existing transit infrastructure. The proposed Project would not otherwise alter or affect the security or resilience of the regional transportation system. Therefore, the Project is consistent with this goal.
Goal 4: Increase person and goods movement and travel choices within the transportation system	**No Conflict.** The Project site is served by existing and proposed pedestrian, bicycle, and mass-transit infrastructure and connectivity. One of the Project objectives is to promote pedestrian connectivity within the City's Downtown, thereby supporting the placement of mixed uses in an area well served by transit and within walking distance to residential areas and commercial amenities. As such, the Project would increase the accessibility to the transportation and increase the persons using the transit infrastructure. Therefore, the Project is consistent with this goal.
Goal 5: Reduce greenhouse gas emissions and improve air quality	**No Conflict.** The Project would support the use of the existing and proposed pedestrian, bicycle, and mass-transit infrastructure and connectivity. Less reliance on automobiles and support for multi-modal transportation would help reduce greenhouse gas emissions and improve air quality. See Section 4.2, Air Quality, and Section 4.6, Greenhouse Gas Emissions, of this Draft EIR for more details on Project features and requirements that would reduce the Project's air quality effects and greenhouse gas emissions. Table 4.6-4 indicates that the net GHG emissions associated with development of the proposed Project would be below the SCAQMD GHG threshold of 3,000 MT CO2e per year. Therefore, the proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. One of the benefits of the proposed Project is to improve air quality by providing housing for those who work in the City so that they may reduce their vehicle miles traveled to the extent possible. Therefore, the Project is consistent with this goal.
Goal 6: Support healthy and equitable communities	**No Conflict.** As detailed in this Section, the Project site is designated as Downtown Mixed Use, which allows for a mix of land uses that are within walking distance of one another. The Project would introduce new residential uses to the City's Downtown and include design features to provide streets and alleyways that are attractive to pedestrians. Thus, the Project would promote healthy, walkable communities. Further, the proposed Project would provide housing opportunities in a variety of sizes, types, and densities to support an equitable

Table 4.9-1. Project Conflicts with the Connect SoCal (SCAG 2020–2045 RTP/SCS)

RTP/SCS Goal	Potential Project Conflicts
	community. The proposed Project would include 26 affordable housing units through the utilization of SB 1818. The specific allocation between the types of low income housing has yet to be determined; however, the proposed affordable units would satisfy a portion of the City's mandated low income units, as set forth by RHNA and the City's Housing Element. The proposed Project would contribute housing and employment opportunities to a jobs-rich community, thereby contributing to a more balanced local economy. Therefore, the Project is consistent with this goal.
Goal 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network	**No Conflict.** The Project would comply with sustainability-focused measures such as building design energy efficiency that meets or exceeds Title 24 requirements, and roof structures to support solar panels. The installation of green infrastructure combined with high standards for energy-efficient buildings contained within the California Building Code, will ensure that Project meets regional goals for sustainability and green development. In addition, the Project would increase density on a site with access to the region's transportation network. Thus, the Project would support a development pattern that reduces the City's jobs/housing imbalance and place residential uses near employment opportunities. Therefore, the Project is consistent with this goal.
Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel	**No Conflict.** The proposed Project would include pedestrian improvements, bicycle parking facilities, and access to existing transit, all of which would encourage residents and employees of the Project to use alternative modes of transportation (as opposed to single-occupancy vehicles), which would in turn support more efficient travel in the area. Additionally, the Project site is located within an urbanized portion of the City and Los Angeles County with access to regional transportation systems that can use new transportation technologies and data driven solutions to provide more efficient travel. Therefore, the Project is consistent with this goal.
Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options	**No Conflict.** The proposed Project would develop a mixed-use, pedestrian-oriented development with access to alternative modes of transportation. The Project would provide additional housing opportunities in a variety of housing sizes, types, and densities that support the goals of the City's Housing Element. The proposed Project would include affordable housing units through the utilization of SB 1818. To further facilitate multiple transportation options, the Project is proposed within the City's Downtown where residents do not need to use a car to access basic needs throughout the day. The residential units include studios, one- and two-bedroom units, and live-work units to encourage diverse housing types within the City. Therefore, the Project is consistent with this goal.

Table 4.9-1. Project Conflicts with the Connect SoCal (SCAG 2020–2045 RTP/SCS)

RTP/SCS Goal	Potential Project Conflicts
Goal 10: Promote conservation of natural and agricultural lands and restoration of habitats	**No Conflict.** The Project site is located in a highly urbanized area away from existing agricultural lands and natural habitat. The Proposed Project would not encroach upon agricultural lands and natural habitat. (See the Chapter 5, Other CEQA Considerations, for more discussion regarding agricultural and biological resources.) Therefore, the Project is consistent with this goal.

Source: SCAG 2020.

As shown in Table 4.9-1, the proposed Project would not conflict with any of the goals within SCAG's Connect SoCal. The Project would develop the Project site, producing an estimated 909 residents and a net loss of 20 employees as compared to existing conditions (see Section 4.11, Population and Housing). The Project site's vicinity is served by existing public transit such as the Metro L Line and various bus routes provided by Metro and Foothill Transit. For these reasons, and as shown in Table 4.9-1, the Project would not conflict with the applicable goals in the RTP/SCS adopted for the purpose of avoiding or mitigating an environmental effect.

City of Arcadia General Plan Consistency

The proposed Project would result in the construction of a new multi-family residential building on a total lot area of 128,517 square feet (sf), or 2.95 acres. As described in the General Plan, the DMU land use only accounts for commercial square footage in calculation of FAR. The total non-residential area of the proposed Project consists of 83,253 square feet (consisting of a Bank of America building, an 8-story office building, and a 1-story office building). Additionally, the Project includes 8 live/work units with a total of 15,145 square feet in size. Of the total live/work areas proposed, 9,281 square feet would be designated for "work" or commercial uses. Therefore, the total non-residential area, including the existing office and "work" areas is 92,534 square feet. In summary, the proposed Project's FAR would result in 0.72, which is consistent with the General Plan's maximum of 1.0.

Table 4.9-2 outlines the applicable policies identified in the each element of the General Plan (Land Use and Community Design Element, Economic Development Element, Circulation and Infrastructure Element, Housing Element, Resource Sustainability Element, Parks, Recreation, and Community Resources Element, Safety Element, and Noise Element) and the proposed Project's consistency with each applicable policy. As shown below, the Project would be consistent with applicable goals and policies of the General Plan.

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
Land Use and Community Design Element	
Goal LU-1: A balance of land uses that preserves Arcadia's status as a Community of Homes and a community of opportunity.	**Consistent.** The Project would not require a General Plan Amendment or Zone Change for implementation. As such, the proposed Project would not change the balance of land uses as designated by the City's General Plan or Zoning Map. The Project would result in a mixed-use development, consistent with the site's land use designation and zoning, within the City's Downtown area. Thus, the Project would promote the City's goal of a balance of land uses for residential and commercial opportunity.
Policy LU-1.1: Promote new infill and redevelopment	**Consistent.** The proposed Project would redevelop an existing site through the demolition of one 2-story office building, two 1-story commercial

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
projects that are consistent with the City's land use and compatible with surrounding existing uses.	buildings, and surface parking and construction of a 7-story multi-family residential building with 319 units. Implementation of the proposed Project would be consistent with the site's General Plan land use designation and zoning designation of Downtown Mixed Use (DMU) allowable land uses. Moreover, the Project proposes to utilize a 35% density bonus under Senate Bill (SB) 1818, which would increase the allowable dwelling unit count to 319 total units. In order to comply with SB 1818, the Project would include 26 affordable dwelling units. Thus, the final unit mix would consist of 293 market rate units, and 26 affordable units, totaling 319 dwelling units. As shown in Figures 2-3 and 2-4, the Project site is surrounded by existing and designated areas for mixed-use development. Therefore, the proposed Project would introduce new residential uses to the Downtown area, consistent with the site's land use designation and zoning, and would be compatible.
Policy LU-1.2: Promote new uses of land that provide diverse economic, social, and cultural opportunities, and that reinforce the characteristics that make Arcadia a desirable place to live.	**Consistent.** As previously addressed under Goal LU-1 and Policy LU-1.1, the proposed Project would introduce new residential land uses on a site that currently consists of office and commercial uses as well as surface parking. Implementation of the Project would be consistent with the Project site's General Plan land use designation and zoning and support the intent of the City to establish a mix of uses in the downtown area. Moreover, the Project proposes various residential amenities throughout the proposed building, including an outdoor pool area, fire pit, barbeque dining area, game lounge, and a lawn/grassy area, as well as an outdoor passive court located in the middle of the building within Level 3. Within Level 7, residential amenities would include a community room and a roof deck. Additional residential amenities would be constructed along the Project's frontage with Santa Clara Street within Levels 1 and 2 of the building, including a two-story fitness gym, package/mail room, lounge, leasing offices, a reception area, and lobbies. An outdoor plaza would be constructed between the 8-story office tower and the residential building, consisting of outdoor lounge areas with benches and seating. The alleyway adjacent to the eastern boundary of the Project site would be converted into a pedestrian paseo. Within the existing 8-story office building, which currently contains a coffee counter, approximately 750 square feet of the southern portion of the building footprint would be converted from office lobby space into a café at ground level. As demonstrated, the proposed Project would continue to support the City's policy of providing diverse economic, social, and cultural opportunities.
Policy LU-1.3: Encourage community involvement in the development review process.	**Consistent.** Consistent with Section 21165 of the California Public Resources Code and Section 15050 of the CEQA Guidelines, the City has prepared this Draft EIR for the proposed Project, subject to the public's review and comment with posting of the Notice of Availability (NOA). Moreover, in accordance with the CEQA Guidelines Section 15082, the City prepared a Notice of Preparation (NOP) to provide responsible and trustee agencies, the Governor's Office of Planning and Research, and the County Clerk with sufficient information describing the Project and its potential environmental effects. The City mailed the NOP to property owners within a 300-foot radius of the Project site. Potential commenters were given between July 19, 2021 and August 19, 2021 to provide public comment. Lastly, a public scoping meeting was held online to share information regarding the Project and the CEQA environmental review process. The meeting was held on August 5, 2021 from 6 PM to 7 PM and solicited written comments about the scope

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
	and content of the environmental analysis to be addressed in the Draft EIR. Information regarding the public scoping meeting is available on the City's website at: www.arcadia.gov/projects.
Policy LU-1.4: Encourage the gradual redevelopment of incompatible, ineffective, and/or undesirable land uses.	**Consistent.** Under existing conditions, the Project site currently supports office and commercial buildings as well as a surface parking lot. As previously mentioned in Goal LU-1, the Project would result in a mixed-use development, consistent with the site's land use designation and zoning, within the City's Downtown area. Therefore, the Project's proposed redevelopment of the site to support residential land uses would be consistent with this policy.
Policy LU-1.5: Require that effective buffer areas be created between land uses that are of significantly different character or that have operating characteristics which could create nuisances along a common boundary.	**Consistent.** As previously addressed under Goal LU-1 and Policy LU-1.1, the proposed Project would introduce new residential land uses on a site that currently consists of office and commercial uses as well as surface parking. Implementation of the Project would be consistent with the Project site's General Plan land use designation and zoning, and would support the intent of the City to establish a mix of uses in the downtown area. The mix of residential, office and commercial are compatible and allowed through the DMU zone. No buffer areas would be required because the character of the mixed-use Project would not create nuisances for the mix of land uses.
Policy LU-1.6: Establish consistency between the Land Use Plan and the Zoning Code.	**Consistent.** The proposed Project is consistent with the City's General Plan designation and zoning for the Project site. Implementation of the Project would not require a General Plan Amendment or Zone Change.
Policy LU-1.7: Encourage developments to be placed in areas that reduce or better distribute travel demand.	**Consistent.** The proposed Project would result in the introduction of residential uses into the City's Downtown area, located approximately 350 feet southwest of Metro's L (Gold) Line Arcadia Station. As such, the proposed development meets the criteria on an infill site within a transit priority area per Senate Bill (SB) 743. Therefore, by providing infill residential development within a transit priority area, travel demand would be reduced with the availability of transit nearby. See Section 4.13, Transportation, of this Draft EIR for more discussion.
Policy LU-1.8: Encourage development types that support transit and other alternative forms of transportation, including bicycling and walking.	**Consistent.** As previously addressed in Policy LU-1.7, the proposed Project is considered an infill residential project within a transit priority area. This determination is based on the Project site's location approximately 350 feet southwest of Metro's L Line Arcadia Station. As such, the Project would be consistent with this policy by providing development adjacent to transit and other alternative forms of transportation from vehicles. Additionally, the Project site is supported by existing sidewalks and bicycle lanes adjacent to and within the site's immediate vicinity, which provides connections to a City-wide network. See Section 4.13, Transportation, of this Draft EIR for more discussion.
Policy LU-1.9: Establish incentives and development standards to encourage development of land uses that provide public amenities and/or desirable facilities or features, as well as private open space and recreation areas.	**Consistent.** This policy is a responsibility of, and is directed to, the City of Arcadia. However, as described in Chapter 3, Project Description, of this Draft EIR, the proposed Project requests a number of discretionary actions and approvals that the City will consider. If approved, the Project would provide public amenities and/or desirable facilities or features, as well as private open space and recreation areas as part of the proposed Project. The Project would include private and common open space on site within and outside of the proposed residential building. With a total of 319 units, the City requires 100 square feet of open space per unit. As such, 31,900 square feet of open space is required. The Project would provide 41,355 square feet of open space, consisting of a 5,845 square foot interior courtyard, a 10,862 square

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
	foot pool courtyard, a 23,957 square foot private balcony, and a 691 square foot roof deck. Specifically, the Project would include an outdoor pool area, fire pit, barbeque dining area, game lounge, and a lawn/grassy area, as well as an outdoor passive court located in the middle of the building within Level 3. An outdoor plaza would be constructed between the 8-story office tower and the residential building, and would include outdoor lounge areas with benches and seating. A portion of the alleyway adjacent to the eastern boundary of the Project site would be converted into a pedestrian paseo.
Policy LU-1.10: Require that new development projects provide their full fair share of the improvements necessary to mitigate project generated impacts on the circulation and infrastructure systems.	**Consistent.** As demonstrated throughout this Draft EIR, the Project's potential environmental effects have been analyzed and where impacts are determined to be potentially significant, mitigation has been incorporated to reduce to a less than significant level. Furthermore, the Project would be required to comply with City required fair share policies and regulations within the City's Development and Municipal Codes. For discussion on potential environmental impacts associated with the Project's potential to impact the City's circulation and infrastructure systems, see Section 4.13, Transportation, as well as Section 4.15, Utilities and Service Systems, of this Draft EIR.
Goal LU-2: A City with a distinctive and attractive public realm, with pedestrian-friendly amenities in commercial and mixed-use districts and single-family neighborhoods that continue to maintain Arcadia's standard of architectural and aesthetic quality.	**Consistent.** As previously addressed in Goal LU-1, the Project would result in a mixed-use development, consistent with the site's land use designation and zoning, within the City's Downtown. Implementation of the Project would not require a General Plan Amendment or Zone Change. Furthermore, as previously addressed in Policy LU-1.8, the Project would be supported by existing sidewalk and bicycle infrastructure within a designated mixed-use land use zone. Lastly, the Project requires the City's approval of Site Plan and Design Review. As such, the Project would be required to meet the City's architectural and aesthetic quality standards. See Section 4.1, Aesthetics, of this Draft EIR for more discussion.
Policy LU-2.1: Ensure that trees planted in the public right-of-way continue to be well maintained where they exist, are planted in areas where they are currently lacking, and encourage replacement of undesirable tree species in public right-of-ways.	**Consistent.** Under existing conditions, trees are planted along the frontage of Santa Clara Street and Wheeler Avenue. As described in Chapter 3, Project Description, proposed Project plans to plant 56 new trees. As previously indicated, the Project requires the City's approval of the Site Plan and Design Review. As such, the Project would be required to meet the City's standards and regulation governing trees within the public right-of-way. Chapter 5, Other CEQA Considerations, further notes Project activities would be required to comply with all applicable requirements set forth in the City's street tree preservation policy as set forth in Article IX, Chapter 7, Tree Preservation, of the City's Development Code. As shown in the Arborist Report (Appendix B), the Project proposes to remove 27 existing trees, including 26 on-site trees and one (1) off-site street tree. According to Appendix B, six (6) on-site trees planned for removal have protected status under the City's Tree Preservation Ordinance (Division 10, Section 9110.01 of the Development Code), which requires the planting of replacement trees if a protected tree is removed. As such, the Project proposes to plant two (2) new trees (2:1 ratio) for each protected tree approved for removal for a total of 12 on-site replacement trees.[1] The removal of one (1) off-site street tree [crepe myrtle (Lagerstroemia

[1] The City's Tree Preservation Ordinance requires that every protected tree that is approved to be removed must be replaced by two (2) new 24" box trees. The Project landscape plans propose to plant 56 new replacement trees including 24", 36", and 48" box trees, as well as six (6) 12' cubit date palms (Phoenix dactylifera).

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Goal/Policy	Analysis
	indica)], although not subject to the requirements of the Tree Preservation ordinance, is regulated under Division IX, Chapter 8, Comprehensive Tree Management Program, of the City's Municipal Code, would also be replaced at a ratio of 2:1, subject to further review by the City's Public Works Department. The 21 on-site, non-regulated trees planned for removal would not be subject to any replacement requirements. However, in addition to the 14 replacement trees required per City regulation, the Arborist Report (Appendix B) recommends planting an additional 21 trees to reduce the impact of the non-regulated tree removals, resulting in a total of 35 required or recommended replacement trees.
Policy LU-2.2: Emphasize the use of public spaces and design that are oriented toward the pedestrian and use of transit throughout the community.	**Consistent.** As previously addressed in Policy LU-1.7 and LU-1.8, the Project proposes an infill residential development within a transit priority area, approximately 350 feet southwest of Metro's L Line Arcadia Station. As such, the Project would be consistent with this policy by providing development adjacent to transit and other alternative forms of transportation from vehicles. Additionally, the Project site is supported by existing sidewalks and bicycle paths adjacent to and within the site's immediate vicinity. As described in Chapter 3, Project Description, the Project proposes common recreational facilities and open space features. This includes a paseo the ground floor between the existing 8-story office building and the proposed multi-family residential building, consisting of flexible pedestrian space, fixed furniture, trees and enhanced plantings, lighting, and bicycle parking. The paseo provides the Project site with public pedestrian access to the site and a through connection between Santa Clara Street and Wheeler Avenue. The Project would also include an enhanced alleyway on the eastern edge of the Project site, providing pedestrians with a through connection between Santa Clara Street and Wheeler Avenue as well. The alley would feature screen planting, artistic vertical screens, and raised planters with trees.
Goal LU-4: High-quality and attractive multifamily residential neighborhoods that provide ownership and rental opportunities for people in all stages of life	**Consistent.** The proposed Project would result in the construction of a 7-story multi-family residential building consisting of 319 dwelling units. Under the DMU zoning regulation, the Project site would have an allowable base density of 80 units per acre, allowing for a total of 236 dwelling units on the 2.96-acre site. The Project applicant proposes to utilize a 35% density bonus under SB 1818, which would increase the allowable dwelling unit count to 319 total units. In order to comply with SB 1818, the Project would include 26 affordable dwelling units. Thus, the final unit mix would consist of 293 market rate units, and 26 affordable units, totaling 319 dwelling units. All of the dwelling units would be rental units. The unit mix would consist of 64 studios, 167 one-bedroom units, 80 two-bedroom units, and 8 live-work units. The residential units would be constructed within Levels 2 through 7 of the proposed 7-story building, while each of the 8 live-work units would be constructed as a two-floor unit (with mezzanine), with frontage along Wheeler Avenue within Level 1 and Level 2 of the residential building. The average square footage of the unit types would be 540 square feet for the studios, 744 square feet for the one-bedroom units, 1,278 square feet for the two-bedroom units, and 1,893 square feet for the live/work.
Policy LU-4.1: Require that new multifamily residential development be visually and	**Consistent.** As previously addressed in Goal LU-1, the Project would not require a General Plan Amendment or Zone Change for implementation. As such, the Project would be consistent with the City's General Plan land use

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
functionally integrated and consistent in scale, mass, and character with structures in the surrounding neighborhood.	designation and zoning. In addition, the Project site is located within the H Special Height Overlay Zone, specifically within the Zone H8 height overlay which allows for a maximum development height of 95 feet. The 7-story structure would be constructed to 84 feet and 11 inches to parapet in height. As such, the Project as proposed would be within the maximum development height for the Project site. Moreover, one of the required approvals for the Project is the City's review of site plan and design. As detailed in Goal LU-4, above, the Project proposes to utilize State Density Bonus law to increase the number of units on site beyond what is allowed under existing General Plan and zoning regulations. As such, the Project is required to provide 26 affordable dwelling units. Utilization of the State's Density Bonus Law is allowed and supersedes local land use regulations. However, as described in Appendix B, Environmental Topics with No Potential for Significant Impacts, of the NOP, potential impacts to aesthetics (i.e., visual consistency for scale, mass, and character with the surrounding neighborhood) is not required to be evaluated under CEQA per SB 743 (Public Resource Code §21099(d) because the Project meets the criteria of an infill residential development within a transit priority area. See Section 4.1, Aesthetics, of this Draft EIR for more discussion.
Policy LU-4.2: Encourage residential development that enhances the visual character, quality, and uniqueness of the City's neighborhoods and districts.	**Consistent.** See the consistency analysis provided for Policy LU-4.1, above.
Policy LU-4.3: Require the provision of adequate private and common open space for residential units. Require sufficient on-site recreational facilities to meet the daily needs of residents, if possible, commensurate with the size of the development.	**Consistent.** The Project would include private and common open space on site within and outside of the proposed residential building. With a total of 319 units, the City requires 100 square feet of open space per unit. As such, 31,900 square feet of open space is required. The Project would provide 41,355 square feet of open space, consisting of a 5,845 square foot interior courtyard, a 10,862 square foot pool courtyard, a 23,957 square foot private balcony, and a 691 square foot roof deck. Specifically, the Project would include an outdoor pool area, fire pit, barbeque dining area, game lounge, and a lawn/grassy area, as well as an outdoor passive court located in the middle of the building within Level 3. An outdoor plaza would be constructed between the 8-story office tower and the residential building, and would include outdoor lounge areas with benches and seating. The alleyway adjacent to the eastern boundary of the Project site would be converted into a pedestrian paseo.
Policy LU-4.4: Strictly enforce City codes, including building and safety, zoning and land use regulations, and property maintenance codes, to maintain safe, high-quality residential neighborhoods.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. However, as described in Chapter 3, Project Description, of this Draft EIR, the proposed Project requests a number of discretionary actions and approvals that the City will consider. These actions would be taken based on the Project's ability to comply with the City's General Plan, Development Code, and Municipal Code, among other regulations.
Policy LU-4.5: Provide amenities that make a multifamily development a	**Consistent.** Various residential amenities would be constructed throughout the residential building and Project site. Such amenities include an outdoor pool area, fire pit, barbeque dining area, game lounge, and a lawn/grassy area, as well as an outdoor passive court located in the middle of the building

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
fully functional residential community.	within Level 3. Within Level 7, residential amenities would be constructed that include a community room and a roof deck. Additional residential amenities would be constructed along the Project's frontage with Santa Clara Street within Levels 1 and 2 of the building, and would include a two-story fitness gym, package/mail room, lounge, leasing offices, a reception area, and lobbies. An outdoor plaza would be constructed between the 8-story office tower and the residential building and would include outdoor lounge areas with benches and seating. The alleyway adjacent to the eastern boundary of the Project site would be converted into a pedestrian paseo. Within the existing 8-story office building, which currently contains a coffee counter, approximately 750 square feet of the southern portion of the building footprint would be converted from office lobby space into a café at ground level. As detailed above, the proposed multifamily development would provide amenities for a fully functional residential community.
Policy LU-4.6: Encourage multifamily projects built with quality materials that will physically endure and provide a positive long-term living environment for residents.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. However, the proposed Project would be built in accordance with the City's Municipal Code, Development Code, and California Building Code. Therefore, the Project would be built with the latest standards required for the public's health, safety, and welfare.
Policy LU-4.7: Arrange multifamily buildings on a site to meet the following criteria: • Provide interest to the "street scene" within the development and give as open a feel as possible to the site. • Create a sense of place by relating buildings to each other and to adjacent open space. • Provide a variety of open spaces of different sizes and shapes that perform different functions on the site, including contiguous areas large enough to be used for both active and passive recreation. • Separate balconies and patios on adjacent buildings from one another to increase the privacy of these spaces.	**Consistent.** See the consistency analysis provided for Policy LU-4.3, above. Additionally, see Figures 3-3c, Level-3 and Levels 4/5/6 and Figure 3-5, Open Space Plan in Chapter 3, Project Description, for a conceptual design of private open space within the proposed building. The Project would redevelop the space between the existing office building and the proposed residential building with a new paseo and outdoor plaza. This community open space area would include on-site wayfinding features, minimized vehicular access, flexible pedestrian space, trees and enhanced plantings, lighting, bicycle parking. The proposed paseo would provide concrete paving and enhanced concrete paving with fixed furniture. Additionally, the Project would repurpose an existing alley on the eastern edge of the Project site to support new wayfinding, screen planting, artistic vertical screens, raised planters with trees, and asphalt paving. A key Project objective is to design a distinctive building that has a coherent architectural concept and provides a high-quality urban addition to the City's Downton Core. Furthermore, when compared to existing conditions, the proposed Project design would add architectural and landscape features that would improve the visual quality of the Project site and the surrounding Project area. As shown in Section 4.1, Aesthetics, Figure 4.1-3a, Architectural Renderings (East Santa Clara Street, and Figure 4.1-3b (Wheeler Avenue) depict a conceptual visual of the proposed Project's exterior aesthetic qualities, including an updated mid-century modern look with clean lines, the integration of neutral colors and building materials, and a cohesive design scheme throughout the Project site. The Project would be required to comply with the City's Commercial and Mixed-Use Design Guidelines to ensure the structures compliment the City's design aesthetics and community character.

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Goal/Policy	Analysis
Goal LU-10: A thriving Downtown, with healthy commercial areas supported by high-quality, residential uses and supportive of the Metro Gold Line transit station	**Consistent.** The Project site is located within an area that is designated by the General Plan as Downtown Mixed Use and zoned DMU. As such, the proposed Project would introduce new residential uses within the City's Downtown. Moreover, the Project site is located approximately 350 feet from the nearest Metro's L Line Station. Implementation on the Project would result in the demolition of existing commercial building located on the south side of the Project site. However, the Project site's surrounding area is supported by existing commercial land uses to support the City's policy to create a thriving Downtown.
Policy LU-10.1: Provide diverse housing, employment, and cultural opportunities in Downtown, with an emphasis on compact, mixed-use, transit- and pedestrian-oriented development patterns that are appropriate to the core of the City.	**Consistent.** The proposed Project would introduce new housing and employment opportunities on the Project site within the City's Downtown. As part of the Project, the 7-story multi-family residential building would be located approximately 350 feet from the nearest Metro L Line station, which would be connected by new on-site improvements to an existing alleyway and outdoor plaza to facilitate pedestrian-oriented development. As described, the Project would be consistent with this City policy.
Policy LU-10.2: Promote the Metro Gold Line Extension and establishment of a transit station in Downtown Arcadia, and take full advantage of the opportunities the Gold Line station will bring to Downtown and the City as a whole.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. At the time of drafting the 2010 General Plan, Metro's Gold Line (now known as the L Line) was planned to be extended to the City of Azusa and include a station within the City of Arcadia. Under existing conditions, the Arcadia Station is now operational and is nearby the Project site. As such, the proposed Project is planned to support the nearby transit facility as a transit priority project.
Policy LU-10.6: Encourage high standards for property maintenance, renovation and redevelopment.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. Once operational, the proposed Project would require routine maintenance of on-site facilities. The Project would be built in accordance with the latest applicable California Building Code requirements and local standards within the City's Municipal and Development Codes. Additionally, the City's code enforcement department would ensure compliance with required upgrades needed during operations of the Project.
Policy LU-10.8: Establish an attractive and coordinated wayfinding sign program in Downtown with an overall consistent design theme.	**Consistent.** As described in Chapter 3, Project Description, of this Draft EIR, the proposed Project would include outdoor open space areas such as a plaza in between the 8-story office building and the proposed residential building as well as an improved paseo space converted from an existing alleyway on the site's eastern edge. Wayfinding signage would be included on the Project site. Compliance with this City policy would be ensured through the City's plan check and permitting process.
Policy LU-10.9: Connect various activity areas and plazas via sidewalks, paseos, and pedestrian alleys to create a comprehensive pedestrian network.	**Consistent.** As mentioned previously in the consistency analysis for Policy LU-10.8, the Project proposes outdoor community open space, including a plaza and paseo which not only support pedestrian access around the Project site, the Project also proposes features which would support flexible pedestrian space, seating, and landscaping designed to enhance the Project site and its surroundings. Thus, the Project would be consistent with this policy.
Policy LU-10.10: Establish a "park once" system in Downtown with a collection of	**Consistent.** The proposed Project would redevelop an existing site containing surface parking. As a result, 183 parking spaces would be replaced with the proposed multi-level parking garage and six surface level spaces would remain to support parking for the existing office building. A total of 551

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
shared surface and parking structures.	parking spaces are proposed to meet the parking needs for the existing uses to remain and the proposed new residential units and café.
Policy LU-10.11: Buildings should be oriented to the pedestrian and the street.	**Consistent.** As shown in Figure 3-3b, Level 1 and Level 2, the proposed residential building would be oriented to pedestrians on both Santa Clara Street and Wheeler Avenue. For example, the Project would include lobby entrances at the northeastern and southeastern corners of the residential building. Moreover, the proposed leasing office would be located on the first floor, accessible via Santa Clara Street. Finally, each of the 8 live-work units would have ground floor entrances on Wheeler Avenue. As such, the Project supports this City policy for pedestrian- and street-oriented development.
Policy LU-10.12: Encourage architecture that uses quality, lasting building materials; provides building scale that relates to intimate nature of Downtown; and applies a unified theme.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. The Project would be built in accordance with the latest applicable California Building Code requirements and local standards within the City's Municipal and Development Codes. Additionally, the Project's proposed design is subject to the review and approval of the City's decision makers where aesthetic qualities such as scale and building materials would be reviewed during the City's plan check and permitting process.
Policy LU-10.14: Create a high-quality pedestrian experience in Downtown through the use of street trees, public art, street furniture, and public gathering spaces. Using signage, art, and unique uses, entice and encourage people to walk and explore the commercial core of Downtown.	**Consistent.** As identified in the consistency analyses found in Policy LU-10.8 and Policy LU-10.9, the proposed Project is designed to support pedestrian-oriented development with the inclusion of outdoor community open space surrounding the Project site (e.g., the proposed paseo and plaza). Furthermore, the Project would include landscaping features including existing and proposed trees and planters. Wayfinding signage as well as artistic vertical screens are proposed within these outdoor spaces. As such, the Project is proposed to support pedestrian-oriented development within the City's Downtown.
Economic Development Element	
Goal ED-2: Re-creation of Downtown as the social and symbolic "Heart of the City"	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. The Project site is located within an area that is designated as Downtown Mixed Use. As such, the Project is proposed to support the land use goals and policies associated with this designation.
Policy ED-2.1: Work proactively to eliminate physical and business deterioration within the Downtown area.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. The Project site is located within an area that is designated as Downtown Mixed Use. Under existing conditions, the Project site includes office and commercial buildings which are proposed for demolition and support the construction of a new multi-family residential building. Implementation of the proposed Project would support economic development within the City's Downtown as the Project site is located within a transit-priority area and the Project would be designed to support a pedestrian-oriented community.
Policy ED-2.3: Adjust parking standards for Downtown to allow for shared parking arrangements, use of public parking lots and structures, and reduced parking requirements.	**Consistent.** As summarized in Section 4.13, Transportation, the Project is proposing 551 parking spaces to meet the parking needs for the existing office and new residential units and cafe. Based on the size and use of the Project, it would be required to provide 921 parking spaces per City Municipal Code and 494 spaces with the State Density Bonus parking reductions applied. The peak shared parking demand on-site, with the proposed Project, would be 404 spaces with a residual of 147 spaces. During the weekends, the peak shared parking demand on-site, with the proposed Project, would be

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Goal/Policy	Analysis
	376 spaces with a residual of 175 spaces. To accommodate the parking demand for the residential uses on-site, at all times, it is recommended that a minimum of 376 spaces be reserved for residential parking. Therefore, with shared parking designated for all uses (residential, office, and cafe) on site, the proposed parking supply of 551 spaces could accommodate the peak weekday and weekend parking demands.
Circulation and Infrastructure Element	
Goal CI-1: An efficient roadway system that serves all of Arcadia, supports all transportation modes, and balances the roadway system with planned land uses	**Consistent.** The proposed Project would not alter the existing roadway network or alter the efficiency of the network. Based on SB 743 and the revised CEQA guidelines, the City's Transportation Study Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment, and the San Gabriel Valley Council of Governments (SGVCOG) VMT Assessment tool, the Project would be screened from a project-level VMT analysis. The Project is in a Low VMT generating area within a TPA. Therefore, a VMT analysis is not required and impacts to VMT would be less than significant.
Policy CI-1.1: Pursue enhancements to the roadway network consistent with the Figure CI-3, Master Plan of Roadway, and the Transportation Master Plan.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia.
Policy CI-1.2: Implement street design standards on arterial corridors consistent with the Master Plan of Roadways to address bicycle facilities, sidewalks, and on-street parking that are context sensitive to adjacent land uses and districts, and to all roadway users, where appropriate.	**Consistent.** The proposed Project would not alter the existing roadway network or alter the efficiency of the network. The Project would include bicycle parking as well as on-site improvements to support pedestrian connectivity with the City's Downtown and nearby Arcadia Metro L Line Station. Site improvements include redeveloping the space between the existing office building and the proposed residential building with a new paseo and outdoor plaza. Additionally, with shared parking designated for all uses (residential, office, and cafe) on site, the proposed parking supply of 551 spaces could accommodate the peak weekday and weekend parking demands.
Policy CI-1.3: Maintain a maximum Level of Service (LOS) D throughout the City, except that LOS E may be permitted in the following circumstances: • Intersections/roadways at, or adjacent to freeway ramps • Intersections/roadways adjacent to Santa Anita Park during racing season • Intersections/roadways at or adjacent to designated Downtown,	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. As described in Appendix K-2, Transportation Memorandum, the net proposed Project trip assignments were added to the Opening Year (2024) peak hour traffic volumes to derive the Opening Year (2024) plus Project peak hour traffic volumes. At the Opening Year (2024), the plus Project intersection analysis for the AM and PM peak hours shows all the study area intersections operating at satisfactory levels of service (LOS E or better) under Opening Year (2024) plus Project conditions. The study area intersections currently and are forecast to operate at LOS E or better under all analysis scenarios, which meets the City's traffic impact thresholds for the Downtown mixed-use district.

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
Baldwin Avenue, and Live Oak Avenue commercial and mixed-use districts. These performance standards may require, but are not intended to mandate, roadway and/or intersection widenings. They represent goals used to monitor traffic conditions and to assess traffic impacts of development projects. Because LOS standards apply only to vehicular mobility and do not account for enhanced pedestrian movement or other modes, the City will not use them as the sole criteria for judging transportation system performance. Pedestrian convenience, transit access and operations, urban aesthetics, and other factors will be considered.	
Policy CI-1.4: Require the cost of transportation mitigation and improvements necessitated by new development be borne by new development— including non-automobile solutions—through the Traffic Impact Fee Program.	**Consistent.** All potential environmental impacts to Transportation would be less than significant. Therefore, no mitigation measures are proposed, and no impact fees would be required.
Policy CI-1.5: Update the Transportation Master Plan and the Traffic Impact Fee Program on a regular basis.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia.
Policy CI-1.6: Develop and maintain adequate funding sources for the ongoing maintenance and upkeep of the City's transportation infrastructure.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. According to the Section 4.13, Transportation, and Appendix K-2, Transportation Memorandum, the Project would contribute to the upkeep of transportation infrastructure by ensuring adequate parking needs for the existing offices and new residential units and café. The Project would provide also wayfinding signage at all parking garage ingress points for customers prior to entering the garage. In addition, bicyclist and pedestrian amenities at the site would be improved, and safety would be maintained at existing levels.
Policy CI-1.7: Continue Capital Improvement Programs (CIP)	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia.

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
funding for transportation improvements.	
Goal CI-2: Maximized operational efficiency of the street system	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. As described in Appendix K-2, Transportation Memorandum, the net proposed Project trip assignments were added to the Opening Year (2024) peak hour traffic volumes to derive the Opening Year (2024) plus Project peak hour traffic volumes. At the Opening Year (2024), the Project intersection analysis for the AM and PM peak hours shows all the study area intersections operating at satisfactory levels of service (LOS E or better) under Opening Year (2024) plus Project conditions. The study area intersections currently and are forecast to operate at LOS E or better under all analysis scenarios, which meets the City's traffic impact thresholds for the Downtown mixed-use district. In addition, as discussed in Section 4.13, Transportation, the Project would facilitate access to the drive-thru and maintain flow from the street system to the parking facilities by providing wayfinding signage at all parking garage ingress points, providing wayfinding signage within the parking garage, and restricting northbound left-turning movements onto Santa Clara Street.
Policy CI-2.1: Implement traffic management and traffic signal operations measures, where feasible, to: • Minimize delay and congestion for all modes, without adversely impacting transit, bicycles, and pedestrians, and • Focus traffic onto arterial streets, and minimize intrusion into residential neighborhoods.	**Consistent.** As discussed in Section 4.13, Transportation, all potential Project impacts related to Transportation would be less than significant. Therefore, no mitigation measures, including additional traffic management infrastructure, are proposed. However, the study area intersections currently and are forecast to operate at LOS E or better under all analysis scenarios, which meets the City's traffic impact thresholds for the Downtown mixed-use district. In addition, the Project would facilitate access to site and maintain flow from the street system to the parking facilities by providing wayfinding signage at all parking garage ingress points, providing wayfinding signage within the parking garage such that customers are directed to the ATM drive-thru, and other users of the, and restricting northbound left-turning movements onto Santa Clara Street.
Policy CI-2.2: Design and operate arterials and intersections for the safe operation of all modes, including transit, bicyclists, and pedestrians.	**Consistent.** The Project includes objectives and design features to support cycling, walkability, and increased pedestrian access to support connectivity with the nearby Arcadia Metro L-Line Station. Site improvements include redeveloping the space between the existing office building and the proposed residential building with a new paseo and outdoor plaza. This community open space area would include on-site wayfinding features, minimized vehicular access, flexible pedestrian space, trees and enhanced plantings, lighting, and bicycle parking. Additionally, the alleyway adjacent to the eastern boundary of the Project site would be partially converted into a pedestrian paseo and would facilitate connectivity between the Arcadia Metro L Line Station. In addition, all pedestrian areas within the Project site would meet American Disability Act (ADA) requirements and adhere to City design guidelines. Bicyclist and pedestrian safety would be maintained at existing levels in the area, and Project would not severely delay, impact, or reduce the service level of transit in the area.

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
Goal CI-3: Enhanced local and regional transit service	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. However, the Project site is located within a transit-priority area and within approximately 350 feet from Metro's L Line Arcadia station. Moreover, the Project would introduce residential land uses which would utilize local and regional transit service.
Policy CI-3.6: Cooperate with Metro and the Gold Line Authority to bring light rail service to Arcadia as soon as possible.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. At the time of drafting the 2010 General Plan, Metro's Gold Line (now known as the L Line) was planned to be extended to the City of Azusa and include a station within the City of Arcadia. Under existing conditions, the Arcadia Station is now operational and is nearby the Project site. Moreover, the proposed Project is planned to support the nearby transit facility as a transit priority project.
Policy CI-3.7: Establish transit hubs at the planned Gold Line Station at Santa Clara Street and First Avenue, and other locations as appropriate, including possibly the race track property and regional mall.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. However, please see the consistency analysis provided above for Policy CI-3.6.
Policy CI-3.9: Require all new and substantially renovated office, retail, industrial, and multifamily developments to install and implement transit amenities, including bus turnouts, transit shelters, and other streetscape elements, as appropriate.	**Consistent.** The proposed Project is a transit-priority project approximately 350 feet from Metro's Gold Line (now L-Line) Arcadia station. The Project's design incorporates pedestrian-oriented development features which support connectivity to the nearby light rail facility. Additionally, the Project site is supported by existing bus service from Foothill Transit and Metro. Proposed Project site improvements include redeveloping the space between the existing office building and the proposed residential building with a new paseo and outdoor plaza. This community open space area would include on-site wayfinding features, minimized vehicular access, flexible pedestrian space, trees and enhanced plantings, lighting, and bicycle parking. Additionally, the alleyway adjacent to the eastern boundary of the Project site would be partially converted into a pedestrian paseo and would facilitate connectivity between the Arcadia Metro L Line Station and the City's downtown amenities.
Goal CI-4: Connected, balanced, and integrated bicycle and pedestrian networks that provide viable alternatives to use of the car	**Consistent**. See the consistency analysis provided for Policy CI-3.9, above.
Policy CI-4.1: Develop and maintain the citywide bicycle network of off-street bike paths, on-street bike lanes, and bike streets identified in Figure CI-7. Development of this plan will include use of easements and flood control channel rights-of-way.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. The City's General Plan Circulation and Infrastructure Element includes a Bikeway Plan that identifies bicycle routes to accommodate a future bicycle plan which will link to regional routes such as the Rio Hondo bike path system, south of the Project site. The proposed Bicycle Plan includes routes planned around the Project site. A Class I bike path is planned along Santa Anita Avenue and a Class III bike lane is planned along First Avenue. Bike lockers and parking are also provided at the Arcadia Metro L Line Station. The proposed Project includes objectives and design features to support cycling, including redeveloping the space between the existing office building and the proposed residential building with a new paseo and

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
	outdoor plaza, improved lighting, and bicycle parking. Additionally, the alleyway adjacent to the eastern boundary of the Project site would be partially converted into a pedestrian paseo and would facilitate bicycle connectivity between the Arcadia Metro L Line Station.
Policy CI-4.2: Establish bike hubs (centralized locations with convenient bike parking for trip destinations or transfer to other transportation modes) at key transit and commercial nodes.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. The proposed Project includes objectives and design features to support cycling, including providing additional on-site bike parking in the proposed paseo and outdoor plaza. In addition, the proposed Project is approximately 350 feet away from Metro's L-Line station, which provides a large, covered parking structure which includes bicycle parking and lockers.
Policy CI-4.3: Encourage the establishment of secure bike parking facilities throughout the City.	**Consistent.** The Project proposes bicycle parking on the Project site. A total of 82 bike stalls would be installed on site, consistent with the Arcadia Municipal Code Section 9103.07.150. Moreover, the Project is proposed as a pedestrian-oriented development with community open space features on the ground level as well as planned improvements to increase on-site pedestrian circulation with the surrounding street network.
Policy CI-4.5: Develop and implement a comprehensive pedestrian circulation plan that includes, among other components: 1) enhanced pedestrian crossings of streets, 2) sidewalk improvement plans, 3) pedestrian amenities on sidewalks on major streets that are key pedestrian routes, including the benches, street trees, trash cans, and pedestrian scaled lighting 4) ADA-compliant crossings, 5) convenient crossing of arterials with landscaped medians, particularly in the vicinity of schools, and 6) strategies to remove barriers to pedestrian movement (for example, news racks, utility poles and boxes).	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. However, the Project includes objectives and design features to support walkability and increased pedestrian access to support circulation. Site improvements include redeveloping the space between the existing office building and the proposed residential building with a new paseo and outdoor plaza. This community open space area would include on-site wayfinding features, minimized vehicular access, flexible pedestrian space, trees and enhanced plantings, and improved lighting. Additionally, the alleyway adjacent to the eastern boundary of the Project site would be partially converted into a pedestrian paseo and would facilitate connectivity between the Arcadia Metro L Line Station. In addition, all pedestrian areas within the project site would meet American Disability Act (ADA) requirements and adhere to City design guidelines. As discussed in Section 4.13, pedestrian safety would be maintained at existing levels in the area.
Policy CI-4.6: Provide sidewalks on all arterial roadways.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. However, the Project site is currently supported by existing sidewalks along Santa Anita Avenue and would contribute to walkability and pedestrian connectivity via onsite improvements including a pedestrian paseo.
Policy CI-4.7: Ensure that intersections and development at intersections are designed and maintained	The Project includes objectives and design features to support walkability and increase pedestrian safety in the area. Site improvements include redeveloping the space between the existing office building and the proposed residential building with a new paseo and outdoor plaza. This community open space area would include on-site wayfinding features, minimized

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Goal/Policy	Analysis
to provide for pedestrian safety.	vehicular access, flexible pedestrian space, trees and enhanced plantings, and improved lighting. Additionally, the alleyway adjacent to the eastern boundary of the Project site would be partially converted into a pedestrian paseo. All pedestrian areas within the project site would meet American Disability Act (ADA) requirements and adhere to City design guidelines. As discussed in Section 4.13, pedestrian safety would be maintained at existing levels in the area.
Policy CI-4.9: Enhance pedestrian and bicycle access to local and regional transit, including connections to bus routes and the light rail station.	**Consistent.** The Project proposes residential uses within the City's Downtown. Additionally, the Project site is nearby regional transit, including Metro's L Line station. Implementation of the Project would support pedestrian-oriented development and construct bicycle parking facilities on site. Therefore, the Project would support this City policy.
Policy CI-4.11: Encourage walking, biking, and use of transit through a variety of supportive land use development and urban design measures, including site planning that promotes safety, pedestrian-friendly design, and access to transit facilities.	**Consistent.** See the consistency analysis for Policy CI-4.9, above.
Policy CI-4.12: Require new and substantially renovated office, retail, industrial, and multifamily developments to include bicycle and pedestrian amenities in the vicinity of the development to facilitate bicycling and walking, including on-site bike paths where appropriate, sidewalk improvements, benches, and pedestrian signal push-buttons at nearby signals.	**Consistent.** See the consistency analysis for Policy CI-4.9, above.
Goal CI-5: Limited cut-through traffic in residential neighborhoods	[**Consistent**. Project site is located in the Downtown mixed-use district, which includes retail uses, commercial businesses, and professional offices, in addition to residential. As described in Appendix K-2, Transportation Memorandum, the net proposed Project trip assignments were added to the Opening Year (2024) peak hour traffic volumes to derive the Opening Year (2024) plus Project peak hour traffic volumes. At the Opening Year (2024), the plus Project intersection analysis for the AM and PM peak hours shows all the study area intersections operating at satisfactory levels of service (LOS E or better) under Opening Year (2024) plus Project conditions. The study area intersections currently and are forecast to operate at LOS E or better under all analysis scenarios, which meets the City's traffic impact thresholds for the Downtown mixed-use district. See the consistency analysis for Policy CI-4.9, above. Policy CI-2.1:

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Goal/Policy	Analysis
Policy CI-5.1: Develop a process or program for developing neighborhood traffic management programs, where appropriate, in residential neighborhoods and around schools, parks, and community centers.	**Consistent.** The Project is not located within or adjacent to a residential neighborhood and is designated as Downtown Mixed Use in the City's General Plan. See the consistency analysis for Policy CI-5, above.
Policy CI-5.2: Develop and implement traffic-calming programs and management measures on local and collector streets, where determined to be necessary, to discourage traffic from diverting into or taking short-cuts through residential neighborhoods, and to control the volume and speed of traffic to appropriate levels consistent with adjacent land uses on local streets, near schools, and along streets with a significant amount of residential development.	**Consistent.** The Project site is not located within or adjacent to a residential neighborhood and is designated as Downtown Mixed Use in the City's General Plan. See the consistency analysis for Policy CI-5, above.
Policy CI-5.5: Require that on-site loading facilities be located and designed to avoid interference with traffic on the street system and internal site circulation.	**Consistent.** The Project would be required to comply with Section 9103.07 - Off-Street Parking and Loading, which states that All loading spaces shall have adequate ingress and egress and shall be designed and maintained so that the maneuvering, loading, or unloading of vehicles does not interfere with vehicular and pedestrian traffic.
Goal CI-7: Parking facilities that support diverse parking needs	**Consistent.** As summarized in Section 4.13, Transportation, the Project is proposing 551 parking spaces to meet the parking needs for the existing office and new residential units and cafe. Based on the size and use of the Project, it would be required to provide 921 parking spaces per City Municipal Code and 494 spaces with the State Density Bonus parking reductions applied. The peak shared parking demand on-site, with the proposed Project, would be 404 spaces with a residual of 147 spaces. During the weekends, the peak shared parking demand on-site, with the proposed Project, would be 376 spaces with a residual of 175 spaces. To accommodate the parking demand for the residential uses on-site, at all times, it is recommended that a minimum of 376 spaces be reserved for residential parking. Therefore, with shared parking designated for all uses (residential, office, and cafe) on site, the proposed parking supply of 551 spaces could accommodate the peak weekday and weekend parking demands.
Policy CI-7.1: Ensure that parking requirements in the City's zoning regulations appropriately reflect the needs	**Consistent**. See the consistency analysis for Goal CI-7, above.

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Goal/Policy	Analysis
of businesses, residents, and institutions, and the evolving nature of personal transportation (for example, electric or other alternative fuel vehicles, car sizes, increased bicycle use).	
Policy CI-7.2: Accommodate shared use of public and private parking facilities within business districts and where joint use of parking lots is appropriate given the uses sharing the facilities.	**Consistent**. See the consistency analysis for Goal CI-7, above.
Policy CI-8.2: Maintain consistency with the South Coast Air Quality Management District air quality mandates, the Los Angeles Congestion Management Program, and SCAG Regional Mobility Plan requirements.	**Consistent.** The proposed Project would not result in significant impacts related to the South Coast Air Quality Management Plan (AQMP) and is consistent with SCAG's goals and policies. See Table 4.9-1. Project Consistency Conflicts with the Connect SoCal (SCAG 2020–2045 RTP/SCS), for compatibility with the SCAG Regional Mobility Plan, Section 4.2, Air Quality, for consistency with SCAQMD mandates, and Appendix K-2 for compatibility with the 2010 Congestion Management Program.
Policy CI-9.6: Require developers to pay the full costs associated with water system improvements needed specifically to service their development, as well as fair-share costs for enhancements identified in the Water Master Plan and Capital Improvement and Equipment Plan.	**Consistent.** The Project would result in the redevelopment of an existing site. Project activities would result in new and more intensive land uses on the Project site when compared to existing conditions. As such, local water system may be impacted by the proposed Project. See Section 4.15, Utilities and Service Systems, of this Draft EIR for more discussion.
Policy CI-9.10: Support regional efforts to use recycled water to recharge groundwater basins.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. See Section 4.15, Utilities and Service Systems, of this Draft EIR for more discussion.
Goal CI-10: A local wastewater collection system that provides quality service equally to all areas of Arcadia	**Consistent.** The Project would result in the redevelopment of an existing site. Project activities would require on-site improvements related to sewer infrastructure. Construction of sewer infrastructure for the Project would be limited to the Project site boundaries and its immediate street frontages and would occur during the Project's construction phase. Existing sewer infrastructure within the adjacent roadways have adequate capacity to serve the proposed Project. See Section 4.15, Utilities and Service Systems, of this Draft EIR for more discussion.
Policy CI-10.2: Provide adequate capacity to convey all sewage flows.	**Consistent.** See the consistency analysis for Goal CI-10, above.
Policy CI-10.5: Require developers to pay the full costs associated with sewer	**Consistent.** Article VII, Chapter 4 of the Arcadia Municipal Code regulates sewer line design, connection to the City's sewer system, fees, and permits. Article VII, Chapter 5 of the Arcadia Municipal Code regulates water system

Table 4.9-2. General Plan Consistency Analysis

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system improvements needed specifically to service their development, as well as fair-share costs for enhancements identified in the Capital Improvement and Equipment Plan.	connection and fees, with Part 5 addressing water use and the City's Water Conservation Ordinance and Water Efficient Landscaping Ordinance. The proposed Project would be subject to all applicable fees. Additionally, Section 4.15 describes required payment of fees associated with potential impacts from the proposed Project.
Goal CI-11: Storm drain infrastructure that minimizes regional and localized flood hazards	**Consistent.** The Project would result in the redevelopment of an existing site. Project activities would include demolition, grading, and construction on site. After installation of the infiltration drywells on the Project site, the peak flow rate would decrease by 0.73 cubic feet per second when compared to the existing conditions, resulting in a proposed or post-Project peak flow rate value of 8.08 cubic feet per second. Because the peak flow rate would be reduced in the proposed condition, it is understood that the existing City storm drains would not be negatively affected by implementation of the proposed Project. As such, the proposed Project would not require the construction or expansion of off-site stormwater drainage facilities, as the Project would not contribute a substantial amount of new stormwater runoff relative to existing conditions. See Section 4.8, Hydrology and Water Quality, and Section 4.15, Utilities and Service Systems, of this Draft EIR.
Policy CI-11.5: Require developers to pay the full costs associated with storm drain system improvements needed specifically to service their development, as well as fair-share costs for enhancements identified in the Capital Improvement and Equipment Plan.	**Consistent.** See the consistency analysis for Goal CI-11, above.
Policy CI-12.2: Decrease overall community consumption of non-local, non-renewable, and non-recyclable materials.	**Consistent.** The annual solid waste that is anticipated to be produced by the proposed Project would equate to approximately .00048% of the available capacity of the landfill through the estimated closure date. This number would be further reduced in order to comply with CALGreen requirements for 65% waste diversion, which would require the Project Applicant/Developer to either submit a construction waste management plan to the City that identifies the C&D waste materials to be diverted from the landfills or use a waste management company that can provide verifiable documentation that the percentage of C&D waste material diverted from the landfill meets CALGreen's 65% requirement.. Project operations 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. Recycling guidelines and procedures are analyzed further in Section 4.15, Utilities and Service Systems, of this Draft EIR.
Policy CI-13.1: Work with telecommunications service providers to meet the needs and demands of businesses, residents, and institutions for high-quality and state-of-the-	**No Applicable.** This policy is a responsibility of, and is directed to, the City. The Project would be adequately served by existing cable and telecommunications services. Section 4.15, Utilities and Service Systems, of this Draft EIR for more discussion.

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Goal/Policy	Analysis
art telecommunications infrastructure and services, including the provision of top-level signal quality and cell phone services throughout the City.	
Policy CI-13.2: Continue to enforce City ordinances that facilitate the placement of utilities and telecommunications facilities in a manner that minimizes visual impact.	**Consistent.** All infrastructure improvements for the proposed Project would be typical of a mixed-use development and would be limited to Project site boundaries or its immediate street frontages. The portion of overhead power along the alley that is to be vacated would be demolished and a new power service feed would be established to accommodate the Project. As part of the Project, a new transfer location would be provided onsite to service the new building (Appendix G). Incompliance with the City's General Plan, all utilities in the Downtown area must be placed underground. See Section 4.15, Utilities, for further discussion.
Policy CI-13.3: Continue to require the placement of utilities underground for all new developments.	**Consistent.** See the consistency analysis for Policy CI 13.2, above.
Housing Element	
No goals or policies are applicable to the implementation of the proposed Project.	
Resource Sustainability Element	
Goal RS-1: Continued improvement in local and regional air quality	**Consistent.** The proposed Project would result in the redevelopment of an existing site currently supporting commercial and office buildings. The Project would result in the demolition of some existing buildings and surface parking and construct a new multi-family residential building. Implementation of the Project would result in new housing near transit within the City's Downtown. See more discussion on the Project's potential impacts to air quality in Section 4.2, Air Quality, of this Draft EIR.
Policy RS-1.1: Reduce local contributions of airborne pollutants to the air basin.	**Consistent.** The proposed Project would result less than significant impacts to all criteria pollutants with the exception short-term construction activities. MM-AQ-1 requires the use of no-VOC paint during construction. With MM-AQ-1, all potential air quality impacts would be less than significant. For more discussion on the Project's potential contribution to airborne pollutants, see Section 4.2, Air Quality, of this Draft EIR.
Policy RS-1.2: Limit, when feasible, locating sensitive receptors near pollutant emitting sources.	**Consistent.** The Project site is located within an area of the City's Downtown designated for mixed uses and would not be located near pollutant emitting sources. Adjacent land uses include commercial uses and the Metro L Line, which is not a pollutant emitting source. See Section 4.2, Air Quality, of this Draft EIR for more discussion.
Policy RS-1.3: Continue to participate in regional efforts to meet state and federal air quality standards.	**Consistent.** See response to Policy RS-1.1 above and see Section 4.2, Air Quality, of this Draft EIR for more discussion.
Policy RS-1.4: Lower the emissions caused by motor vehicles through Transportation Demand	**Consistent.** Based on SB 743 and the revised CEQA guidelines, the City's Transportation Study Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment, and the San Gabriel Valley Council of Governments (SGVCOG) VMT Assessment tool, the project would be screened from a

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Management strategies and land use patterns that reduce vehicle miles traveled.	project-level VMT analysis. The project is in a Low VMT generating area within a TPA. Therefore, a VMT analysis is not required and impacts to VMT can be presumed to be less than significant. As discussed in Section 4.134, Transportation, the Project would also be consistent with SCAG 2020–20405 RTP/SCS as well as the Metro Long Range Transportation Plan.
Policy RS-1.5: Promote the reduction of vehicular traffic and improved efficiency of the City's circulation system (i.e. roadways) as a means to improving air quality.	**Consistent.** See the consistency analysis for Goal RS-1, above. Additionally, see Sections 4.2, Air Quality; 4.6, Greenhouse Gas Emissions; and 4.13, Transportation, of this Draft EIR for more discussion.
Policy RS-1.6: Require projects that generate potentially significant levels of air pollutants to incorporate the most effective air quality mitigation into project design, as appropriate.	**Consistent.** See the consistency analysis for Policy RS-1.1, above.
Policy RS-1.7: Promote energy-efficient building construction and operation practices that reduce emissions and improve air quality.	**Consistent.** The Project would comply with sustainability-focused measures such as building design energy efficiency that meets or exceeds Title 24 requirements, and roof structures to support solar panels. The installation of green infrastructure combined with high standards for energy-efficient buildings contained within the California Building Code, will ensure that Project meets regional goals for sustainability. In addition, the Project would increase density on a site with access to the region's transportation network and transit. Construction and operational consumption of energy is analyzed in Section 4.4, Energy. As such, the Project is consistent with this City policy.
Goal RS-2: Reducing Arcadia's carbon footprint in compliance with SB 375 and AB 32	**Consistent.** To meet the goals of SB 375, the Connect SoCal is applicable to the proposed Project, and Section 4.6, Greenhouse Gas Emissions includes a consistency discussion with Connect SoCal. The proposed Project would support the use of the existing and proposed pedestrian, bicycle, and mass-transit infrastructure and connectivity. Less reliance on automobiles and support for multi-modal transportation would help reduce greenhouse gas emissions and improve air quality. Table 4.6-4 in Section 4.6, Greenhouse Gas Emissions indicates that the net GHG emissions associated with development of the proposed Project would be below the SCAQMD GHG threshold of 3,000 MT CO2e per year. Therefore, the proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. One of the benefits of the proposed Project is to improve air quality by providing housing for those who work in the City so that they may reduce their vehicle miles traveled to the extent possible. Additionally, the proposed Project would be required to meet at minimum, the applicable current CALGreen and Title 24 Building Energy Efficiency Standards regarding the installation of rooftop solar systems. The proposed Project also includes solar energy generation capacity on the Project roof. As set forth in 2019 Building Energy Efficiency Standards, low-rise and high-rise multi-family buildings, hotels, and nonresidential buildings must include a "solar zone on the roof or overhang of the building or on covered parking and must have a total area no less than 15% of the total roof area of the building excluding any skylight area. The solar zone requirement is

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	applicable to the entire building, including mixed-occupancy." Compliance with State laws, such as SB 375 and AB 32, is outlined and discussed within Section 4.6, Greenhouse Gas Emissions, of the Draft EIR.
Policy RS-2.1: Cooperate with the state to implement AB 32, which calls for reducing greenhouse gas emissions to 1990 levels by 2020, and Executive Order S-3-05, which calls for 1990 levels by 2020 and 80% below 1990 levels by 2050.	**Consistent.** See the consistency analysis for Goal RS-2, above.
Policy RS-2.2: Reduce per capita greenhouse gas emissions to 15% below 2005 levels by 2020, and total municipal greenhouse gas emissions to 15% below 2005 levels by 2020.	**Consistent.** See the consistency analysis for Goal RS-2, above.
Policy RS-2.3: Participate in regional strategies and plan to implement SB 375, and in particular, use the legislatively authorized incentives, such as grants and transportation funding and waivers to environmental assessments, to encourage infill and transit-oriented development.	**Consistent.** The Project site is an infill/transit-oriented development within 350 feet of transit (Metro's L Line Arcadia Station) addition, the Project site's vicinity is served by existing public transit such as various bus routes (Metro Line 232, Metro Line 625, Beach Cities Line 109, LADOT Commuter Express 438, and LADOT Commuter Express 574) as well as the Metro C Line. The Metro C Line is a light rail line, which runs between Redondo Beach and Norwalk. The nearest station is the Mariposa Station, which is just over 0.5-mile from the Project site. which would help reduce the proposed Project's vehicle miles traveled (VMT). Also, see the consistency analysis for Goal RS-2, above.
Policy RS-2.4: Pursue the strategies in the Land Use and Community Design Element to encourage transit-oriented development in established focused areas.	**Consistent.** The Project is proposed on a site designated and consistent with the City's Downtown Mixed-Use land use. The Project site is located nearby an existing light rail station, and, thus, is a transit-priority project (see Section 413, Transportation for more discussion). Implementation of the Project would introduce new residential uses consistent with the intent of the General Plan.
Policy RS-2.5: Pursue the enhancement of bicycle and pedestrian infrastructure set forth in the Circulation and Infrastructure Element to help decrease vehicle miles traveled and vehicle trips.	**Consistent.** The Project proposes bicycle parking on the Project site. Bicycle stalls would be installed on site, consistent with the Arcadia Municipal Code Section 9103.07.150. Moreover, the Project is proposed as a pedestrian-oriented development with community open space features on the ground level as well as planned improvements to increase on-site pedestrian circulation with the surrounding street network.
Goal RS-4: Wise and sustainable water use practices that respond to and support the needs of City residents and businesses	**Consistent.** The proposed Project would adhere to the water conservation methods established in Title 24 of the California Building Code. The Project would also adhere to the City's Water Conservation Plan and Water Efficient Landscaping Ordinance, per Article VII, Chapter 5, Part 5, Division 3 and 4 of the City's Municipal Code. See Section 4.15, Utilities and Service Systems, of this Draft EIR for more discussion on water usage.
Policy RS-4.1: Continue to participate in regional	**Consistent.** See the consistency analysis for Goal 4, above.

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programs that protect water resources in Arcadia.	
Policy RS -4.2: Address state-of-the-science approaches to water supply, demand, and conservation as part of regular updates to the City's Urban Water Management Plan, including the possibility of using reclaimed water as part of a groundwater basin recharge strategy.	**Consistent.** The proposed Project would adhere to the water conservation methods established in Title 24 of the California Building Code. The Project would also adhere to the City's Water Conservation Plan and Water Efficient Landscaping Ordinance, per Article VII, Chapter 5, Part 5, Division 3 and 4 of the City's Municipal Code. City does not currently have any recycled water infrastructure.
Policy RS-4.3: Require that applications for major new development projects address the adequacy and reliability of water supplies as described in SB 610.	**Consistent.** The proposed Project does not involve enough new development to require evaluation pursuant to SB 221 or SB 610 (i.e. does not generate a water demand equal to or greater than that required by a 500-dwelling unit project), and no Water Supply Assessment is required. The proposed Project is consistent with the General Plan and does not require a General Plan Amendment; therefore, the Project would be consistent with the City's growth projections anticipated in local and regional planning documents, including the City's 2020 Urban Water Management Plan (UWMP).
Policy RS-4.4: Maintain a high level of groundwater recharge capacity within formal recharge facilities belonging to the City.	**Consistent.** The Project site is not currently used for groundwater infiltration, either by spreading or by groundwater injection. The proposed Project would incorporate two drywells and one four-foot diameter primary settling chamber are proposed to be constructed on the Project site, located in the south side of the basement parking lot, which would be able to capture the required runoff volume and treat that volume as quickly as it enters the drywell system. After installation of the infiltration drywells, the peak flow rate on the Project site would decrease by 0.73 cubic feet per second, resulting in a proposed or post-Project peak flow rate value of 8.08 cubic feet per second. Because the peak flow rate would be reduced in the proposed condition, it is understood that the existing City storm drains would not be negatively affected by implementation of the proposed Project. As such, upon construction and operation of the drywells, groundwater recharge at the site would increase in comparison to existing conditions. See Section 4.8, Hydrology and Water Quality, and Section 4.15, Utilities and Service Systems, of this Draft EIR for more discussion on impacts related to potential groundwater use and recharge.
Policy RS-4.9: Incorporate Low Impact Development (LID) strategies into new construction and city projects.	**Consistent.** See the consistency analysis for Policy RS-4.4, above.
Policy RS-4.10: Fulfill the City's responsibilities relative to the requirements of the County's NPDES permit program by enforcing regulations aimed at reducing groundwater and urban runoff pollution.	**Consistent.** See the consistency analysis for Policy RS-4.4, above.
Policy RS-4.12: Require the installation of efficient	**Consistent.** The Project would be required to include all drought-tolerant landscaping requirements included in local regulations. AMC Section 7554.4,

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
irrigation systems (e.g., drip irrigation, soil moisture sensors and automatic irrigation systems) which minimize runoff and evaporation, and which maximize the water that will reach the plant roots.	Plan Check Requirements, requires that, as part of the broader general permitting process, a Landscape Design Plan, and a Landscape Documentation Package be prepared by a licensed landscape architect that incorporates efficient use of water and BMPs into landscape project design..
Goal RS-5: Wise and creative energy use that incorporates new technologies for energy generation and new approaches to energy conservation	**Consistent.** See the consistency analysis for RS-1.7, above.
Policy RS-5.3: Require that all new development meets or exceeds the state and local energy conservation requirements.	**Consistent.** See the consistency analysis for RS-1.7, above.
Policy RS-5.8: Promote innovative building, site design, and orientation techniques which minimize energy use.	**Consistent.** See the consistency analysis for RS-1.7, above.
Policy RS-5.9: Facilitate the provision of energy-efficient modes of transportation and fixed facilities which establish transit, bicycle, and pedestrian modes as viable alternatives.	**Consistent.** The proposed Project would result in the redevelopment of an existing site currently supporting commercial and office buildings. The Project would result in the demolition of some existing buildings and surface parking, and construct a new multi-family residential building. Implementation of the Project would result in new housing near transit within the City's Downtown. See more discussion on the Project's potential impacts to air quality in Section 4.13, Transportation, of this Draft EIR.
Goal RS-6: A higher level of waste reduction and recycling city-wide relative to 2009 achievements	**Consistent.** The proposed Project would be built in compliance with local and State regulations regarding solid waste. See Section 4.15, Utilities and Service Systems, of this Draft EIR for more discussion on solid waste.
Parks, Recreation, and Community Resources Element	
Policy PR-1.1: Maintain a system of City parks and recreation facilities that provide a variety of active and passive recreational opportunities throughout the City.	**Consistent.** According the California Department of Parks and Recreation (CDPR), under existing conditions, the Project site is in a location with an abundance of park space (19.68 acres per 1000 residents), which significantly exceeds the minimum standards provided by the CDPR, County, and City. Under projected Project conditions, the City would continue to exceed the minimum acreage standards by at least a factor of five. The Project would be also subject to the City's Council Resolution 6602, Park Facilities Impact Fee (Section 9105.15.040 of the City's Development Code), which requires new development projects to pay impact fees, which would support park improvements as well as fund capital costs for other new and existing infrastructures.. Further, the Project would include common open space areas, including an outdoor pool area, fire pit, barbeque dining area, game lounge, and a lawn/grassy area, as well as an outdoor passive court.

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
	These on-site amenities would provide an alternative to off-site public parks and recreational facilities, allowing the Project's residents to recreate on the Project site while incrementally reducing impacts to off-site public parks and recreational facilities. Potential impacts to parks and recreational facilities are discussed in Section 4.12, Public Services and Recreation, of this Draft EIR.
Policy PR-1.2: Strive to provide a minimum of 2.43 acres of parkland per 1,000 residents.	**Consistent.** See the consistency analysis for PR-1.1, above.
Policy PR-1.3: Provide park and recreation facilities that are appropriate for the individual neighborhoods in which they are located, reflect the needs and interests of the population they serve, and meet the performance standards identified in the General Plan.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia.
Policy PR-1.4: Require parkland dedications, provision of onsite usable public space, and/or payment of in-lieu fees for development projects involving new residential construction.	**Consistent.** See the consistency analysis for PR-1.1, above.
Policy PR-1.5: Maximize public space by requiring plazas and similar spaces in private developments that can serve multiple uses, including recreation and public gathering areas.	**Consistent.** As described in Chapter 3, Project Description, the proposed Project includes both community open space and private open space throughout the Project site. The Project would redevelop the space between the existing office building and the proposed residential building with a new paseo and outdoor plaza. This community open space area would include on-site wayfinding features, minimized vehicular access, flexible pedestrian space, trees and enhanced plantings, lighting, bicycle parking. The proposed Project would provide approximately 23,957 square feet of private open space and 17,398 square feet of public open space, which exceeds the City's requirement for 31,900 square feet of open space. For more discussion on the proposed Project's open space requirements and proposals, see Chapter 3, Project Description, of this Draft EIR.
Policy PR-1.12: Maintain and enhance pedestrian, bicycle, and transit linkages to provide better access to parks, recreation, and public spaces and meet the needs of Arcadia residents.	**Consistent.** The proposed Project is designed to support a new pedestrian-oriented community within the City's Downtown. Additionally, the Project site is located nearby a Metro L Line Station. Lastly, Arcadia County Park is located approximately 500 feet to the southwest of the Project site. Therefore, the Project as proposed supports the City's policy for multi-modal connectivity and community open space for residents.
Policy PR-1.16: Perform regular maintenance of facilities to ensure proper working order of all recreation facilities and equipment.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia.

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
Goal PR-3: Ensuring that trees and the urban forest make a continuing and significant contribution to community character	**Consistent.** See the consistency analysis for Policy LU-2.1, above.
Policy PR-3.4: Continue to use the Arcadia Tree Commission or any successor advisory group to further City objectives regarding public trees.	**Consistent.** See the consistency analysis for Policy LU-2.1, above.
Policy PR-3.5: Require that new private and public developments incorporate trees in a manner that maximizes the utility of trees for passive cooling, screening, carbon sequestration, erosion and runoff control, and integration of landscape design into the overall design of the development.	**Consistent.** See the consistency analysis for Policy LU-2.1, above.
Policy PR-3.6: Ensure that existing mature trees on private property are considered in the planning and development process and are retained to the greatest extent feasible.	**Consistent.** See the consistency analysis for Policy LU-2.1, above.
Policy PR-5.1: Continue funding City-sponsored programs that are produced and operated by the Recreation and Community Services Department.	**Consistent.** See the consistency analysis for Policy PR-1.1. Additionally, the introduction of a new residential population in the City would result in the payment of in-lieu fees or other regulatory requirements to satisfy this City policy.
Policy PR-6.2: Require that new development provide adequate mitigation for impacts on area schools as provided in State law.	**Consistent.** The proposed Project would introduce a new population to the Project site with the development of the proposed residential building. The Leroy F. Greene School Facilities Act of 1998 (SB 50) sets a maximum level of fees a developer may be required to pay to mitigate a project's impacts on school facilities. The maximum fees authorized under SB 50 apply to zone changes, general plan amendments, zoning permits and subdivisions. Pursuant to SB 50, the applicant would be required to pay development fees for schools to AUSD prior to the issuance of the Project's building permit. Potential impacts to schools are discussed in Section 4.12, Public Services and Recreation, of this Draft EIR.
Policy PR-6.6: Use development impact fees to fund City Library facilities, equipment, and programs that are needed as a result of new development projects.	**Consistent.** The proposed Project would introduce a new population to the Project site with the development of the proposed residential building. Library services are provided at the Arcadia Public Library as well as the Live Oak Library, which is managed by the County. As previously discussed, pursuant to the Section 9105.15.040 of the City's Development Code, the Project Applicant/developer would pay its fair share of impact fees based on the fee

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
	category and adopted fee rates. Potential impacts to libraries are discussed in Section 4.12, Public Services and Recreation, of this Draft EIR.
Goal PR-9: Retention and proper stewardship of historical and cultural resources	**Consistent.** The proposed Project involves the demolition and construction on an existing developed site. There are no historic resources on the Project site. Implementation of MM-CUL-1 would ensure that potential impacts related to inadvertent discovery of archaeological resources would be less than significant. See Section 4.3, Cultural Resources, of this Draft EIR for more discussion.
Policy PR-9.1: Encourage the maintenance and preservation of historically, culturally, and or/ architecturally significant structures and sites in the community.	**Consistent.** See the consistency analysis for Goal PR-9, above.
Policy PR-9.5: Identify historic sites, structures, neighborhoods, and other resources through a Historic Resource Inventory.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia.
Policy PR-9.6: Explore the establishment of a Cultural Heritage Ordinance.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia.
Safety Element	
Goal S-1: Minimized potential for loss of life, physical injury, and property damage resulting from earthquakes and geologic hazards	**Consistent.** The proposed Project would be built to comply with the provisions of the City's Municipal and Development Codes governing building code and safety. As such, compliance with the provisions found within local regulations, the Project would minimize the potential loss of life, physical injury, and property damage resulting from earthquakes and geologic hazards. For more discussion, see Section 4.5, Geology and Soils, of this Draft EIR.
Policy S-1.1: Explore the creation of a fault hazard management zone for the Sierra Madre fault.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia.
Policy S-1.2: Emphasize carefully planned development within seismic and geologic hazard areas to minimize potential hazards risk as the City's preferred hazards management strategy.	**Consistent.** In accordance with the *State CEQA Guidelines*, analysis has been prepared to determine seismic and geologic hazards for the proposed Project. See Section 4.5, Geology and Soils, of this Draft EIR for more discussion.
Policy S-1.3: Require detailed geologic investigations to accompany development proposals for sites that lie within known or suspected seismic and geologic hazard areas. Require that such investigations and reports conform to accepted	**Consistent.** As described in the consistency analysis for Policy S-1.2, Section 4.5, Geology and Soils, of the Draft EIR includes the potential impacts related to seismic and geologic hazards. Moreover, please see Appendix E-1, Geotechnical Investigation, as referenced in Section 4.5, for more discussion on the proposed Project's potential impacts and requirements needed to comply with local and State standards. Therefore, Project would be consistent with this City policy with the inclusion of Appendix E-1.

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
professional standards and any applicable State and City requirements.	
Policy S-1.5: Continue enforcing the most rigorous building and grading codes which govern seismic safety.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. However, similar to the consistency analysis for Policy S-1.3, above, the Draft EIR includes discussion within Section 4.5, Geology and Soils, to ensure the Project as proposed complies with existing regulations found within the City's Municipal and Development Codes.
Policy S-2.3: Require that new development projects retain as much runoff as possible on the development site to reduce flow volumes into the storm drain system, allow for recharge of the groundwater basins, and comply with the City's storm water permitting requirements (consistent with the National Pollutant Discharge Elimination Systems program, or NPDES) and employ Best Management Practices (BMPs).	**Consistent.** The proposed Project would redevelop an existing Project site consisting of surface parking and office and commercial buildings, some of which would be demolished in order to construct a new residential building. Project activities would be required to comply with regulations found within the City's Municipal and Development Codes, such as water permitting requirements. See Section 4.8, Hydrology and Water Quality, of this Draft EIR for more discussion.
Goal S-3: High level of protection from the dangers of wildland and urban fires	**Consistent.** The Project site is located within a highly urbanized area and is not within a Very High Fire Hazard Severity Zone. The nearest wildland areas are located at the bottom of the San Gabriel Mountains, approximately 1 mile north of the Project site. Moreover, the Project would be served by existing service from local fire protection services. See Sections 4.7, Hazards and Hazardous Materials, and 4.12, Public Services and Recreation, of this Draft EIR for more discussion.
Policy S-3.4: Limit new development in designated high-fire-hazard areas. Where prior entitlements have been given, require and enforce strict adherence to City, County, and State codes that address building materials and approaches, defensible spaces, brush clearance, required fire flows, on-site or nearby fire-fighting equipment, and adequate emergency vehicle access to accommodate the weight and size of vehicles.	**Consistent.** See the consistency analysis for Goal S-3. The Project site is located within a highly urbanized area and is not within a Very High Fire Hazard Severity Zone. The nearest wildland areas are located at the bottom of the San Gabriel Mountains, approximately 1 mile north of the Project site.
Policy S-3.5: Prohibit new development in areas which do not have adequate water pressure or fire flows until	**Consistent.** As discussed in the consistency analysis for Goal S-3, the Project site would be supported by existing fire protection services, who have reviewed the proposed Project and provided guidance on the Project's potential impacts to service. Moreover, impacts related to adequate water

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
sufficient pressure and fire flows can reliably be provided and maintained.	pressure and fire flows, see Section 4.15, Utilities and Service Systems, for discussion on water supplies.
Policy S-3.7: Perform regular life safety inspections of all commercial, multifamily, and brush area occupancies to ensure compliance with City and State fire codes, standards, and regulations.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia.
Goal S-4: A continued high level of protection from risks to life, the environment, and property associated with human-caused hazards in Arcadia	**Consistent.** In accordance with the *State CEQA Guidelines*, Project-related impacts related to hazards has been analyzed in Section 4.7, Hazards and Hazardous Materials, of this Draft EIR.
Policy S-4.1: Adopt and strictly enforce the most current regulations governing hazardous waste management.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia.
Policy S-4.2: Minimize exposure of the environment, critical facilities, and residences to hazardous materials.	**Consistent.** In accordance with the *State CEQA Guidelines*, Project-related impacts related to the accidental upset of hazardous materials has been analyzed in Section 4.7, Hazards and Hazardous Materials, of this Draft EIR.
Policy S-4.3: Ensure that all businesses and hazardous materials transportation services within the City adhere to the requirements of the City's hazardous materials plans and programs.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia. However, during construction and operation, the proposed Project would comply with existing regulations governing the transport of hazardous materials. Moreover, in accordance with the *State CEQA Guidelines*, Project-related impacts related to the transport of hazardous materials has been analyzed in Section 4.7, Hazards and Hazardous Materials, of this Draft EIR. For more discussion, see Section 4.7.
Goal S-5: To provide a continued high level of fire and police protection services, with an emphasis on prevention and education	**Consistent.** The proposed Project would be constructed in compliance with all applicable AMC requirements and would pay all applicable development fees and would generate an expanded tax base for the City to support fire and police protection services. For more discussion on this topic, see Section 4.12, Public Services and Recreation, of this Draft EIR.
Policy S-5.1: Involve Police and Fire Department personnel as an integral part of new development and redevelopment review process.	**Consistent.** As part of the preparation of this Draft EIR, information request letters were sent to agencies and local departments within the City to determine potential impacts to public services. No new facilities are required to support the proposed Project. See Appendix I, Public Services Correspondence Letters, and Section 4.12, Public Services and Recreation, of this Draft EIR for more discussion.
Policy S-5.3: Maintain fire and police stations, facilities, and services sufficient to meet high public safety standards, as established by the City Council.	**Consistent.** The proposed Project would introduce a new population into the City of Arcadia. No new facilities are required to support the proposed Project. See Section 4.12, Public Services and Recreation, of this Draft EIR.

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
Policy S-5.9: Provide the City of Arcadia with an all-risk fire service by providing and maintaining a full-range of services that are intended to instill a sense of safety and well-being throughout the community. Services will include emergency medical services; fire prevention and education; protection from hazards of fire; hazardous materials, and domestic terrorism; and urban search and rescue.	**Consistent.** As stated above in the consistency analysis for Policy S-5.1, information request letters were sent to agencies and local departments within the City to determine potential impacts to public services. No new facilities are required to support the proposed Project. See Appendix I, Public Services Correspondence Letters, and Section 4.12, Public Services and Recreation, of this Draft EIR for more discussion.
Policy S-5.11: Require new development projects to pay their fair share of costs associated with any necessary increases in public safety equipment, facilities, and staffing to provide life safety protection.	**Consistent.** As stated above in the consistency analysis for Policy S-5.1, information request letters were sent to agencies and local departments within the City to determine potential impacts to public services. No new facilities are required to support the proposed Project. See Appendix I, Public Services Correspondence Letters, and Section 4.12, Public Services and Recreation, of this Draft EIR for more discussion.
Goal S-6: Comprehensive and effective emergency and disaster response preparedness	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia.
Policy S-6.3: Maintain an up-to-date Emergency Operations Plan and Natural Hazard Mitigation Plan on a five-year basis to secure adequate federal resources in the event of a disaster.	**Not Applicable.** This policy is a responsibility of, and is directed to, the City of Arcadia.
Noise Element	
Goal N-1: Effective incorporation of noise considerations into land use planning decisions	**Consistent.** As detailed in Section 4.10, Noise, of this Draft EIR, the proposed Project would comply with existing noise regulations and restrictions designated for the Project site and no noise mitigation would be required.
Policy N-1.1: Consider noise impacts as part of the development review process relative to residential and other noise-sensitive land uses.	**Consistent.** Implementation of the proposed Project would result in the demolition and construction on an existing developed site. The proposed Project would comply with existing regulations governing noise and no noise mitigation would be required. See Section 3.10, Noise, of this Draft EIR for more discussion.
Policy N-1.2: Ensure that acceptable noise levels are maintained near schools, hospitals, and other sensitive	**Consistent.** The proposed Project would result in the demolition and construction activities on site. First Avenue Middle School is the nearest school to the Project site. The nearby school as well as other sensitive receptors are considered when analyzing the Project's potential noise-related impacts, and all impacts would be

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
areas in accordance with the Noise/Land Use Compatibility Guidelines in Figure N-4, Table N-2 Interior/Exterior Noise Standards, and the City's noise ordinance.	less than significant and no mitigation is required. See Section 3.10, Noise, of this Draft EIR for more discussion.
Policy N-1.4: Discourage new development of residential or other noise-sensitive uses in noise-impacted areas unless effective mitigation measures are incorporated into the project design to reduce noise levels that comply with Noise/Land Use Compatibility Guidelines in Figure N-4 and Table N-2 Interior/Exterior Noise Standards.	**Consistent.** Implementation of the proposed Project would result the construction of a new residential building within the City's Downtown and would comply with all applicable regulations related to noise. Existing conditions as well as potential noise-related impacts are discussed in Section 3.10, Noise, of this Draft EIR. Furthermore, in accordance with CEQA, if a significant impact has been identified, mitigation is required to be incorporated to reduce the impact to a less-than-significant level. See Section 3.10 for more discussion, including compliance with local noise guidelines on land use compatibility and noise standards.
Policy N-1.5: Require that proposed projects that have the potential to result in noise impacts include an acoustical analysis and appropriate mitigation to achieve the interior and exterior noise standards indicated in Table N-2 Interior/Exterior Noise Standards.	**Consistent.** Similar to the consistency analysis for Policy N-1.4, CEQA requires mitigation to be incorporated if a significant impact has been identified. As such, the discussion found within Section 3.10, Noise, of this Draft EIR includes analysis on potential noise impacts, specifically related local standards. The proposed Project would comply with existing regulations governing noise and no noise mitigation would be required.
Policy N-2-5: Enforce truck routes established in the Circulation and Infrastructure Element and the Municipal Code.	**Consistent.** The proposed Project would result in off-site noise associated with trucks traveling to and from the Project site during construction and operation. The proposed Project would comply with existing regulations governing noise and no noise mitigation would be required. See Section 3.10, Noise, of this Draft EIR for discussion on off-site traffic noise and potential impacts related to applicable noise standards.
Goal N-3: Limited intrusion of point-source noise within residential neighborhoods and on noise-sensitive uses	**Consistent.** See the consistency analysis for Policy N-1.1 and Section 3.10, Noise, of this Draft EIR for discussion.
Policy N-3-1: Enforce the noise ordinance to protect residents and noise-sensitive uses from excessive noise levels associated with stationary sources.	**Consistent.** The proposed Project would result in noise-related impacts during construction and operation. See Section 3.10, Noise, of the Draft EIR for details on construction and operational noise impacts to sensitive noise receptors.
Policy N-3-3: Explore requiring the use of noise suppression devices and techniques on all exterior noise sources (construction operations, pumps, fans, leaf blowers) to	**Consistent.** The proposed Project would result in noise-related impacts during construction and operation, but the proposed Project would comply with existing regulations governing noise and no noise mitigation would be required. See Section 3.10, Noise, of the Draft EIR for details on construction and operational noise impacts and compatibility with adjacent land uses.

Table 4.9-2. General Plan Consistency Analysis

Goal/Policy	Analysis
lower exterior noise to levels that are compatible with adjacent land uses.	
Policy N-3-4: Require any new mixed use structures to be designed to minimize the transfer of noise and vibration from commercial or industrial to residential and other noise-sensitive uses.	**Consistent.** The proposed Project would result in noise- and vibration-related impacts during construction and operation, but the proposed Project would comply with existing regulations governing noise and no noise mitigation would be required. See Section 3.10, Noise, of the Draft EIR for details on construction and operational noise and vibration impacts to sensitive noise receptors.
Policy N-3-5: Require noise created by new non-transportation noise sources to be mitigated so as not to exceed acceptable interior and exterior noise level standards identified in this Noise Element.	**Consistent.** The proposed Project would result in non-transportation noise on site during construction and operation, but the proposed Project would comply with existing regulations governing noise and no noise mitigation would be required. See Section 3.10, Noise, of the Draft EIR for details on construction and operational noise impacts to the City's noise level standards.

As described in Section 2.3.1, General Plan and Zoning, and shown in Figure 2-3, the City's General Plan identifies the site as Downtown Mixed Use. According to the City's General Plan, the Downtown Mixed Use designation permits service and retail uses, commercial businesses, professional offices, and residential uses within the City's downtown, at a maximum floor area ratio (FAR) of 1.0 and a maximum unit density of up to 80 dwelling units per acre (City of Arcadia 2010). The proposed Project does not require a General Plan Amendment for implementation to occur. Further, based on Table 4.9-2 and the reasons described above, the proposed Project would be consistent with the General Plan for the purposes of avoiding or mitigating environmental effect.

City of Arcadia Municipal Code

The City of Arcadia Development Code, in conformance with the General Plan, regulates land use development in the City. In each zone, the zoning regulations specify the permitted and prohibited uses, and the development standards, including setbacks, height, parking, and design standards, among others. The proposed Project would not require a Zone Change for implementation, consistent with Table 2-10, Allowed Uses and Permit Requirements for Downtown Zones of the City's Development Code. As specified in Chapter 3, Project Description, the Project requests the following discretionary approvals for Project implementation: Certification of Demolition; Minor Use Permit with Density Bonus; Site Plan and Design Review; Street Vacation for the Alley; and a Tentative Parcel Map.

Compliance with applicable zoning regulations would reduce potential impacts associated with the avoidance or mitigation of an environmental effect. With the City's approval, demolition activities would be permitted and review of the proposed site plan for design consistency would occur. The Project proposes a unit mix consisting of 64 studios, 168 one-bedroom units, 79 two-bedroom units, and 8 live-work units. The need for the issuance of a Minor Use Permit is illustrated in Table 2-10, Allowed Uses and Permit Requirements for Downtown Zones, of the City's Development Code, which is required for the development of multifamily dwellings and live-work units. Additionally, consistent with the General Plan, the Project site has a base density of 80 du/ac, allowing for a total of 236 dwelling units on the 2.95-acre site. The Project applicant proposes to utilize a 35% density bonus under SB 1818, which would increase the allowable dwelling unit count to 319 total units. In order to comply with SB 1818, the Project

would include 26 affordable dwelling units. Thus, the final unit mix would consist of 293 market rate units, and 26 affordable units, totaling 319 dwelling units. Utilization of the State Density Bonus is further codified in Section 9103.15 of the City's Development Code, as described in Section 4.9.2, above. Finally, the approval of a Street Vacation for the Alley on the Project site's eastern edge and approval of a Tentative Parcel Map is required for Project implementation. The Tentative Parcel Map would merge four of the lots into two legal lots and a portion of the alley would be vacated to accommodate the Project's design objectives for pedestrian connectivity. Therefore, with the approval of these items, less than significant impacts would occur related to land use regulations adopted for the purposes of avoiding or mitigating an environmental effect.

Conclusion

Based on the analysis provided above, the proposed Project would be consistent with the SCAG 2020–2045 RTP/SCS, City of Arcadia General Plan, and the City's Development Code. The Project proposes to create a new residential community within an existing developed site. The introduction of new housing would further mix the existing land uses within the Project site and would reduce automobile trips by creating a pedestrian-oriented, multi-modal environment. The Project would comply with all applicable development standards for the Project site. Thus, the proposed Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project site adopted for the purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant. No mitigation is required.

4.9.5 Cumulative Impact Analysis

Cumulative land use impacts could occur if any of the related projects would result in incompatible land uses, or result in land uses that are inconsistent with adopted land use plans when combined with the impacts of the Project. Given the built-out conditions of the greater Los Angeles Metropolitan region, including the Project site, cumulative development would likely convert existing underutilized properties in the Project site's area to revitalized higher-density developments to respond to the need for housing, sources of employment, and associated retail land uses. The Project would benefit the surrounding community by replacing underutilized properties; add residential uses to a job-rich community; and improve local and regional access to the regional transportation network. Furthermore, by providing additional housing and employment in close proximity to transit, the Project would assist the City and region in achieving short- and long-term planning goals and objectives related to reducing urban sprawl, efficiently using existing infrastructure, reducing regional congestion, and improving air quality through the reduction of vehicle miles traveled. This is consistent with SCAG and other regional policies for promoting more intense land uses adjacent to transit stations and job centers.

Generally, land use conflicts would be related to noise, traffic, air quality, and hazards/human health and safety issues, which are discussed in the relevant sections of the Draft EIR. Land use conflicts are also typically site-specific and not cumulative in nature; in other words, despite the number of cumulative projects in a given area, they would not necessarily compound to create cumulative land use conflicts. Cumulative incompatibility issues associated with surrounding developments or projects are anticipated to be addressed and mitigated for on a project-by-project basis. In addition, the cumulative environmental effects associated with implementation of the Project have been addressed in the technical sections of this Draft EIR.

Further, all related projects in the City would be subject to the same local development standards, such as those identified in the City's Development Code, as the proposed Project. Therefore, cumulative impacts related to land use and planning would be less than significant. No mitigation is required.

4.9.6 Mitigation Measures

The Project would not result in significant impacts; therefore, no mitigation is required.

4.9.7 Level of Significance After Mitigation

All impacts were determined to be less than significant. No mitigation is required.

4.9.8 References

City of Arcadia. 2010. *City of Arcadia General Plan*. Adopted November 16, 2010. https://www.arcadiaca.gov/shape/development_services_department/planning___zoning/general_plan.php.

City of Arcadia. 2013. Arcadia General Plan, Chapter 5, Housing Element. Adopted December 3, 2013. https://www.arcadiaca.gov/Shape%20Arcadia/Development%20Services/Housing%20Element/20142021HousingElementUpda.pdf.

City of Arcadia. 2021. Housing Element Update. Accessed May 2021. Web. https://www.arcadiaca.gov/shape/development_services_department/planning___zoning/housing_element_update.php

SCAG. 2020a. *The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, Connect SoCal.* https://www.connectsocal.org/Documents/Adopted/fConnectSoCal-Plan.pdf.

SCAG. 2020b. "News Release: SCAG Regional Council formally adopts Connect SoCal." September 3, 2020. http://scag.ca.gov/Documents/PR-SCAG-ConnectSoCal.pdf.

4.10 Noise

This section describes the existing noise conditions of the Alexan Mixed-Use Development Project (Project) site and vicinity, identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. For the relevant modeling data, refer to the following appendices:

Appendix I-1 Field Noise Measurement Data

Appendix I-2 Construction Noise Modeling Data

Appendix I-3 Stationary Operations Noise Modeling Data

Appendix I-4 Traffic Noise Modeling Data

Other sources consulted are listed in Section 4.10.8, References.

Comments received in response to the Notice of Preparation (NOP) are summarized in Table 1-1, Notice of Preparation and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft Environmental Impact Report (EIR). A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR. One individual expressed concern regarding noise and vibration at the adjacent medical office (at the corner of Santa Anita Avenue and Wheeler Avenue) from Project construction.

4.10.1 Existing Setting

The Project site is located at 150 North Santa Anita Avenue in the City of Arcadia (City) within Los Angeles County, approximately 13 miles east of downtown Los Angeles. The regional points of interest such as Los Angeles County Arboretum and Botanical Gardens and Santa Anita Park (live horse racing) are located near the Project site within the City limits. The City of Sierra Madre is located just north of the City and the City of Monrovia to the east. The City of Temple City is located directly south, and the City of Pasadena and the unincorporated communities of East Pasadena and East San Gabriel are located to the west of the City. Ambient outdoor noise sources at the Project site consist primarily of traffic along the adjacent roads.

Noise Terminology and Characteristics

Sound, Noise, and Acoustics

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) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound. In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receptor determine the sound level and characteristics of the noise perceived by the receptor. The field of acoustics deals primarily with the propagation and control of sound.

Frequency

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this huge range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of decibels (dB). The threshold of hearing for young people is about 0 dB, which corresponds to 20 mPa.

Addition of Decibels

Because decibels are logarithmic units, SPL cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a receptor equidistant to each sound source would be 3 dB higher than one source under the same conditions. For example, if one automobile produces an SPL of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB—rather, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dB louder than one source.

A-Weighted Decibels

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an "A-weighted" sound level (expressed in units of dBA) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-, C-, D-, and G-scales), but these scales are rarely used in conjunction with highway traffic noise. Noise levels for traffic noise reports are typically reported in terms of A-

weighted decibels (dBA). Table 4.10-1 arranges typical outdoor and indoor noise sources against a decreasing linear scale of A-weighted sound levels.

Table 4.10-1. Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	— 70 —	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2013.

Human Response to Changes in Noise Levels

As discussed above, doubling sound energy results in a 3 dB increase in sound. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different than what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1 dB changes in sound levels, when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000 Hz–8,000 Hz) range (Caltrans 2013). In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people can begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5 dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness. Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3 dB increase in sound would generally be perceived as barely detectable.

Noise Descriptors

Noise in our daily environment fluctuates over time at varying rates. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors are utilized in this analysis.

- **Equivalent Sound Level (L_{eq}):** L_{eq} represents an energy average of the sound level occurring over a specified period. The 1-hour A-weighted equivalent sound level (L_{eq}[h]) is the energy average of A-weighted sound levels occurring during a one-hour period, and is the basis for noise abatement criteria used by the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA). Note that L_{eq} is not an arithmetic average of varying dB levels over a period of time, it accounts for greater sound energy represented by higher decibel contributions.
- **Percentile-Exceeded Sound Level (L_{xx}):** L_{xx} represents the sound level exceeded for a given percentage of a specified period (e.g., L_{10} is the sound level exceeded 10% of the time, and L_{90} is the sound level exceeded 90% of the time).
- **Maximum Sound Level (L_{max}):** L_{max} is the highest instantaneous sound level measured during a specified period.
- **Day-Night Level (L_{dn}):** L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10 p.m. and 7 a.m.
- **Community Noise Equivalent Level (CNEL):** Similar to L_{dn}, CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10 p.m. and 7 a.m., and a 5 dB penalty applied to the A-weighted sound levels occurring during evening hours between 7 p.m. and 10 p.m.

Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on the following factors:

- **Geometric Spreading** – Sound from a localized source (i.e., an ideal point source) propagates uniformly outward in a spherical pattern (or hemispherical when near a surface). The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Roadways consist of several localized noise sources on a defined path, and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source.
- **Ground Absorption** – The propagation path of noise from a sound emission source to a receptor is usually horizontal and proximate to the ground. Under these conditions, noise attenuation from ground absorption and reflective-wave canceling can add to the attenuation associated with geometric spreading. For acoustically "hard" paths over which sound may traverse (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or "soft" sites (i.e., those sites with an absorptive ground surface between the source and the receptor, such as fresh-fallen snow, soft dirt, or dense vegetative ground cover), an additional ground-attenuation value of +1.5 dB per doubling of distance is normally assumed. When added to cylindrical spreading for line source sound propagation, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance.

- **Atmospheric Absorption** – In addition to aforementioned geometric spreading, the fluid medium (i.e., the air) through which sound travels yields frequency-dependent attenuation that increases in magnitude with increasing frequency. The effect is influenced by temperature and relative humidity, and typically negligible over short source-to-receptor distances (e.g., less than 500 feet); but, it helps explain why lower-frequency sound such as a thunderclap appears to "travel farther" over great distances.
- **Meteorological Effects** – Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound pressure levels can also be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects when distances between a source and receptor are large.
- **Shielding by Natural or Human-Made Features** – A large object or barrier in the direct path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and ridgelines) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receptor specifically to reduce noise. A barrier that breaks the line of sight between a source and a receptor will typically result in at least 5 dB of noise reduction. Taller barriers provide increased noise reduction. While a line of trees may visually occlude the direct line between a source and a receptor, its actual noise-reducing effect is usually negligible because it does not create an acoustically solid barrier. Deep expanses of dense wooded areas, on the other hand, can offer noise reduction under the right conditions.

Vibration Characteristics

Vibration is oscillatory movement of mass (typically a solid) over time. It is described in terms of frequency and amplitude and, unlike sound, can be expressed as displacement, velocity, or acceleration. For environmental studies, vibration is often studied as a velocity that, akin to the discussion of sound pressure levels, can also be expressed in dB as a way to cast a large range of quantities into a more convenient scale. Vibration impacts to buildings are generally discussed in terms of inches per second (ips) peak particle velocity (PPV), which will be used herein to discuss vibration levels for ease of reading and comparison with relevant standards. Vibration can also be annoying and thereby impact occupants of structures, and vibration of sufficient amplitude can disrupt sensitive equipment and processes (Caltrans 2020), such as those involving the use of electron microscopes and lithography equipment. Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities where sudden releases of subterranean energy or powerful impacts of tools on hard materials occur. Depending on their distances to a sensitive receptor, operation of large bulldozers, graders, loaded dump trucks, or other heavy construction equipment and vehicles on a construction site also have the potential to cause high vibration amplitudes. The maximum vibration level standard used by Caltrans for the prevention of structural damage to typical residential buildings is 0.3 ips PPV (Caltrans 2020). For human annoyance, Caltrans guidance indicates that a more stringent threshold of 0.2 ips PPV due to continuous vibration (e.g., nearby roadway traffic) would be "annoying." Vibration velocity limits for transient or single events tend to be less stringent than those for continuous or "steady-state" vibration sources.

Sensitive Receptors

Noise- and vibration-sensitive land uses are typically considered locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, and hospitals are

usual examples, with others depending on what the local jurisdiction may have defined or established. Based on context from the City Noise Ordinance and General Plan Noise Element as summarized in Section 4.10.2, Relevant Plans, Policies, and Ordinances, sensitive receptors include residences, schools, hospitals, hotels and motels, places of worship, and open space/recreation uses. Residences, a school and recreational uses are the nearest noise-sensitive land uses in the vicinity of the Project site. The closest sensitive receptor is a school approximately 630 feet from the Project site. These existing sensitive receptors represent the nearest land uses with the potential to be impacted by construction and operation of the Project, including noise levels associated with the addition of Project-related traffic on the local roadway network. A medical office building is adjacent to the Project on the northeast corner of Santa Anita Avenue and Wheeler Avenue. Medical offices are typically not considered a sensitive receptor for the purposes of CEQA noise analysis. Medical facilities are considered as sensitive receptors if they involve continuing care, such as a hospital or convalescent home. The medical office building near the Project site is a dermatologist's office and would not be considered a sensitive receptor. Nonetheless, potential noise and vibration levels from the Project at the medical office building are provided in this analysis.

Existing Noise Environment

The existing noise environment of the Project area and its vicinity includes a variety of acoustical contributors that include proximate roadway traffic on Santa Anita Avenue and other nearby arterial roadways, and an assortment of stationary noise sources that include commercial and industrial activities as well as operating heating, ventilating, and air-conditioning systems (HVAC) from residential and commercial land uses.

Noise measurements were conducted on and near the Project site in September 2021 to characterize the existing noise levels. Noise measurements were conducted at five locations on the Project site and at nearby noise-sensitive land uses to determine the approximate ambient daytime noise levels. The locations of the noise measurement locations are shown in Figure 4.10-1, Noise Measurement Locations.

The short-term noise measurements (15 minutes in duration each) were conducted on September 1, 2021 between 10:54 a.m. and 1:19 p.m. The attended sound level measurements were taken with a SoftdB Piccolo sound-level meter. This sound-level meter meets the current American National Standards Institute standard for a Type 2 (general-purpose) sound-level meter. The sound-level meter was positioned at a height of approximately 5 feet above the ground. The measured daytime average sound levels ranged from 59 to 66 dBA, as shown in Table 4.10- 2, Ambient Measured Noise Levels. The measurement results are in terms of the time-averaged equivalent noise level (L_{eq})The field noise monitoring data sheets are included in Appendix I-1 of this EIR.

Table 4.10-2. Ambient Measured Noise Levels

Site	Location	Sound Level (dBA L_{eq})	Noise Sources
Daytime Short-Term Noise Measurements			
ST1	Adjacent to private school building (Excelsior School) at 41 Santa Clara Street.	65.2	Traffic, distant mechanical equipment
ST2	Adjacent to single-family residences north of Santa Clara Street	65.4	Traffic, distant mechanical equipment
ST3	Arcadia Community Park	65.5	Traffic
ST4	Adjacent to 16 Alta Street (multi-family residences)	59.0	Traffic

Table 4.10-2. Ambient Measured Noise Levels

Site	Location	Sound Level (dBA L_{eq})	Noise Sources
ST5	On-site; adjacent to medical office building at 100 North Santa Anita Avenue	61.1	Traffic, distant construction, distant conversations

Source: See Appendix I-1 for complete results.
Notes: dBA = A-weighted decibels; L_{eq} = time-averaged equivalent noise level.

4.10.2 Relevant Plans, Policies, and Ordinances

Federal

Federal Transit Administration.

Although no federal regulations are applicable to this Project, guidance and methodologies from the Federal Transit Administration's (FTA's) Transit Noise and Vibration Impact Assessment Manual (FTA 2018) pertaining to construction noise and vibration are used in this analysis.

State

California Department of Transportation

In its Transportation and Construction Vibration Guidance Manual, Caltrans recommends a vibration velocity threshold of 0.2 ips PPV (Caltrans 2020) for assessing annoying vibration impacts to occupants of residential structures. Although this Caltrans guidance is not a regulation, it can serve as a quantified standard in the absence of such limits at the local jurisdictional level. Similarly, thresholds to assess building damage risk due to construction vibration vary with the type of structure and its fragility but tend to range between 0.2 ips and 0.3 ips PPV for typical residential structures (Caltrans 2020).

Government Code Section 65302(g)

California Government Code Section 65302(g) requires the preparation of a Noise Element in a general plan, which shall identify and appraise the noise problems in the community. The Noise Element shall recognize the guidelines adopted by the Office of Noise Control in the State Department of Health Services and shall quantify, to the extent practicable, current and projected noise levels for the following sources:

- Highways and freeways
- Primary arterials and major local streets
- Passenger and freight on-line railroad operations and ground rapid transit systems
- Aviation and airport-related operations
- Local industrial plants
- Other ground stationary noise sources contributing to the community noise environment

California General Plan Guidelines

The California General Plan Guidelines, published by the Governor's Office of Planning and Research, provides guidance for the acceptability of specific land use types within areas of specific noise exposure. Table 4.10-3, Land

Use Compatibility for Community Noise Environments, presents guidelines for determining acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. The Office of Planning and Research guidelines are advisory in nature. Local jurisdictions, including the City of Arcadia, have the responsibility to set specific noise standards based on local conditions.

Table 4.10-3. Land Use Compatibility for Community Noise Environments

Land Use Type	Community Noise Exposure (CNEL)			
	Normally Acceptable[1]	*Conditionally Acceptable*[2]	*Normally Unacceptable*[3]	*Clearly Unacceptable*[4]
Residential-low density, single-family, duplex, mobile homes	50–60	55–70	70–75	75–85
Residential – multiple-family	50–65	60–70	70–75	70–85
Transit lodging – motel, hotels	50–65	60–70	70–80	80–85
Schools, libraries, churches, hospitals, nursing homes	50–70	60–70	70–80	80–85
Auditoriums, concert halls, amphitheaters	NA	50–70	NA	65–85
Sports arenas, outdoor spectators' sports	NA	50–75	NA	70–85
Playgrounds, neighborhood parks	50–70	NA	67.5–77.5	72.5–85
Golf courses, riding stables, water recreation, cemeteries	50–70	NA	70–80	80–85
Office buildings, business commercial and professional	50–70	67.5–77.5	75–85	NA
Industrial, manufacturing, utilities, agriculture	50–75	70–80	75–85	NA

Source: OPR 2003

CNEL = Community Noise Equivalent Level; NA = not applicable

1 Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

2 Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features have been included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

3 Normally Unacceptable: New construction or development should be discouraged. If new construction of development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise-insulation features must be included in the design.

4 Clearly Unacceptable: New construction or development should generally not be undertaken.

California Code of Regulations Title 24

The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation. State regulations governing noise levels generated by individual motor vehicles and occupational noise control are not applicable to planning efforts, nor are these areas typically subject to CEQA analysis. State noise regulations and policies applicable to the Project include Title 24 requirements and noise exposure limits for various land use categories. The 2019 California Building Code (CBC, Part 2, Title 24, Section 1204.6, California Code of Regulations) stipulates "interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room. The noise metric shall be either the day-night average sound level (L_{dn}) or the community noise equivalent level (CNEL)."

Local

City of Arcadia General Plan

The policies outlined in the City of Arcadia General Plan Noise Element (City of Arcadia 2010) are considered relevant to the Project, as described below. The Noise Element is intended to be used as a guide in public and private development matters related to outdoor noise. The Noise Element serves as an aid in defining acceptable land uses and as a guideline for compliance with California Noise Insulation Standards. As stated in Government Code Section 65302(f), the ultimate purpose of noise control policies and programs is to "minimize the exposure of community residents to excessive noise." Table 4.10-4 presents the City's interior and exterior noise standards. Land use planning decisions in the City of Arcadia are guided by the Noise/Land Use Compatibility Criteria set forth in Figure 4.10-2.

Table 4.10-4. Interior/Exterior Noise Standards

Land Use	Maximum Exterior Noise Level	Maximum Interior Noise Level
Residential: Rural, Single-Family, and Multifamily	65 dBA CNEL	45 dBA CNEL
Schools		
Classroom	70 dBA CNEL	45 dBA L_{eq}
Playground	70 dBA CNEL	---
Libraries	---	45 dBA
Hospitals/Convalescent Facilities		
Sleeping Areas	65 dBA CNEL	45 dBA CNEL
Living Areas	---	50 dBA CNEL
Reception, Office	---	50 dBA L_{eq}
Hotels/Motels		
Sleeping Areas	---	45 dBA CNEL
Reception, Office	---	50 dBA L_{eq}
Places of Worship	65 dBA CNEL	45 dBA L_{eq}
Open Space/Recreation		
Wildlife Habitat	60 dBA CNEL	---
Passive Recreation Areas	65 dBA CNEL	---
Active Recreation Areas	70 dBA CNEL	---
Commercial and Business Park		
Office	---	55 dBA L_{eq}
Restaurant, Retail, Service	---	65 dBA L_{eq}
Warehousing/Industrial	---	70 dBA L_{eq}

Source: City of Arcadia General Plan Noise Element, Table N-2

Goal N-1: Effective incorporation of noise considerations into land use planning decisions.

Policy N-1.1: Consider noise impacts as part of the development review process relative to residential and other noise-sensitive land uses.

Policy N-1.2: Ensure that acceptable noise levels are maintained near schools, hospitals, and other sensitive areas in accordance with the Noise/Land Use Compatibility Guidelines in Figure N-4, Table N-2 Interior/Exterior Noise Standards, and the City's noise ordinance.

Policy N-1.3: New commercial and industrial developments located adjacent to residential areas and identified noise-sensitive uses shall demonstrate reduction of potential noise impacts on neighboring sensitive uses to acceptable levels.

Policy N-1.4: Discourage new development of residential or other noise-sensitive uses in noise-impacted areas unless effective mitigation measures are incorporated into the project design to reduce noise levels that comply with Noise/Land Use Compatibility Guidelines in Figure N-4 and Table N-2 Interior/Exterior Noise Standards.

Policy N-1.5: Require that proposed projects that have the potential to result in noise impacts include an acoustical analysis and appropriate mitigation to achieve the interior and exterior noise standards indicated in Table N-2 Interior/Exterior Noise Standards.

Goal N-2: Reduced noise impacts from transportation sources.

Policy N-2-1: Enforce State Motor Vehicle Code noise standards for cars, trucks, and motorcycles, and coordinate enforcement with the California Highway Patrol and County of Los Angeles Sheriff's Department.

Policy N-2-2: Continue to work with and lobby Metro to fund gap closure of the I-210 sound walls between Baldwin and Santa Anita Avenues.

Policy N-2-3: Consider using roadway sound attenuation techniques for resurfacing projects that use "quiet" pavement or noise-reducing rubberized asphalt.

Policy N-2-4: Consider the noise impacts on adjacent residential uses associated with establishing stop signs or other traffic control or traffic calming devices.

Policy N-2-5: Enforce truck routes established in the Circulation and Infrastructure Element and the Municipal Code.

Policy N-2-6: Work with Metro to provide that the design and operation of the Gold Line tracks, crossings, and station area use approaches that will minimize noise impacts associated with train operations on the community. In particular, construct the Santa Anita Avenue crossing as a grade-separated crossing.

Goal N-3: Limited intrusion of point-source noise within residential neighborhoods and on noise-sensitive uses

Policy N-3-1: Enforce the noise ordinance to protect residents and noise-sensitive uses from excessive noise levels associated with stationary sources.

Policy N-3-2: Encourage industrial and commercial activities to restrict their receiving operations to daytime periods and condition such operations for new development projects.

Policy N-3-3: Explore requiring the use of noise suppression devices and techniques on all exterior noise sources (construction operations, pumps, fans, leaf blowers) to lower exterior noise to levels that are compatible with adjacent land uses.

Policy N-3-4: Require any new mixed-use structures to be designed to minimize the transfer of noise and vibration from commercial or industrial to residential and other noise-sensitive uses.

Policy N-3-5: Require created by new noon-transportation noise sources to be mitigated so as not to exceed acceptable interior and exterior noise level standards identified in this Noise Element.

Policy N-3-6: Provide appropriate funding to monitor noise levels and investigate noise complaints.

Policy N-3-7: Educate the community at large about the importance of maintaining a healthy noise environment, and identify ways residents can assist in noise abatement effort

Arcadia Municipal Code

Chapter 6, Section 4610.3(a) of the City's Municipal Code contains standards (Shown in Table 4.10-5) that limit the levels of stationary source noise. The broad aim is to maintain ambient noise at acceptable levels, with specific and separate standards established for residential, commercial, and industrial districts. At the boundary line between two of the above zones the noise level of the quieter zone shall be used.

Table 4.10-5. Stationary Source Noise Standards

Region	7:00 A.M. to 10:00 P.M.	10:00 P.M.to 7:00 *A.M.*
Residential Zone	55 dBA	50 dBA
Commercial Zone	65 dBA	60 dBA
Industrial Zone	70 dBA	70 dBA

Source: City of Arcadia Municipal Code, Section 4610.3

4610.3(b) of the City's Municipal Code (Corrections to Noise Limits) states the following: "The numerical limits given in Section 4610.3(a) shall be adjusted by the following corrections, where appropriate". These adjustments are shown in Table 4.10-6.

Table 4.10-6. Stationary Source Noise Standard Adjustments (Where Appropriate)

Noise Condition	Correction (in dB)
1. Impulsive sounds, pure tone or sounds with a cyclically varying amplitude	-5
2. Noise occurring more than 5 but less than 15 minutes per hour	+5
3. Noise occurring more than 1 but less than 5 minutes per hour	+10
4. Noise occurring less than 1 minute per hour	+15

Source: City of Arcadia Municipal Code, Section 4610.3

Section 4610.3(c) of the City's Municipal Code states: "It shall be unlawful for any person to produce or cause or allow to be produced sound or noise from air-conditioning equipment, pumps, fans or similar machinery which is received on residentially zoned property occupied by another person in excess of 55 dBA, provided, however, that if such machinery was installed prior to December 1, 1970, the noise level shall not be in excess of 60 dBA."

In Article IV, Part 6, Nighttime Construction, Section 4261 "Prohibited Hours Defined," Section 4262 "Construction Limited," Section 4262.1 "Same. Exception," and Section 4263 "Permit," the Municipal Code stipulates that nighttime construction between the hours of 6:00 p.m. and 7:00 a.m. of any weekday, 5:00 p.m. and 8:00 a.m. on Saturday, and anytime on Sunday and holidays is prohibited.

Within Section 9103.13 (Performance Standards) of the City's Municipal Code, subsection 9103.13.080 (Vibration) states the following:

"No existing or proposed use, activity, or process or portion thereof shall cause or create a steady state or impact vibration on or beyond any property line with a vibration displacement by frequency bands in excess of that indicated in the Table 3-17 (Vibration Limits)." Table 3-17 is reproduced here as Table 4.10-7.

Table 4.10-7. Vibration Limits

Frequency	Vibration Displacement (in inches)	
Cycles per Second	*Steady State*	*Impact*
Under 10	.0005	.0010
10—19	.0004	.0008
20—29	.0003	.0006
30—39	.0002	.0004
40 and over	.0001	.0002

Source: City of Arcadia Municipal Code, Section 9103.13

Subsection 9103.13.010(B)(3) exempts temporary construction activity from the vibration limits above.

Conditions of Approval

The following standard construction best management practices (BMPs) are recommended on all projects – regardless of level of significance –and would be included as a condition of approval for the proposed Project. The construction contractors' specifications will include the following best practices, to be implemented during construction activities:

- Construction shall not take place between the hours of 6:00 p.m. and 7:00 a.m. on weekdays, between 5:00 p.m. and 8:00 a.m. on Saturday, or at any time on Sunday or a federal holiday.
- Stationary construction noise sources such as generators or pumps should be located at least 100 feet from sensitive land uses, to the maximum extent feasible.
- Construction staging areas should be located as far from noise-sensitive land uses to the maximum extent feasible.
- During construction, the contractor shall ensure all construction equipment is equipped with appropriate noise-attenuating devices. Idling equipment shall be turned off when not in use.
- Equipment shall be maintained so that vehicles and their loads are secured from rattling and banging.

4.10.3 Thresholds of Significance

The significance criteria used to evaluate a project's impacts related to noise are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to noise would occur if a project would result in:

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

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

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, expose people residing or working in the project area to excessive noise levels.

Quantitative thresholds of significance have been established for the purposes of this analysis based on the local polices and regulations described in Section 4.10.2 and are listed below.

- Through adherence to the limitation of allowable construction times provided in the City of Arcadia Municipal Code, construction-related noise would be considered compliant with the Municipal Code. The nearest sensitive receptor is approximately 630 feet from the Project site. Based on Cal/OSHA's standards, construction noise would not pose health and safety risks to nearby sensitive receptors. Therefore, impacts would be less than significant.
- Off-site noise impacts due to Project-generated traffic would be considered significant if Project-generated traffic causes an increase of 3 dBA CNEL (a barely perceptible difference) compared to existing traffic noise levels or cause noise levels to exceed a 65 dBA CNEL noise threshold at residential land uses or other applicable thresholds based upon the City's General Plan (as summarized in Table 4.10-4).
- Noise emissions from Project-related HVAC systems would be limited to the noise standard listed in Section 4610.3(c) of the City's Municipal Code (55 dBA at the nearest off-site residential properties); commercial or other non-residential uses would be limited to the noise standards for stationary sources listed in Table 4.10-5. Exceedance of these standards would be considered a significant impact.
- For groundborne vibration during construction, guidance from Caltrans indicates that a vibration velocity level of 0.2 ips PPV received at a structure would be considered annoying by occupants (Caltrans 2020). As for the receiving structure itself, aforementioned Caltrans guidance from Section 4.10.2 recommends that a vibration level of 0.3 ips PPV would represent the threshold for building damage risk.

4.10.4 Impacts Analysis

Threshold 4.10a Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

On-site noise-generating activities associated with the Project would include short-term construction as well as long-term operational noise associated with the Project. The Project would also generate off-site traffic noise along various roadways in the area. These potential effects are analyzed below.

Construction Noise (Short-Term Impacts)

Construction noise and vibration are temporary phenomena. Construction noise and vibration levels vary from hour to hour and day to day, depending on the equipment in use, the operations performed, and the distance between the source and receptor.

Construction of the overall proposed Project is anticipated to take approximately 26 months, beginning as early as June 2023. Construction of the proposed Project would include demolition, site preparation, grading, building construction, paving, and application of architectural coatings and landscaping. No rock blasting, on-site rock crushing or pile driving is anticipated to be necessary as part of this Project.

Equipment that would be in use during construction would include, in part, graders, backhoes, excavators, loaders, cranes, dozers, cement pump trucks, pavers, rollers, welders, concrete saws, and air compressors. The typical maximum noise levels for various pieces of construction equipment at a distance of 50 feet are presented in Table 4.10-8. Usually, construction equipment operates in alternating cycles of full power and low power, producing average noise levels over time that are less than the listed maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Table 4.10-8. Typical Construction Equipment Maximum Noise Levels

Equipment Type	Typical Equipment (L_{max}, dBA at 50 Feet)
Air compressor	78
Backhoe	78
Concrete mixer truck	79
Concrete Saw	90
Dozer	85
Grader	85
Crane	81
Man-lift	75
Roller	80
Generator	72
Front End Loader	79
Paver	77
Welder	73

Source: FTA 2018.
Notes: L_{max} = maximum sound level; dBA = A-weighted decibels.

The maximum noise levels at 50 feet for typical construction equipment would be approximately 90 dB for the equipment typically used for this type of development project, although the hourly noise levels would vary. Construction noise in a well-defined area typically attenuates at approximately 6 dB per doubling of distance. Project construction activities would take place as near as approximately 30 feet from existing commercial uses, but during construction of other components, construction would be several hundred feet away and potentially shielded from direct view. The nearest residences in the Project vicinity are located approximately 650 feet from the near side of the Project site, and approximately 1,000 feet from the far side.

Aggregate noise emissions from Project construction activities, broken down by sequential phase, was predicted for two distances to the nearby modeled receptors: (1) from the nearest position of the construction site boundary;

and (2) from the geographic center of the construction site of each phase location, which serves as the time-averaged location or geographic acoustical centroid of active construction equipment for the phase under study. The intent of the former distance is to help evaluate anticipated construction noise from a limited quantity of equipment or vehicle activity expected to be at the boundary for some period of time. The latter distance is used in a manner similar to the general assessment technique as described in the FTA guidance for construction noise assessment, when the location of individual equipment for a given construction phase is uncertain over some extent of (or the entirety of) the construction site area. Because of this uncertainty, all the equipment for a construction phase is assumed to operate—on average—from the acoustical centroid.

The Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) (FHWA 2008) was used to estimate construction noise levels at the nearest occupied noise-sensitive land use (although the model was funded and promulgated by the FHWA, the RCNM is often used for non-roadway projects, because the same types of construction equipment used for roadway projects are often used for other types of construction). Input variables for the RCNM consist of the receiver/land use types, the equipment type and number of each (e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (e.g., percentage of hours the equipment typically works per day), and the distance from the noise-sensitive receiver. Although some noise reduction from intervening structures is likely for most of the modeled locations because of the relatively large distances, barrier shielding was conservatively neglected for this analysis. The RCNM has default duty-cycle values for the various pieces of equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty-cycle values were used for this noise analysis.

Using the FHWA's RCNM construction noise model and construction information (types and number of construction equipment by phase), the estimated noise levels from construction were calculated for a representative range of distances, as presented in Table 4.10-9, Construction Noise Modeling Results Summary, below. The RCNM inputs and outputs are provided in Appendix I-2.

Table 4.10-9. Construction Noise Modeling Results Summary

Receiver Location	Land Use	Distance from Construction Activity to Receptor (feet)	Estimated Construction Noise Level					
			Demolition	*Site Prep*	*Grading*	*Construction*	*Paving*	*Architectural Coating*
ST1: Northwest of the Project	School	Nearest Construction Activity /Receiver Distance (630')	64	64	62	59.5	60	52
		Typical Construction Activity /Receiver Distance (765')	62	63	61	58.1	58	50
ST2: Northwest of the Project	Single-family residences	Nearest Construction Activity /Receiver Distance (860')	61	61	60	56.8	57	49
		Typical Construction Activity /Receiver Distance (980')	60	61	59	55.9	56	48
ST3: Southwest of the Project	Arcadia County Park	Nearest Construction Activity /Receiver Distance (650')	63	63	62	59	59	51
		Typical Construction Activity /Receiver Distance (825')	62	62	60	57.4	57	49
	Multi-family residences	Nearest Construction Activity /Receiver Distance (650')	63	63	62	59	59	51

ST4: South of the Project		Typical Construction Activity /Receiver Distance (825')	62	62	60	57.4	57	49
ST5[1]: West of the Project Site	Medical Office Building	Nearest Construction Activity /Receiver Distance (30')	85	88	85	81	83	76
		Typical Construction Activity /Receiver Distance (165')	76	76	74	71.4	71	63

Source: Appendix I-2
Notes: L_{eq} = equivalent continuous sound level
[1] ST5 is a not be considered a sensitive receptor. However, due to an NOP comment received (see Table 1-1, Notice of Preparation and Comment Letters Summary, potential noise and vibration levels from the Project at the medical office building are provided for informational purposes.

As shown in Table 4.10-9, the highest noise levels are predicted to occur during demolition, site preparation, and grading activities. At the nearest noise-sensitive land use (a private school located to the northwest of the Project site), construction noise levels would be as high as 64 dBA L_{eq} at the school when Project construction occurs near the Project boundary, approximately 630 feet away. At the typical construction activity/receiver distance from the school of approximately 765 feet, construction noise would range from approximately 50 to 63 dBA L_{eq}. At the nearest existing residences and at Arcadia County Park, each located approximately 650 feet from the nearest construction work, noise from construction activities is estimated to range from approximately 51 to 63 dBA L_{eq}.

At the adjacent medical office building, noise levels from construction activities would be as high as 88 dBA L_{eq} when Project construction occurs at the nearest Project boundary, approximately 30 feet away. At the typical construction activity/receiver distance from the medical office building of approximately 165 feet, construction noise would range from approximately 63 to 76 dBA L_{eq}. According to the FHWA (FHWA 2011), the typical noise reduction provided by buildings varies from 20 to 25 dBA for buildings of light frame construction with the windows closed. Buildings constructed using masonry provide approximately 25 to 30 dB noise reduction with windows closed. Conservatively assuming a noise reduction factor of 20 dB, the interior noise level at the medical office building would be as high as 68 dBA L_{eq} when Project construction occurs at the nearest Project boundary, approximately 30 feet away. At the typical construction activity/receiver distance from the medical office building of approximately 165 feet, the interior noise levels would range from approximately 43 to 56 dBA L_{eq}.

According to the City's Municipal Code, construction work is prohibited between the hours of 6:00 p.m. and 7:00 a.m. Monday – Friday, 5:00 p.m. and 8:00 a.m. on Saturday, and any time on Sunday and holidays. Although nearby off-site receivers would be exposed to elevated construction noise levels, the noise levels would not be high enough to pose a hazard to human health based on the Division of Occupational Safety and Health (DOSH) standards. Within the State of California, the DOSH, better known as Cal/OSHA, aims to protect and improve occupational health and safety. Its occupational noise regulations are similar to those of the federal government and while they are intended to apply to occupational health and safety, they can be utilized for purposes of construction noise impacts. Cal/OSHA sets an "Action Level" (AL), of 85 dBA. The AL is defined as the average employee noise exposure for an 8-hour day, which when reached or exceeded requires the implementation of actions to reduce the risk of noise-induced hearing loss. Cal/OSHA sets a "Permissible Exposure Level" (PEL) of 90 dBA. The PEL is the average employee noise exposure for an 8-hour day, 40-hour week at which nearly all employees may be exposed without adverse health effects. Note that these levels are conservative because they assume a career-long exposure; in the case of nearby residents, the noise exposure during construction activities would be quite brief.

As noted above, at noise sensitive receptor locations, construction noise will reach up to 64 dBA L_{eq}, which is below Cal/OSHA's AL and PEL. Therefore, construction would not pose human health risks and would not generate a substantial temporary increase in ambient noise levels in excess of standards.

Furthermore, the exposure would be short-term and would cease upon completion of construction. In compliance with the City's Municipal Code, construction activities associated with the proposed Project would not take place between 6:00 a.m. and 7:00 a.m. on weekdays, 5:00 p.m. and 8:00 a.m. on Saturday, or at any time on Sunday or holidays. Therefore, the proposed Project construction would be in compliance with applicable noise regulations, and therefore construction noise would be less than significant.

Operational Noise (Long-Term Impacts)

Long-term operational noise associated with the proposed Project includes stationary noise and traffic noise from the proposed on-site uses. Each of these is addressed below.

On-Site Stationary Noise.

HVAC equipment would be located on the rooftop of the proposed building and would be screened from direct view by nearby receivers by parapet walls and/or mechanical equipment screen walls. Based upon information provided by the applicant, a total of 327 roof-mounted Carrier air conditioner units would be used for heating, ventilation and air conditioning (HVAC), each with a cooling capacity of 2 tons. From the HVAC manufacturers' equipment specifications for representative models (details of which are provided in Appendix I-3), the dimensionless sound power levels were found to range from approximately 55 dBA to 73 dBA. Conservatively assuming a sound power level of 73 dBA per HVAC unit, a Microsoft Excel–based outdoor sound propagation prediction model was used to calculate the combined noise level from all 319 units at nearby sensitive receptors using several assumptions:

- Treatment of exposed roof-mounted HVAC condenser units as point-type sound emission sources.
- Point-source sound propagation (i.e., 6 dB per doubling of distance) that conservatively ignores acoustical absorption from atmospheric and ground surface effects.
- Condenser units would be installed at rooftop locations currently depicted in Project design drawings as of this writing.
- Because the condenser units are expected to be roof-mounted, the prediction model separately evaluates potential noise path occlusion due to the proposed project's intervening building structure.

Using the aforementioned noise prediction model, and without consideration of noise reduction due to acoustical shielding from structures other than the proposed Project, the noise levels from the combination of all operating condenser units at the nearby receivers was estimated and summarized in Table 4.10-10. As shown, noise levels at the nearest receivers would range from approximately 24 to 40 dBA L_{eq}, which would be well below the applicable noise standards and would also be well below measured ambient noise levels. Therefore, on-site stationary noise would be less than significant. No mitigation is required.

Table 4.10-10. On-Site Stationary Source Noise Modeling Results Summary

Receiver Location	Land Use	Stationary Equipment (HVAC) Noise Levels (dBA L_{eq})	Applicable Noise Standard (dBA L_{eq})
ST1: Northwest of the Project	School	25	60
ST2: Northwest of the Project	Single-family residences	32	55

ST3: Southwest of the Project	Arcadia County Park	25	60
ST4: South of the Project	Multi-family residences	24	55
ST5: West of the Project	Medical Office Building	40	60

Source: Appendix I-3
Notes: Leq = equivalent continuous sound level; applicable noise standards from Section 4610.3(c) of the City's Municipal Code for residential properties and Section 4610.3(a) of the City's Municipal Code for commercial and other non-residential uses.

Off-Site Traffic Noise

The proposed Project would generate traffic along adjacent arterial roadways (primarily Santa Anita Avenue, Santa Clara Street, Wheeler Avenue, and Huntington Drive). The City does not have a specific criterion for evaluating the significance of Project-related increases in off-site traffic noise levels at residences or noise-sensitive areas. For the purposes of this analysis, Project-generated traffic noise level increases are considered significant if they cause an increase of 3 dBA CNEL (a barely perceptible difference) compared to existing traffic noise levels, or cause noise levels to exceed 65 dBA CNEL at residential land uses or other applicable thresholds based upon the City's General Plan (as summarized in Table 4.10-4). If existing traffic noise levels exceed 65 dBA CNEL under existing conditions, impacts are considered significant if the Project increases traffic noise above existing traffic noise levels.

The noise levels associated with roadway traffic were determined based on the Project's Transportation Technical Memorandum (Appendix K-2) and using the FHWA TNM 2.5 Traffic Noise Model version 2.5 (FHWA 2004). The results of the traffic modeling at the nearby off-site receivers (represented by modeled receivers ST1 through ST5) for the existing and Existing Plus Project scenarios are summarized in Table 4.10-11; the traffic noise model data files are attached to this document in Appendix I-4. As shown, the Project-related traffic would result in a noise level increase of zero (0) dB CNEL (when rounded to whole numbers) along the studied roadways in the vicinity of the Project site. The proposed Project would not result in an exceedance of the City's 65 dBA CNEL noise threshold for residences or other applicable thresholds, and Project-related traffic would not substantially increase the existing noise levels in the Project vicinity. Therefore, operational traffic-related noise impacts would be less than significant. No mitigation is required.

Table 4.10-11. Traffic Noise Modeling Results - Existing and Existing Plus Project

Receiver Location	Land Use	Existing Traffic Noise Level (dBA CNEL)	Existing plus Project Traffic Noise (dBA CNEL)	Noise Increase (dB)
ST1: Northwest of the Project	School	66	66	0
ST2: Northwest of the Project	Single-family residences	67	67	0
ST3: Southwest of the Project	Arcadia County Park	67	67	0
ST4: South of the Project	Multi-family residences	60	60	0
ST5: West of the Project	Medical Office Building	68	68	0

Source: Appendix I-4

The noise level increases associated with additional traffic volumes under future (Year 2024) with Project traffic conditions and future without Project traffic conditions are summarized in Table 4.10-12. The noise level increases

associated with the Project under future traffic conditions would be zero (0) dB CNEL (when rounded to whole numbers) along the studied roadways in the vicinity of the Project site. Increases would be below the significance threshold of 3 dB, and the proposed Project would not result in an exceedance of the City's 65 dBA CNEL noise threshold for residences or other applicable thresholds. Therefore, operational traffic-related noise impacts would be less than significant. No mitigation is required.

Table 4.10-12. Traffic Noise Modeling Results - Future (Year 2024) and Future (Year 2024) Plus Project

Receiver Location	Land Use	Future Traffic Noise Level (dBA CNEL)	Future plus Project Traffic Noise (dBA CNEL)	Noise Increase (dB)
ST1: Northwest of the Project	School	67	67	0
ST2: Northwest of the Project	Single-family residences	68	68	0
ST3: Southwest of the Project	Arcadia County Park	67	67	0
ST4: South of the Project	Multi-family residences	60	60	0
ST5: West of the Project	Medical Office Building	68	68	0

Source: Appendix I-4

Threshold 4.10b Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction activities can expose persons to excessive groundborne vibration or groundborne noise under certain circumstances. Caltrans has collected groundborne vibration information related to construction activities (Caltrans 2020). Information from Caltrans indicates that continuous vibrations with a PPV of approximately 0.2 ips is considered annoying. For context, heavier pieces of construction equipment, such as a large bulldozer or similar equipment that may be expected on the Project site, have peak particle velocities of approximately 0.089 ips or less at a reference distance of 25 feet (FTA 2018). The equation used for this analysis to estimate vibration levels is as follows (FTA 2018):

$$PPV_{rcvr} = PPV_{ref} * (25/D)^{1.5} = 0.089 * (25/630)^{1.5} = 0.001;$$

where PPV_{rcvr} is the predicted vibration velocity at the receiver position, PPV_{ref} is the reference value at 25 feet from the vibration source (the bulldozer), and D is the actual horizontal distance to the receiver.

Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in FTA and Caltrans guidance. A large bulldozer or similar type of heavy equipment operating on site would generate an estimated vibration level of approximately 0.001 ips at the nearest residences located approximately 650 feet from the Project site. Therefore, because these predicted vibration levels are less than the Caltrans guidance-based annoyance threshold of 0.2 ips PPV, the impact of vibration-induced annoyance to occupants of nearby existing homes would be less than significant. No mitigation is required.

Construction vibration, at sufficiently high levels, can also present a building damage risk. At the nearest office building approximately 30 feet from the Project site, vibration is predicted at approximately 0.067 ips PPV, which is

be well below the guidance limit of 0.3 ips PPV for preventing structural damage (Caltrans 2020). Because the predicted vibration levels are less than both the annoyance and building damage risk thresholds, vibration from construction activities would be less than significant. No mitigation is required.

Once operational, the Project would not be expected to feature major onsite producers of groundborne vibration. Anticipated onsite mechanical systems like pumps, compressors, and fans are designed and manufactured to feature rotating or reciprocating components (e.g., impellers, rotors, and pistons) that are well-balanced with isolated vibration within or external to the equipment casings. On this basis, potential vibration impacts due to Project operation would be less than significant. No mitigation is required.

Threshold 4.10c For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project is not located within the vicinity of a private airstrip, and the nearest airport (San Gabriel Valley Airport, formerly known as El Monte Airport) is located approximately 3.5 miles south of the Project site. The Project is not located within the planning area for this airport, nor is it located within two miles of this airport or any other airport (Airnav.com 2021; County of Los Angeles 2004). Therefore, the Project would not expose people residing or working in the Project area to excessive noise related to public airports. No impact would occur.

4.10.5 Cumulative Impact Analysis

Noise in Excess of Standards

Implementation of the Project as well as unrelated development projects within its vicinity would all be subject to applicable noise standards (descriptions of the standards applicable within the City of Arcadia are described throughout this section). On this basis, and because noise impacts of the Project with respect to relevant standards would be less than significant, the Project would not contribute to cumulative exceedances of noise standards, and its incremental effect would be a less-than-significant impact.

Temporary/Periodic Increases in Ambient Noise Levels

The Project would result in temporary noise increases during construction activities, as discussed under 4.10.4(a) above. The construction period of the Project has the potential to overlap with the construction of other development projects in the City. Due to the decrease in noise levels with distance and the presence of physical barriers (i.e., intervening buildings and topography), noise due to construction of other projects would not meaningfully combine with future development under the Proposed Project to produce a cumulative noise effect during construction. By way of illustration, if there are two concurrent construction projects of comparable sound emission intensity, and the activity nearest to the studied noise-sensitive receptor is compliant with the City's applicable noise threshold, the other activity could be no closer than three times the distance of the receptor to the nearest activity and not make a cumulatively measurable contribution to the total and still City-compliant noise exposure level. If two concurrent projects were close to a receptor, the cumulative noise would be one of the following:

- the louder (in dBA) of the two concurrent activities; or,

- a logarithmic sum of the two activity noise levels that, per acoustic principles, cannot be more than 3 dBA greater than the louder of the two individual noise-producing activities.

In sum, cumulative construction noise is likely to be dominated by the closest or loudest activity to the receptor, and the combination will be no more than a barely perceptible difference (i.e., up to a 3 dBA change). Based on the cumulative project list provided by the City for the Project, there are no construction projects that would potentially contribute construction noise that would, in combination with the Project, result in cumulative impacts. Thus, cumulative impacts associated with temporary increases in ambient noise levels would be considered less than significant.

Vibration

Construction-related vibration from future development under the Project was addressed under Threshold 4.10.4(b) above. Other foreseeable projects within the vicinity of the Project site would not be close enough to create a combined excessive generation of groundborne vibration; therefore, cumulative impacts associated with excessive groundborne vibration would be less than significant.

Permanent Increase in Ambient Noise Levels

Off-Site Traffic

Future development from implementation of the Project along with other unrelated projects would generate off-site traffic noise. When calculating future traffic impacts, the traffic study included traffic attributed to both the Project and unrelated projects. Thus, future traffic noise prediction results with and without the Project already account for the cumulative impacts from unrelated projects contributing to traffic increases. Since the noise impacts are generated directly from the traffic analysis results, the Existing and Year 2024 traffic with and without Project predicted increases in traffic noise levels described herein already reflect cumulative impacts. As described herein, the noise level increases associated with both of these scenarios would not exceed applicable standards. As such, anticipated increases would be below the significance thresholds; hence, the incremental effect of the Project on off-site traffic noise is not cumulatively considerable. Cumulative off-site traffic noise impacts would be less than significant.

Stationary Sources

Noise from operation of stationary mechanical equipment added to the outdoor ambient sound environment as a result of Project implementation would include permanent on-site noise sources (e.g., rooftop HVAC equipment) as addressed under Section 4.10.4, Impacts Analysis, under Threshold 4.10a. A cumulative impact could occur if noise produced from such sources due to implementation of the Project were to combine with noise produced from the operation of other unrelated projects in the vicinity to create a cumulatively significant permanent increase in ambient noise levels. However, noise emission from HVAC equipment attenuates with distance and can be occluded by structures and terrain. Additionally, the operation of the Project, along with the operation of other unrelated projects, would be subject to applicable requirements from the City's noise ordinance, which limits the exterior noise levels at residences. Hence, for these two reasons, cumulative impacts to outdoor ambient noise levels resulting from Project stationary sources would be less than significant.

4.10.6 Mitigation Measures

Impacts would be less than significant, and no mitigation measures are required.

4.10.7 Level of Significance After Mitigation

Based upon the Impacts Analysis (Section 4.10.4), Project-related noise and vibration impacts would be less than significant without mitigation.

4.10.8 References

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OPR (Office of Planning and Research). 2003. *State of California General Plan Guidelines.* October 2003.

SOURCE: NearMap 2021

DUDEK

0 75 150 Feet

FIGURE 4.10-1

Noise Measurement Locations

Alexan Mixed-Use Development Project

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Land Use Category	Community Noise Equivalent Level (CNEL), dB						
	55	60	65	70	75	80	85
Estate Residential, Very Low Density Residential, Low Density Residential (1)							
Medium Density Residential							
High Density Residential, Mixed Use, Downtown Mixed Use							
Commercial, Regional Commercial, Horse Racing							
Commercial/Light Industrial							
Public/Institutional							
Open Space - Outdoor Recreation							
Open Space - Resource Protection							

Note:
(1) Areas along the I-210 corridor may be exempted, provided mitigation is provided to meet State Health and Safety Code requirements for interior noise levels.

NORMALLY ACCEPTABLE	*CONDITIONALLY ACCEPTABLE*	*NORMALLY UNACCEPTABLE*	*CLEARLY UNACCEPTABLE*
Specified land use is satisfactory, assuming buildings are of conventional construction, without any special noise insulation requirements.	New development should be undertaken only after analysis of noise reduction requirements is made and needed insulation features are incorporated intc design.	New construction or development generally is discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and incorporated into project design.	New construction or development is discouraged.

Source: City of Arcadia General Plan Noise Element, Figure N-4

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4.11 Population and Housing

This section describes the existing population and housing conditions within the Alexan Mixed-Use Development Project (Project) site and vicinity, identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, level of significance, and references. Information contained in this section is based on local and regional forecasts of the Project area from the Southern California Association of Governments (SCAG) and the City of Arcadia General Plan. All population, housing, and employment data is based on the most recent U.S. Census Bureau data. Other sources consulted are listed in Section 4.11.8, References.

Comments received in response to the Notice of Preparation (NOP) are summarized in Table 1, Notice of Preparation and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft Environmental Impact Report (EIR). A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR.

Methodology

The Project site encompasses 128,517 gross square feet (sf), or 2.95 gross acres, and consists of four parcels located in the eastern portion of the City of Arcadia. As shown in Table 2-1, Existing Land Use Summary, the Project site includes a 1-story Bank of America building and drive-thru, an 8-story occupied office building, and a 1-story occupied office building; all of which will remain in place with the exception of a 750 square foot interior renovation of the 8-story office building's lobby to accommodate a café. Project implementation would result in the demolition and removal of one 2-story office building, two 1-story commercial buildings, an alley, and surface parking. Adjacent to the southwest portion of the Project site is APN 5773-006-029 at 100 N. Santa Anita Avenue, which is an approximately 1,500 sf 1-story occupied medical office building. This off-site property is not a part of the proposed Project and would not be altered by the proposed Project.

4.11.1 Existing Conditions

Existing Population, Housing, and Employment Data

Southern California Association of Governments Region Overview

SCAG is the nation's largest metropolitan planning organization, representing six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura), 191 cities, and approximately 19 million residents. The City of Arcadia is within Los Angeles County. The SCAG region is a major hub of global economic activity, representing the 16th largest economy in the world and contains two of the largest ports in the nation. At the time of the issuance of the NOP, the applicable regional growth forecasts were included in SCAG's 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) as adopted in September 2020 (SCAG 2020).

SCAG completes a comprehensive update of the plan every 4 years to update the growth forecast, integrate new projects and programs funded by the six county transportation commissions, confirm alignment with federal and state performance standards and environmental requirements, and to review and refine regional strategies to address gaps in achieving the region's vision for greater mobility, sustainability and economic prosperity. The plan is a "living" document that can be amended and refined in between the 4-year cycles, as necessary, to address regionally significant changes in transportation programs and funding.

The 2020–2045 RTP/SCS (also referred to as Connect SoCal) was made available for public review in March 2020 (SCAG 2020). On May 7, 2020, the Regional Council adopted Resolution No. 20-621-1 certifying the "Connect SoCal" and the associated Program Environmental Impact Report (PEIR) and approving Connect SoCal for federal conformity purposes only. On September 3, 2020, the SCAG Regional Council unanimously voted to approve Resolution No. 20-624-1 to: (1) adopt the 2020–2045 RTP/SCS (Connect SoCal or Plan) PEIR Addendum and Revised Mitigation Monitoring and Reporting Program; (2) approve Connect SoCal in its entirety; and (3) submit Connect SoCal to the California Air Resources Board for confirmation that the Plan meets greenhouse gas reduction targets.

Connect SoCal is a long-range planning document that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable regional growth pattern. Over 4,000 individual transportation capital projects and programs through 2045, advanced through local and countywide plans, form the foundation of Connect SoCal. The implementation of the plan is anticipated to generate and support 168,400 annual jobs stemming from direct transportation investments and 264,500 jobs annually from the enhanced economic competitiveness that infrastructural improvements will provide (SCAG 2020a).

According to SCAG, for the purpose of determining consistency with Connect SoCal for the California Environmental Quality Act (CEQA), lead agencies, such as local jurisdictions, have the sole discretion in determining a local project's consistency; consistency should be evaluated utilizing the goals and policies of Connect SoCal and its associated Program PEIR. Connect SoCal does not supersede or otherwise affect local jurisdiction authority or decisions on future development, including entitlements and development agreements. There is no obligation by a jurisdiction to change its land use policies, General Plan, or regulations to be consistent with Connect SoCal (SCAG 2020a).

A combination of forecasts for population, households, and employment within the SCAG region and Los Angeles County, as included SCAG's Demographics and Growth Forecast Technical Report (SCAG 2020b), are presented below in Table 4.11-1.

Table 4.11-1. SCAG Regional Population, Households, and Employment Forecasts

	2020	2045	Total Change	Percent Change
SCAG Region				
Population	19,518,000	22,504,000	2,986,000	19.5%
Households	6,333,000	7,633,000	1,300,000	27.0%
Employment	8,695,000	10,049,000	1,354,000	19.8%
Los Angeles County				
Population	10,407,000	11,674,000	1,267,000	12.2%
Households	3,472,000	4,119,000	647,000	24.1%
Employment	4,838,000	5,382,000	544,000	13.5%

Source: SCAG 2020b; Table 13.

According to the Connect SoCal data, on a national level, population growth has slowed, with the U.S. Census Bureau projecting a decrease in national annual growth rate from about 0.75% in 2016 to approximately 0.40% by the 2040s. In the SCAG region, growth is similarly slowing down, from about 0.85% in 2020 to about 0.45% by 2045. While growth rates are at a historic low; an increase to the total population is expected. In the SCAG region, a 0.6% annual growth rate corresponds to about 126,621 new residents annually, or 3.6 million new residents between

2016 and 2045 (SCAG 2020a). For Los Angeles County, a total population increase of 12.2% is anticipated between 2020 and 2045 (SCAG 2020b).

County and City Demographic Overview

Population Growth

Table 4.11-2 presents historic data and projections for population growth in the City of Arcadia (City) and Los Angeles County between 2020 and 2045 based on data from the U.S. Census Bureau (2020 Census data projections), and from SCAG's Connect SoCal.

Table 4.11-2. City and Los Angeles County Population Growth and Forecasts 2020–2045

Year	City of Arcadia Total Residents	County of Los Angeles Total Residents
2020	56,681 [a]	10,407,000 [b]
2030 [b]	—	10,900,000
2035 [b]	—	11,174,000
2045 [b]	62,200	11,647,000
Forecasted Change 2020–2045	**5,519**	**1,240,000**
Total Percentage Change 2020–2045	**9.7%**	**11.9%**
Average Annual Percentage Change 2020–2045	**0.4%**	**0.5%**

Sources:
[a] U.S. Census Bureau 2021
[b] SCAG 2020b (Tables 13 and 14)

As shown in Table 4.11-2, the City's projected total and incremental annual rate of population growth is lower than Los Angeles County's population growth rate when compared over the same time period. According to Table 4.11-2, a total of 5,519 new residents are anticipated to move to the City of Arcadia between 2020 and 2045.

Household Growth

Table 4.11-3 presents historic data and projections in the City's and Los Angeles County's households between 2020 and 2045 based on data from the California Department of Finance 2020 estimates and from SCAG's Connect SoCal.

Table 4.11-3. City and Los Angeles County Household Growth and Forecasts 2020–2045

Year	City of Arcadia Total Households	County of Los Angeles Total Households
2016 [a]	19,600	3,319,000
2020	21,289 [b]	3,472,000 [a]
2030 [a]	—	3,749,000
2035 [a]	—	3,885,000
2045 [a]	22,400	4,119,000
Forecasted Change 2020–2045	**1,111**	**647,000**
Total Percentage Change 2020–2045	**5.2%**	**18.6%**
Average Annual Percentage Change 2020–2045	**0.2%**	**0.8%**

Sources:
[a] SCAG 2020b (Tables 13 and 14)
[b] DOF 2021

As shown in Table 4.11-3, the City's projected total and incremental annual rate of growth in the housing stock is substantially lower than Los Angeles County's growth rate in housing when compared over the same time period. According to Table 4.11-3, a total of 1,111 households are forecasted in the City of Arcadia between 2020 and 2045.

Employment Growth

Table 4.11-4 presents historic data and forecasts of employment in the City and Los Angeles County between 2016 and 2045 based on data from SCAG's Connect SoCal.

Table 4.11-4. City and Los Angeles County Employment and Forecasts 2016–2045

Year	City of Arcadia Total Employment	County of Los Angeles Total Employment
2016	32,600	4,743,000
2020	—	4,838,000
2030	—	5,060,000
2035	—	5,172,000
2045	36,100	5,382,000
Forecasted Change 2016–2045	**3,500**	**639,000**
Total Percentage Change 2016–2045	**10.7%**	**13.5%**
Average Annual Percentage Change 2016–2045	**0.4%**	**0.5%**

Sources:
SCAG 2020b (Tables 13 and 14)

As shown in Table 4.11-4, the City's projected total and incremental annual rate of growth in employment is slightly lower than Los Angeles County's growth rate in employment when compared over the same time period. According to SCAG, a total of 3,500 new jobs are anticipated to be created in the City of Arcadia between 2016 and 2045.

Arcadia General Plan

General Plan Buildout

The City's 2010 General Plan includes buildout projections for the City based on the Land Use designations. Table 4.11-5 includes the General Plan's 2035 buildout projections for population, dwelling units, and non-residential square footage (based on SCAG's 2012-2035 RTP/SCS).

Table 4.11-5. 2010 General Plan Buildout Projections for 2035

City of Arcadia	2035
Population	61,994
Dwelling Units	22,535
Non-Residential Square Footage	13,459,717

Sources: City of Arcadia 2010, Table LU-2

As shown in Table 4.11-5, the City's 2010 General Plan anticipates a General Plan buildout population of 61,994 persons by 2035. SCAG's Connect SoCal projections of 62,200 persons by 2045 (see Table 4.11-2) represents an expectation that the City will meet the population growth set forth in the General Plan. Since incorporation in 1903, the majority of development in the City occurred prior to 1960, as part of the post-war population boom, with the

City's population increasing from 696 persons in 1910 to 41,005 persons in 1960. Since then, the City has experienced moderate levels of growth. In the 2010 Census, the City had reached a population of 56,364. Current estimates place the population at 56,564. Over the next 20 years, City projections for future growth anticipate a moderate, yet steady, increase in population. SCAG projections (as part of the 2012-2035 RTP/SCS) indicate that the population of Arcadia could reach 64,300 by the year 2035 (City of Arcadia 2013).

Housing Element Regional Housing Needs Allocation

The City's 2010 General Plan projected demographic information for the year 2035. In 2013, the City updated the Housing Element of the General Plan. The 2014–2021 Housing Element of Arcadia's General Plan sets forth the City's 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. The Housing Element stated there were approximately 20,677 residential units in the City in 2012, which is fewer than projected in the 2010 General Plan, as shown in Table 4.11-5. The average household size estimated for 2010 was 2.83 persons per household (City of Arcadia 2013).

The Housing Element stated that the City's employment was 26,043 in 2009 (City of Arcadia 2013). Those projections have since been revised through SCAG's updated Connect SoCal, as shown in Table 4.11-4, which estimated 32,600 in 2016 and 36,100 jobs by 2045.

State law requires that a community provide an adequate number of residential sites to allow for and facilitate production of the City's regional share of housing. To determine whether the City has sufficient land to accommodate its share of regional housing needs for all income groups, the City must identify "adequate sites." Government Code Section 65583 provides that adequate sites are those with appropriate zoning and development standards, with services and facilities, needed to facilitate and encourage the development of a variety of housing for all income levels. Compliance with this requirement is measured by the jurisdiction's ability to provide adequate land to accommodate the Regional Housing Needs Allocation (RHNA) (City of Arcadia 2013).

SCAG is responsible for allocating the RHNA to individual jurisdictions within the region. The RHNA is distributed by income category for the 2014–2021 Housing Element. The RHNA planning period is between January 1, 2014 through October 31, 2021 (i.e., 2014–2021 RHNA).

The City of Arcadia's RHNA allocation was 1,054 total units and distributed as follows:

- Very Low/Extremely Low Income (up to 50% of Area Median Income [AMI]): 276 units (26.2%)
- Low Income (51% to 80% of AMI): 167 units (15.8%)
- Moderate Income (81% to 120% of AMI): 177 units (16.8%)
- Above Moderate Income (more than 120% of AMI): 434 units (41.2%)

Jobs/Housing Balance

A jobs/housing balance is a ratio that indicates the number of available jobs in the City compared to the number of available housing units. The ratio is one potential indicator of a community's ability to reduce commuter traffic and overall vehicle miles traveled (VMT) by maintaining a balance between employment and housing in close proximity (e.g., within the City limits).

A general measure of the balance of a community's employment opportunities with the needs of its residents is through a "jobs–housing balance" test. A balanced community would have a match between employment and housing opportunities so that most of the residents could also work in the community. Connect SoCal provides the data required to calculate the City's jobs-housing balance, as shown in Tables 4.11-3 and 4.11-4. Assuming a 2016 housing stock of 19,600 units and a 2016 employment of 32,600 jobs, the City maintained a 1.7:1 jobs to housing ratio in the City, which translates to being a jobs-rich community. Assuming a 2045 housing stock of 22,400and a 2045 employment of 36,100, the City would maintain a jobs-rich community with a 1.6:1 jobs to housing ratio in the City (SCAG 2020b).

Project Site Demographics

The Project site consists of an existing 8-story office building and 1-story bank drive-through. Both buildings are occupied and support an employment population which would remain in place. An interior renovation is planned within the existing 8-story which would result in an approximately 750 square foot conversion of the southern building footprint from a lobby to a café. Currently, there is a coffee station in the lobby of the 8-story building, which would be removed. Under existing conditions, a 2-story office building, two single-story commercial buildings, and surface parking also occupy the Project site, all of which would be removed as a result of the proposed Project (see Table 2-1, Existing Land Use Summary). The Project site does not currently include any residents or housing.

4.11.2 Relevant Plans, Policies, and Ordinances

Federal

There are no federal programs, policies, or regulations related to population or housing that are applicable to the Project.

State

Section 65580 of the Government Code (Housing Element Law)

Pursuant to Section 65580 of the Government Code, a Housing Element of a General Plan must contain local commitments to the following:

- Provide sites with appropriate zoning and development standards and with services and facilities to accommodate the jurisdiction's RHNA for each income level. The RHNA is the only population and/or housing requirement that applies to the General Plan Update.
- Assist in the development of adequate housing to meet the needs of lower and moderate-income households.
- Address, and where appropriate and legally possible, remove governmental constraints to the maintenance, improvement, and development of housing, including housing for all income levels and housing for persons with disabilities.
- Conserve and improve the condition of the existing affordable housing stock.
- Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status or disability.
- Preserve assisted housing developments for lower income households.

Department of Housing and Community Development

State law requires that jurisdictions provide their fair share of regional housing needs. The California Department of Housing and Community Development (HCD) is mandated to determine the statewide housing need. The HCD, in cooperation with local governments and councils of governments, are charged with making a determination of the existing and projected housing need as a share of the statewide housing need of their city or region. The housing construction need is determined for four broad household income categories: very low (households making less than 50% of median family income), low (50% to 80% of median family income), moderate (80% to 120% of median family income), and above moderate (more than 120% of median family income). The intent of the future needs allocation by income groups is to relieve the undue concentration of very low and low-income households in a single jurisdiction and to help allocate resources in a fair and equitable manner.

The "fair share" allocation process begins with the California Department of Finance's projection of statewide housing demand for an 8-year period, which is then apportioned by the HCD among each of the state's official regions, which are represented by councils of government. A local jurisdiction's fair share of regional housing need is the number of additional dwelling units that will need to be constructed during a given 8-year planning period. Once a local government has received its final RHNA, it must revise its Housing Element to show how it plans to accommodate its portion of the region's housing need.

Senate Bill 1818 (Government Code 65915)

Senate Bill (SB) 1818 amended the State Density Bonus program (Government Code 65915) and became effective on January 1, 2005. See discussion for Section 9103.15, Density Bonuses for Affordable and Senior Housing, of the Arcadia Development Code, below.

Regional and Local

Southern California Association of Governments

SCAG is the Metropolitan Planning Organization for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties. As the designated Metropolitan Planning Organization, SCAG is mandated to research and develop plans for transportation, growth management, hazardous waste management, and air quality. SCAG is responsible for planning efforts that result in the RTP and the Federal Transportation Improvement Program; SCAG also develops the SCS to reduce greenhouse gas emissions as required by the Sustainable Communities and Climate Protection Act (Senate Bill 375).

SCAG is responsible for developing demographic projections; developing land use, housing, employment, transportation programs and strategies for South Coast Air Quality Management District; ensuring that the RTP and the Federal Transportation Improvement Program conform to the State Implementation Plans for transportation-related criteria pollutants, per the Clean Air Act; preparing the Regional Housing Needs Assessment, including planning for future population, housing, and employment growth throughout the SCAG region; and preparing the Southern California Hazardous Waste Management Plan. SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts within the SCAG region. SCAG's demographic data is developed to enable the proper planning of infrastructure and facilities to adequately meet the needs of the anticipated growth. Growth forecasts contained in the RTP/SCS for Los Angeles County and the City are used in this section to analyze population, housing, and employment forecasts.

Regional Transportation Plan/Sustainable Communities Strategy

The RTP is a long-range transportation plan that is developed and updated by SCAG every 4 years to guide transportation investments throughout the region. The SCS is a required element of the RTP that integrates land use and transportation strategies to achieve California Air Resources Board emissions reduction targets pursuant to Senate Bill 375. On September 3, 2020, the SCAG Regional Council adopted the 2020-2045 RTP/SCS (Connect SoCal). The RTP/SCS includes goals to increase mobility and enhance sustainability for the region's residents and visitors. The RTP/SCS encompasses three principles to improve the region's future: mobility, economy, and sustainability. The RTP/SCS provides a regional investment framework to address the region's transportation and related challenges, while enhancing the existing transportation system and integrating land use into transportation planning (SCAG 2020a).

To address the mobility challenge of the region's continuing roadway congestion, the RTP/SCS proposes transportation investments in transit; passenger and high-speed rail; active transportation; transportation demand management; transportation systems management; highways; arterials; goods movement; aviation and airport ground access; and operations and maintenance projects. The RTP/SCS recommends local jurisdictions accommodate future growth within existing urbanized areas, particularly near existing transit, to reduce VMT, congestion, and greenhouse gas emissions. The RTP/SCS approach to sustainably manage growth and transportation demand would reduce the distance and barriers between new housing, jobs, and services and would reduce vehicle travel and greenhouse gas emissions. As part of its RTP/SCS document, SCAG develops population and housing forecasts for the SCAG region and for the jurisdictions that make up the SCAG region.

Regional Housing Needs Allocation (RHNA)

The RHNA is mandated by the State Housing Law as part of a periodic process of updating local housing elements in city and county general plans. The RHNA is produced by SCAG and contains a forecast of housing needs within each jurisdiction within the SCAG region for eight-year periods. The RHNA provides an allocation of the existing and future housing needs by jurisdiction that represents the jurisdiction's fair share allocation of the projected regional population growth. The future housing needs allocations are broken down by income level so that each jurisdiction is responsible for the development of affordable housing units to meet future housing needs.

The 5th Cycle RHNA Allocation Plan is the RHNA that was in effect at the time that the NOP was issued for the proposed Project and covers a planning period of October 2013 through October 2021 and it showed a need for 412,137 additional housing units within the SCAG region. Table 4.11-6 shows the 5th Cycle RHNA Final Allocation Plan.

Table 4.11-6. SCAG's 5th Cycle RHNA Allocation Plan

Total	Very-Low Income	Low Income	Moderate Income	Above Moderate Income
SCAG Region				
412,137	100,632	64,947	72,053	174,505
Los Angeles County				
179,881	45,672	27,469	30,043	76,697
City of Arcadia				
1,054	276	167	177	434

Source: SCAG 2012

As described in Section 4.11.1, Existing Conditions, subsequently, on September 3, 2020, SCAG's Regional Council adopted Resolution No. 20-624-1 to (1) adopt the 2020–2045 RTP/SCS (Connect SoCal) PEIR Addendum and Revised Mitigation Monitoring and Reporting Program; (2) approve Connect SoCal in its entirety; and (3) submit Connect SoCal to the California Air Resources Board for confirmation that the Plan meets greenhouse gas reduction targets.

SCAG is required to develop a final RHNA methodology to distribute existing and projected housing need for the 6th cycle RHNA for each jurisdiction, which will cover the planning period October 2021 through October 2029. Several guiding principles that SCAG staff has developed to use as the basis for developing the distribution mechanism for the RHNA methodology. These principles are based on the input and guidance provided by the RHNA Subcommittee during their discussions on RHNA methodology between February 2019 and June 2019.

1. The housing crisis is a result of housing building not keeping up with growth over the last several decades. The RHNA allocation for all jurisdictions is expected to be higher than the 5th RHNA cycle.

2. Each jurisdiction must receive a fair share of their regional housing need. This includes a fair share of planning for enough housing for all income levels, and consideration of factors that indicate areas that have high and low concentration of access to opportunity.

3. It is important to emphasize the linkage to other regional planning principles to develop more efficient land use patterns, reduce greenhouse gas emissions, and improve overall quality of life.

HCD provided SCAG a final regional determination of 1,341,827 units for the 6th cycle RHNA on October 15, 2019. Following the formal distribution of draft RHNA allocations based on the Final RHNA methodology and a separate appeals phase described in Government Code 65584.05 et seq., RHNA allocations are anticipated to be adopted in February 2021. Based on SCAG's determination of existing need and projected needs, which considers anticipated vacancies and projected household growth, the regional existing need for additional housing units has been determined to be 836,857 units, and the regional projected need is 504,970 units (SCAG 2020c). HCD's regional determination of 1,341,827 exceeds SCAG's 2020–2045 household growth forecast of 1,297,000 by 3.68% (SCAG 2020c).

SCAG's 6th Cycle RHNA allocation to local jurisdictions based on the Regional Council-approved Final RHNA Methodology described above includes the allocations shown in Table 4.11-7. On March 22, 2021, HCD approved SCAG's adopted 2021-2029 RHNA Plan.

Table 4.11-7. SCAG's 6th Cycle Final RHNA Allocation

Total	Very-Low Income	Low Income	Moderate Income	Above Moderate Income
SCAG Region				
1,341,827	351,796	206,807	223,957	559,267
Los Angeles County				
812,060	217,273	123,022	131,381	340,384
City of Arcadia				
3,214	1,102	570	605	937

Source: SCAG 2020d

City of Arcadia General Plan

The Housing Element is one of the seven required General Plan elements mandated by state law. State law requires that each jurisdiction's Housing Element consist of "identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled program actions for the preservation, improvement and development of housing." The Housing Element must analyze and plan for housing for all segments of the community. This Housing Element covers the Planning Period from October 2013 to October 2021, consistent with the State-mandated update required for all jurisdictions within the SCAG region. The Housing Element of the City's General Plan for the 2013–2021 cycle was adopted by the City Council on December 3, 2013 (City of Arcadia 2013). With the approval of the RHNA Allocation, as discussed above, the City of Arcadia is currently within the process of updating its Housing Element for the 2021-2029 planning period, and a draft Housing Element was released for public review in December 2021 (City of Arcadia 2022).

City of Arcadia Development Code

9103.15 – Density Bonuses for Affordable and Senior Housing

This section of the City's Development Code codifies the requirements of California State Government Code Sections 65915 through 65918. The program offers incentives for the development of affordable housing for low-income, moderate-income, and senior citizen households. Where regulations are not specifically addressed in this Section or where conflicts exist between these provisions and the provisions of Government Code Sections 65915 through 65918, the provisions of the Government Code, as they may be amended over time, apply.

4.11.3 Thresholds of Significance

The significance criteria used to evaluate a project's impacts to population and housing are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to population and housing would occur if the project 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).
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

4.11.4 Impacts Analysis

Threshold 4.3a Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Project impacts associated with population, housing, and employment are based on estimates of the number of residents, households, and employees that may be generated by the Project in comparison to regional growth forecasts. The Project's estimates are then compared to population, housing, and employment projections from SCAG growth forecasts for the City of Arcadia, as used in the development of the 2020–2045 RTP/SCS (Connect SoCal).

Short-Term Construction Impacts

Construction activities at the Project site would lead to the temporary need for construction workers, which may come from the City, other areas of Los Angeles County, or elsewhere within the SCAG region. The proposed Project involves fairly common construction requirements that would not require a highly specialized labor force to permanently relocate from other regions. Construction of the Project is anticipated to start in June 2023, in which construction would last approximately 26 months, ending in August 2025. The different construction activities require specific skill sets for a much shorter duration than the overall construction schedule. Because construction workers would not be needed continuously and only for varying portions of the Project phases, it is reasonable to assume that workers/crews would work at the Project site on a temporary basis only, and thus, are not likely to relocate their households as a consequence of the construction job opportunities presented by the Project. Because the demand for construction workers would be short-term, and because the Project site within an urban metropolitan region with a high diversity of skilled labor, a permanent need for new workers to relocate in order to accommodate the proposed Project's temporary construction workforce is not anticipated. Any changes in the City or regional population, housing, or employment due to short-term construction activities would be less than significant.

Long-Term Operational Impacts

The proposed Project would demolish some of the existing structures on the Project site, including a 2-story office building, two 1-story commercial buildings, and surface parking. The Project site also contains an existing 8-story office building and 1-story bank drive-through, which would remain in place. The Project would redevelop the site with the construction of a 7-story multi-family residential building, consisting of 319 dwelling units with various residential amenities throughout the building and Project site. An outdoor plaza would be constructed between the 8-story office tower and the proposed residential building. In addition, approximately 750 square feet of lobby space within the existing 8-story building would be converted into a café, while the alleyway adjacent to the eastern boundary of the site would be converted into a pedestrian paseo. The Project would also include a total of 576 parking spaces, contained within two above-ground parking areas, within Levels 1 and 2 of the proposed building, and two subterranean parking levels. Implementation of the proposed Project would not require a General Plan Amendment or Zone Change. Therefore, the proposed Project would directly result in the building new housing where housing currently does not exist.

Population Projections

SCAG estimated that Los Angeles County had 10,407,000 residents in 2020 and estimates the county would have 11,647,000 residents by 2045 (see Table 4.11-1 and 4.11-2). The U.S. Census Bureau determined the City had a total of 56,681 residents in 2020 and SCAG estimates 62,200 residents by 2045 (see Table 4.11-2). As such, the forecasted population growth for the City of Arcadia is 5,519 persons between 2020 and 2045.

Using population and housing estimates from the California Department of Finance, the City has an occupancy rate of 2.85 persons per household (DOF 2021). Assuming 2.85 persons per household, the proposed Project's residential units would accommodate 909 individuals.[1] Additionally, it is likely that the proposed residential units would accommodate a combination of existing residents and new residents that either currently work within the City and/or new residents that would be hired as a result of projected employment generation within the City.

[1] This estimated number of new residents conservatively assumes full occupancy of all units. 319 new housing units x 2.85 persons per household = 909 residents accommodate by the proposed Project

Additionally, the City's 2021 housing vacancy rate of 6.3% is slightly less than Los Angeles County's housing vacancy rate 6.4% (DOF 2021).

The U.S. Census Bureau determined, based on the 2020 Census results, there were 56,364 residents in the City in 2010 (U.S. Census 2021). The City's General Plan estimated a buildout population of 61,994 residents by 2035 (see Table 4.11-5). SCAG's Connect SoCal projections of 62,200 persons by 2045 (see Table 4.11-2) represents an expectation that the City will meet the population growth set forth in the General Plan. When considering the 2035 buildout of the General Plan, it can be interpreted that the proposed Project's anticipated population of 909 residents would be fulfilling a 2035 population projection that was anticipated at the time of the preparation of the City's General Plan.

The proposed Project would accommodate an expected 909 residents which would be counted within the overall population growth projections included in the Connect SoCal of 5,519 residents between 2020 and 2045 (see Table 4.11-2).

The proposed Project would be considered growth-accommodating rather than growth-inducing in that the proposed Project's 319 new residential units would accommodate 909 residents, which are anticipated to be a mix of current and future residents to the City. If all 909 residents would be new to the City, the Project would be within the overall population growth projections included in the Connect SoCal.

Because the proposed Project would support SCAG's goals and strategies for growth in the region as described in Section 4.9, Land Use and Planning, and because the proposed Project would assist the development of new housing and improves the City's job/housing balance (as described below), impacts related to population growth would be less than significant.

Employment Projections

As described in Chapter 3, Project Description, the Project would develop a new residential building, which would require staffing to support on-site services. In addition, the proposed Project would include 8 live/work units. As further detailed in Appendix K-2 of this Draft EIR, approximately 9,281 square feet of the live/work units would be considered a commercial/retail land use. The Project also includes the interior renovation of the existing 8-story office tower in order to convert the space into a new 750 square foot café. Given that the existing office and commercial land uses on site would be demolished, the Project would result in a loss of approximately 50 potential jobs and the proposed Project is anticipated to generate approximately 30 jobs. Therefore, as shown below in Table 4.11-8, the proposed Project is estimated to generate a net loss of approximately 20 jobs as compared to existing conditions.

Table 4.11-8. Employment Estimate

Land Use/Structure	Project Action	Size	Employee Generation Factor	Number of Employees[1]
Existing[2]				
Low-Rise Office [a]	Demolish 2-story office	9,000 square feet	319 square feet per employee	28
Other Retail/ Services [a]	Demolish 1-story commercial	4,591 square feet	424 square feet per employee	11

Table 4.11-8. Employment Estimate

Land Use/Structure	Project Action	Size	Employee Generation Factor	Number of Employees[1]
Other Retail/ Services [a]	Demolish 1-story commercial	3,733 square feet	424 square feet per employee	9
High-Rise Office [a]	8-story office to remain[3]	750 square feet	440 square feet per employee	2
			Total Employment Loss	**50**
Proposed				
Other Retail/ Services [a]	Proposed Café	750 square feet	424 square feet per employee	2
Residential	Proposed Residential Amenities	319 units	1 Community Manager, 1 Assistant Manager, 1 Leasing Consultant, 1 Maintenance Supervisor, 1 Maintenance Mechanic, 1 Porter/Housekeeper	6
Other Retail/ Services [a]	Live/Work[4]	9,281 square feet	424 square feet per employee	22
			Proposed Total of New Employees	**30**
			Net Total of Employees	**-20**

Source:

[a] SCAG 2001, Table 4A

Notes:

1 Employee estimates are rounded to the nearest whole number

2 As shown in Table 2-1, Existing Land Use Summary, no change is proposed to the existing Bank of America office building or 1-story office building on APN 5773-006-036.

3 The existing 8-story office building would remain in place with the exception of interior renovation for the proposed café

4 Live/work units would be comprised of approximately 39% residential and 61% office space

Although the proposed Project would result in a loss of 20 employment opportunities at the Project site, the proposed Project would not result in a significant effect to the City or region. According to the California Employment Development Department, preliminary results find approximately 10.4% (529,700 persons) of the Los Angeles County's 5,108,400 person-labor force were unemployed as of July 2021, and approximately 7.8% (2,300 persons) of the City's 29,300 person-labor force were unemployed in July 2021 (EDD 2021). Given the fact that unemployment rates during COVID-19 may be skewed when compared to previous years, the 2019 rates were also evaluated. According to the California Employment Development Department, approximately 4.6% (234,400 persons) of the Los Angeles County's 5,090,800 person-labor force were unemployed as of July 2019, and approximately 3.7% (1,100 persons) of the City's 29,800 person-labor force were unemployed in July 2019 (EDD 2021). As such, it can be assumed that many of the 30 new jobs would be filled by individuals that live within the City.

As previously discussed above, the number of jobs in the City would decrease by approximately 20 positions as a result of the Project. Therefore, the proposed Project would not contribute to SCAG's employment growth projections in Los Angeles County, nor would the Project contribute to SCAG's employment growth projections for the City. Instead, the estimated loss of 20 jobs at the Project site resulting from the proposed Project would represent a nominal change to the City's jobs-rich community, as further described below.

Housing Projections Analysis

SCAG projects that Los Angeles County will have an increase of 647,000 housing units between 2020 and 2045, and that the City will have an increase of 1,111 units during this same period (see Table 4.11-3). The proposed Project's 319 residential units would represent 0.05% of SCAG's projected housing for Los Angeles County and 28.7% of the projected housing for the City. Therefore, the proposed Project's housing units would not exceed the projections for housing within the City, as set forth in the 2020–2045 RTP/SCS.

California's housing element law requires that each city and county develop local housing programs designed to meet its fair share of existing and future housing needs for all income groups. This effort is coordinated when preparing the state-mandated Housing Element of the City's General Plan. This fair share allocation concept seeks to ensure that each jurisdiction accepts responsibility for the housing needs of, not only its resident population, but for all households that might reasonably be expected to reside within the jurisdiction, particularly lower income households. This assumes the availability of a variety and choice of housing accommodations appropriate to their needs, as well as certain mobility among households within the regional market.

Table 4.11-7 provides the 6th Cycle RHNA allocation for 2021 to 2029 as set forth in the Connect SoCal 2020–2045 RTP/SCS. Because the proposed Project will be occupied within the timeframe of the 6th Cycle, it is most relevant to the analysis. The City's fair share allocation for the planning period is 3,214 units. This indicates that between the years 2021 to 2029, the City needs to accommodate at least 3,214 housing units, consisting of a variety of housing types to accommodate extremely low, very low, low, moderate, and above moderate-income households to keep pace with housing demand. The proposed Project would create new housing and would include affordable housing in accordance with SB 1818. The specific allocation between the types of low-income housing has yet to be determined; however, the proposed low-income units would satisfy a portion of the City's mandated 6th Cycle RHNA allocation.

As such, the proposed Project's 319 new residential units would assist the City in meeting the mandated RHNA allocation and would be consistent with and supportive of the City's Housing Element projections for new residential units within the City.

Jobs/Housing Balance

As previously described under Section 4.11.1, Existing Conditions, the City is considered to be a jobs-rich community. The proposed Project would generate additional housing available for the community, as the jobs-housing balance of the proposed Project would be 0.09:1[2], which is a housing-rich project. As such, the proposed Project would be contributing additional housing to the City's jobs-rich community and would assist in meeting the mandated RHNA allocation of housing units. In conclusion, the proposed Project would facilitate a more balanced jobs-housing profile for the City by adding more housing to a city with an approximately 1.6:1 jobs to housing ratio (SCAG 2020b).

Threshold 4.3b Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The Project site, under existing conditions, consists of surface parking as well as the commercial and office space. No housing units are located on the Project site. Thus, Project implementation would not require demolition of

[2] 30 jobs and 319 housing units = 30/319 = 0.09

existing housing or displace people or housing. The proposed Project would include the construction of a mixed-use development that would add approximately 319 housing units to the City. Impacts would be less than significant.

4.11.5 Cumulative Impact Analysis

As discussed above, assuming 2.85 persons per household, the proposed Project's residential units would accommodate 909 residents. Additionally, the Project is estimated to result in a net loss of 20 employees as compared to the existing conditions. Planned related projects identified in below in Table 4.11-9 (as well as in Section 2.5, Cumulative Projects, in Section 2, Environmental Setting of this Draft EIR) identify other residential projects varying in size and type with a majority proposed as new condos and five projects as mixed-use developments with residential and commercial uses. The remaining cumulative projects would primarily be increasing employment in the City and potentially further exacerbating the jobs-rich profile of the City, which could increase the vehicle miles traveled between employment centers and residential land uses. While the proposed Project would provide employment opportunities to the local and regional area, the net loss of employment opportunities on site would not contribute to current projections for employment growth in the City or Los Angeles County. Additionally, as shown in Table 4.11-9 below, the planned growth of cumulative projects within the City includes over 73,795 square feet of additional commercial development. With the addition of the 319 housing units, the proposed Project is anticipated to facilitate a more balanced jobs-housing profile for the City of Arcadia.

Table 4.11-9, below, details the cumulative potential housing growth as well as population growth.

Table 4.11-9. Cumulative Projects Estimates

Location ID	Cumulative Project Location	Within City Limits	Land Use/Project Type	Unit	Size	Status
1	405 South 1st Avenue (Mixed Use Building)	Yes	Residential	4	DU	Permits Issued
			Commercial	585	SF	
2	420 South 1st Avenue (Mixed Use Building)	Yes	Residential	11	DU	Planning Review
			Commercial	1,020	SF	
3	25 N Santa Anita Ave (Huntington Parkview Mixed Use)	Yes	Residential	157	DU	Planning Review
			Commercial	14,690	SF	
4	205 North Santa Anita Avenue (Santa Anita Mixed Use)	Yes	Residential	22	DU	May be withdrawn but almost complete for public hearing
			Commercial	1,240	SF	
5	117 East Huntington Drive (Huntington Plaza/Mixed Use)	Yes	Residential	139	DU	Plan Check
			Commercial	10,200	SF	
6	288 North Santa Anita Avenue (Medical Office/Retail Building)	Yes	Office/Retail	31,160	SF	Under Construction
7	130 West Huntington Drive (Le Meridien Hotel/Condos/Retail)	Yes	Hotel	233	Rooms	Hotel Complete/ Condos Under Construction
			Condo	96	DU	
			Retail	6,640	SF	
			Spa	3,960	SF	
		Yes	Hotel	175	Rooms	

Table 4.11-9. Cumulative Projects Estimates

Location ID	Cumulative Project Location	Within City Limits	Land Use/Project Type	Unit	Size	Status
8	125 W Huntington Drive (Hotel Indigo)		Restaurant and Spa	4,300	SF	Plan Check Complete
9	230 California Street	Yes	Condos	5	DU	Under Construction
10	116 Bonita Street	Yes	Condos	3	DU	Under Construction
11	157 Genoa Street	Yes	Condos	4	DU	Plan Check Complete
12	135 El Dorado Street	Yes	Condos	3	DU	Under Construction
13	314 California Street	Yes	Condos	5	DU	Under Construction
14	147 Alice Street	Yes	Condos	3	DU	Plan Check
15	125 California Street	Yes	Condos	3	DU	Under Construction
16	416 Genoa Street	Yes	Condos	8	DU	Under Construction
17	414 S 2nd Avenue	Yes	Condos	6	DU	Plan Check
18	43 Genoa Street	Yes	Condos	4	DU	Planning Review
19	920 North Santa Anita Avenue	Yes	Condos	6	DU	Planning Review
20	141 Fano Street	Yes	Condos	3	DU	Planning Review
21	200 Street 2nd Avenue	Yes	Condos	4	DU	Planning Review
			Total Housing Units Projected	**486**	**DU**	

Source: Appendix K-2
Notes: DU = dwelling unit; SF = thousand square feet

As shown above, a total of 486 units are proposed within one mile of the Project site, all of which are within the City limits. In addition to the proposed 319 units of housing growth by the Project, the cumulative total would be estimated at 805 new units[3]. Given that the City's Housing Element is currently undergoing an update in accordance with State law and at the time of this Draft EIR's production, State and regional projections are used for analysis comparison. Table 4.11-3 reveals the California Department of Finance estimates 21,289 units exist within the City of Arcadia. Moreover, SCAG estimates a total of 22,400 units would be built by 2045. As such, the addition of 805 units would result in 22,094 new units in the City once the proposed Project is operational in 2024. Therefore, the estimated household growth is within the State and regional growth projections. Furthermore, the proposed housing growth generated by the Project would further the goals and strategies of SCAG and the City's General Plan by providing housing in an urban setting in close proximity to transit, while contributing to a more balanced jobs-housing community. Although, the proposed Project's residential population would not exceed SCAG's population projections, it can also be assumed that many of the residential units would accommodate workers within the City and could reduce vehicle miles traveled by providing housing in proximity to employment centers.

[3] 486 + 319 = 805

Cumulative population growth could be assumed using the previously identified 2.85 persons per household. Thus, the related projects could result in approximately 1,385 persons[4]. In addition to proposed population growth generated by the Project (909 residents), a total of 2,294 persons[5] is anticipated. As such, 58,975 persons are estimated at build out of both the related projects and the proposed Project, which is within SCAG's projected population growth of 62,200 persons for the City by 2045.

Given the above, it is not anticipated that the proposed Project, in combination with other future foreseeable projects, would create a cumulatively considerable impact to population, housing or employment.

4.11.6 Mitigation Measures

No mitigation measures are required.

4.11.7 Level of Significance After Mitigation

The proposed Project would not result in significant impacts, and no mitigation measures is required.

4.11.8 References

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[4] Total of 486 units x 2.85 persons per household = 1,385.1 (1,385) persons

[5] 909 + 1,385 = 2,294

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SCAG. 2020d. *SCAG 6th Cycle Final RHNA Allocation Plan. Approved by HCD on March 22, 2021 and modified on July 1, 2021*. https://scag.ca.gov/sites/main/files/file-attachments/6th-cycle-rhna-final-allocation-plan.pdf?1625161899.

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U.S. Census. 2021. U.S. Census Bureau, QuickFacts: Arcadia City. Accessed August 20, 2021. https://www.census.gov/quickfacts/fact/table/arcadiacitycalifornia/PST045219

4.12 Public Services and Recreation

This section describes the existing conditions of public facilities, including police, fire, emergency medical, school, library, and park/recreation facilities, and associated personnel servicing the proposed Alexan Mixed-Use Development Project (Project) site and vicinity. This section also establishes the significance criteria used to evaluate Project impacts based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, as well as the regulatory framework necessary to analyze and report environmental impacts, both cumulative and otherwise, that could potentially result from Project design, construction, and/or implementation. Finally, this section reviews any necessary mitigation measures, and assesses relative levels of significance after mitigation. Information contained in this section is based on a review of relevant online data from the City of Arcadia (City) website and written correspondence with the City of Arcadia Fire Department (AFD), the Arcadia Police Department (PPD), the Arcadia and Live Oak County Public Libraries, the Arcadia Recreation and Community Services Department (ARCSD), and the Arcadia Unified School District (AUSD). For specific correspondence, refer to the following appendix:

Appendix J-1 Public Services Correspondence Letter, Fire Protection

Appendix J-2 Public Services Correspondence Letter, Police Protection

Appendix J-3 Public Services Correspondence Letter, Schools

Appendix J-4 Public Services Correspondence Letter, Parks

Appendix J-5 Public Services Correspondence Letter, Libraries

Other sources consulted are listed in Section 4.12.8, References.

Comments received in response to the Notice of Preparation (NOP) are summarized in Table 1, Notice of Preparation and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft Environmental Impact Report (EIR). A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR.

4.12.1 Existing Conditions

Fire Protection & Emergency Medical Services

Fire and emergency response services at the Project site are provided by the AFD, under the direction of Fire Chief Barry Spriggs (City of Arcadia Fire Department 2021). According to the City General Plan, the AFD is an "all-risk" department, providing services such as "fire suppression, urban search and rescue, paramedic ambulance service, fire prevention inspections/permits, public fire, education programs, emergency preparedness planning, fire cause and origin investigation, fire patrols, and other services based on community needs" (City of Arcadia 2010b).

The AFD is made up of 26 firefighters and support personnel (Appendix J-1). There are at least 17 personnel on duty each shift that are divided among three stations (City of Arcadia 2010a). Table 4-13-1 of the General Plan EIR lists minimum staffing and equipment at each of the three locations. Of the three main Stations within the City (Stations 105, 106, & 107), Station 105 is the closest to the Project site, approximately 0.65-miles south at 710 South Santa Anita Avenue. Station 105's primary service area includes the Downtown business district where the

Project site is located, however, each station also responds to emergencies outside of their priority areas, as needed by the community. Station 106 is located and 630 South Baldwin Street, while Station 107 is located at 79 West Orange Grove. Figure 4.12-1, Existing Fire and Police Stations shows the location of the City's three fire stations. Current resources at these fire stations include:

- Station 105
  - Fire Administration: Fire Chief, Deputy Fire Chief, Senior Management Analyst, and Fire Administrative Specialist
  - Fire Prevention: Fire Marshal, Administrative Assistant, Fire Inspectors
  - Fire Suppression: BLS Fire Engine, Tractor Drawn Aerial Ladder Truck, Rescue Ambulance, Command Vehicle
- Station 106
  - Fire Suppression: Fire Engine, Rescue Ambulance, Urban Search and Rescue Truck
- Station 107
  - Fire Suppression: Assessment Fire Engine

According to the AFD, data from the previous three years shows that response times are increasing due to call volume, recent pandemic effects, and other factors such as increased traffic patterns, further emergency responses due to adjacent districts responding, and hospital bed availability (Appendix J-1).

As such, the AFD is currently conducting analysis of the call response times and staffing resources that may be necessary to keep response times within the City's guidelines. This analysis may result in a AFD Program or Impact Fee to fund solutions to address the cumulative impact of the densification and multi-story development within the City and the downtown area specifically. An anticipated solution to be funded by the AFD Program or Impact Fee to help decrease response times and increase emergency response safety would be the implementation of a pre-emption system that is integrated with the City's traffic light system. An example of such a system is HAAS ALERT. The AFD is currently working on a study that will apply to the downtown area. This study may lead to a program for such an alerting or pre-emption system and may result in fair share contributions from development projects in the downtown area (Appendix J-1).

Fire Prevention Services

The Fire Prevention Bureau of the AFD is responsible for "…public education; plan check of new and temporary construction of buildings; fire sprinkler, fire alarm, and extinguishing systems for compliance with applicable codes and standards; fire alarm tests; and fire zone information (City of Arcadia 2010a). The Fire Prevention Bureau is assigned to Station 105 and is comprised of three personnel that include a Fire Marshal, an Administrative, Assistant, and a Fire inspector (City of Arcadia 2010a). According to the General Plan's Safety Element, the City's Fire Prevention Program, overseen and implemented by the AFD, has "greatly reduced" property damage, injury and loss of life associated with fire and fire related incidents. The staffing of the Fire Prevention Bureau is evaluated on an as needed basis and is expected to increase along with increases in the City's commercial occupancy (City of Arcadia 2010b).

Fire Suppression Services

The Fire Suppression Division is responsible for "…firefighting services, hazardous material services, and disaster response. The Suppression Division also provides mandatory and continuous training for new recruits and in-service firefighters, and also procures, maintains, and develops specifications for firefighting equipment and tools the fire, emergency medical and life safety services to the community" (City of Arcadia 2010a).

The City adheres to the National Fire Protection Association (NFPA) Standard 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments, which sets minimum standards for firefighter engine and truck company staffing. The City also maintains mutual aid agreements for fire suppression with surrounding cities, including Monrovia, Pasadena, South Pasadena, San Marino, San Gabriel, Sierra Madre, Alhambra, Monterey Park, Glendale, and Burbank and Los Angeles County, as well as with the United States Forest Service (City of Arcadia 2010b). In addition, the AFD is part of the California Master Mutual Aid program in which fire personnel mobilize from unaffected areas to support other areas that are experiencing an emergency, such as a large brush fire, earthquake, mudslide, or any number of natural or human-caused disaster (City of Arcadia 2010a). Response times for the Suppression Division have been provided by the AFD and are as follows: Four (4) minutes or less for the arrival of the first arriving engine company at the fire suppression incident or eight (8) minutes or less for the deployment of a full first alarm assignment 90% of the time (Appendix J-1).

Fire Hazard Areas

According to the California Department of Forestry and Fire Protection's Fire Hazard Severity Zone maps and the City General Plan Safety Element, the Project site is not within a Fire Hazard Severity Zones (CAL FIRE 2021; City of Arcadia 2010b). Due to the urban setting of the Project site, the potential for wildland fire hazards in the immediate Project vicinity are extremely limited, however, portions of the City approximately 0.75 miles north of the Project site are within a Very High Fire Hazard Severity Zone (VHFHSZ). The City General Plan EIR Section 4.7g identifies the I-210 (running east-west through the City) and I-605 (running along the City's southeastern corner) as the official area-wide evacuation routes. As identified by CAL FIRE, all of the incorporated Fire Hazard Severity Zones within and adjacent to the City are north of the I-210, as are the main arterial roadways that would likely be utilized by residents of these zones in the event of a wildfire evacuation (CAL FIRE 2021). The Project area is located to the south of the I-210 and to the far west of I-605. As such, potential residents of the proposed Project would likely not access the designated area-wide evacuation routes via the same arterial roadways as the northern residents living in and around the VHFHZs and/or other Low, Moderate/High/Fire Hazard Severity Zones.

Emergency Medical Services

As previously mentioned, the AFD is responsible for providing both fire and emergency medical response for the proposed Project site and vicinity. The City also offers a Paramedic Membership Program (PMP) which provides both commercial and residential community members 24-hour emergency paramedic and ambulance services for a small annual fee. The current emergency medical response performance standard is the arrival of advanced life support arriving on scene within 5 minutes 90% of the time (Appendix J-1).

Police Protection

As shown in Figure 4.12-1, Existing Fire and Police Stations, the APD is located next to City Hall at 250 West Huntington Drive, approximately 0.6-miles southwest of the Project site. The APD employs over 70 officers and 35 support staff

(Appendix J-2) and provides police protection services to the City via the Administration Division and the Operations Division. Both are managed by a Division Captain, who oversees a number of staff and personnel, and who reports directly to the Chief of Police, Roy Nakamura. The Operations Division is the department's largest and most visible, consisting of the Patrol Division, the Special Weapons and Tactics (SWAT) team, as well as reserve officers. The Operations Division's primary duties include responding to various calls for service, conducting preliminary investigations, preparing initial police reports, providing high visibility patrol, and coordinating traffic and parking enforcement (City of Arcadia Police Department 2021). The APD is also a member of the Foothill Area Support Team (FAST) a regional police helicopter program that includes the neighboring cities of Alhambra, Arcadia, Monrovia, Covina, Pasadena, Glendora, La Verne, San Marino, Sierra Madre, and West Covina (City of Arcadia 2010b).

The APD maintains a minimum staffing level of no less than 5 officers per patrol shift and up to 8 officers per patrol team. The department provides patrol services 24 hours a day and prioritizes emergency service request responses based on the best available information. Average response times are approximately two to three minutes for emergency calls (Appendix J-2).

Schools

The AUSD provides public educational services to the Project site and has a current enrollment of nearly 10,000 students across eleven 11 schools: six elementary schools, three middle schools, one high school, and one alternative school (AUSD 2021a). In addition to the AUSD public schools, there are private and charter schools in the City. Specific public schools serving the Project site include Holly Avenue Elementary, First Avenue Middle School, and Arcadia High School. In 2017, the City residents voted to extend Measure A, a parcel tax that directly funds the AUSD, and is expected to generate approximately $77 million before it expires in 2035 (AUSD 2021b). Figure 4.12-2, Existing School Facilities, maps the respective locations of the three AUSD schools serving the Project. Table 4.12-1 provides the addresses and approximate distances of the schools from the Project site.

Table 4.12-1. Public Schools Serving the Project Site

School	Address	Distance from Project Site (Miles)
Holly Avenue Elementary School	360 West Duarte Road	1.31
First Avenue Middle School	301 South First Avenue	0.31
Arcadia High School	180 Campus Drive	0.73

Sources: AUSD 2021b

Parks/Recreation

Parks and Facilities

The City's Recreation and Community Services Department is responsible for developed park land that provides a wide variety of attractions and amenities including more than 12 parks, athletic fields, community centers, a dog park and a public golf course. Table 4.12-2 indicates the parks and recreational facilities serving the City, including location and acreage, which are shown in Figure 4.12-3, Parks and Recreational Facilities.

Table 4.12-2. Parks and Recreational Facilities

Map Key	Park Facility Name	Address	Size (in acres)
Mini Parks			
1	Bicentennial Park	Corner of 6th Ave. & Longden Ave.	.63
2	Fairview Avenue Park	Arcadia Ave. b/t La Cadena Ave. and Baldwin Ave.	.91
3	Forest Avenue Park	West Forest Ave. b/t Rodeo Rd. and Tindalo Rd.	.26
4	Tripolis Friendship Park	Corner of South Golden West Ave. & Fairview Ave.	.34
		Total Mini Park Acreage	**2.14**
Neighborhood Parks			
5	Eisenhower Park and Dog Park	Corner of 2nd Ave. & East Colorado Blvd.	5.39
6	Newcastle Park	143 Colorado Blvd.	2.64
7	Orange Grove Park	1440 North Baldwin Ave.	2.66
8	Tierra Verde Park	Corner of East Camino Real Ave. & 2nd Ave.	1.55
–		**Total Neighborhood Park Acres**	**12.24**
Community Parks			
9	Wilderness Park	2240 Highland Oaks Dr.	120.0[1]
		Total Community Park Acres	**120.0**
Special Parks			
10	Arcadia Community Center/Senior Center	365 Campus Dr.	4.98
11	Bonita Park and Skate Park	207 Bonita St.	3.38
12	Civic Center Athletic Field	240 W Huntington Dr.	2.24
13	Longden Park	Adjacent to 1179 East Longden Ave.	.99
14	Par-3 Golf Course	620 Live Oak Ave.	25.5
		Total Special Park Acres	**37.09**
Joint-Use Parks and Facilities			
15	Arcadia High School	180 Campus Dr.	20.47
16, 17	Baldwin Stocker Elementary School and Park	422 West Lemon Ave.	2.88
18, 19	Camino Grove Elementary School and Park	700 Camino Grove Ave.	5.89
20	Dana Middle School	1401 South 1st Ave.	5.46
21	First Avenue Middle School	301 South 1st Ave.	3.30
22	Foothills Middle School	171 East Sycamore Ave.	6.72
23	Highland Oaks Elementary School	10 Virginia Rd.	3.84
24	Holly Avenue Elementary School	360 West Duarte Rd.	3.98
25, 26	Hugo Reid Elementary School and Park	1000 Hugo Reid Dr.	6.79[2]
27	Hugo Reid Primary School	1153 De Anza Pl.	.98
28	Longley Way Elementary School	2601 Longley Way.	2.56
		Total Joint-Use Park and Facilities Acres	**62.87**

[1] 120 acres represents the gross total of park acreage; only 8.7 acres of parkland is improved, 111.13 acres are unimproved
[2] Per 2007 Parks and Recreation Master Plan, 4.35 acres are dedicated to park use and 2.42 acres are of school recreational facilities

County Parks and Facilities			
29	Los Angeles County Arboretum and Botanical Garden	301 North Baldwin Ave.	127
30	Arcadia Community Regional Park	405 South Santa Anita Ave.	52
31	Peck Road Water Conservation Park	5401 Peck Rd.	120
32	Santa Anita Golf Course	405 South Santa Anita Ave.	147
		Total County Parks and Facilities Acres	**446**
		Gross Total Parks and Recreational Facility Acreage	**680.34**
		Parks and Recreational Facilities Deducted[3]	*545.21*
		Net Total Parks and Recreational Facility Acreage	**135.13**

Source: City of Arcadia 2010

Different public agencies have different methodologies for calculating park acreage standards, but all are typically expressed as a minimum acreage per 1,000 residents. The California Department of Parks and Recreation (CDPR) typically uses 3.0 acres per 1,000 residents as a standard minimum of park space within communities (CDPR 2021). In their 2016 Parks Needs Assessment Report, the Los Angeles County Parks and Recreation Department (LACPRD) calculated an average of 3.3 acres per 1,000 residents within the County of Los Angeles, which has been interpreted as a standard benchmark for the County (Appendix J-4).

As shown in Table 4.12-2 above, the City does not consider the Special Parks, Joint-Use Parks and Facilities, County Parks and Facilities as municipal assets for recreation and does not take credit for these facilities in the calculation of acres of parkland per residents. However, these additional 545 acres of parks and recreation facilities within the City do provide an important asset for the City residents and towards the overall available open space and recreation amenities within the City.

Per the City's General Plan, the City strives to provide a minimum of 2.43 acres of parkland per 1,000 residents (Appendix J-4). The CDPR Community FactFinder tool (2020 Edition) provides metrics and calculations related to parks services within a half-mile radius of any predetermined center point, which provides a more localized level of access determination. Both the City and the County calculate performance on a citywide basis. Table 4.12-3 shows performance under existing conditions provided by the three agencies.

Table 4.12-3 Performance Standards and Methodologies at the State, County, and Local Levels

Title of Agency	Performance Standard (park acres/ 1,000 residents)	Current Performance (park acres/ 1,000 residents)	Existing Population Used for Performance Calculations	Total Park Acreage Used for Performance Calculations	Standard Met Under Existing Conditions?
California Department of Parks and Recreation [4]	3	19.68*	3,824*	75.25*	**Yes**
County of Los Angeles Department of Parks and Recreation	3.3	1.32[1]	56,681[2]	74.80	**No**

[3] Per 2007 Parks and Recreation Master Plan: Area Deducted from Arcadia Parkland Inventory

[4] The CDPR FactFinder tool (2020 Edition) provides metrics and calculations related to parks services within a half-mile radius of any predetermined center point. The center point used for this calculation is the Project site (150 North Santa Anita Avenue). All data shown on this row in Table 4.12-3 was provided by the FactFinder tool.

Table 4.12-3 Performance Standards and Methodologies at the State, County, and Local Levels

Title of Agency	Performance Standard (park acres/ 1,000 residents)	Current Performance (park acres/ 1,000 residents)	Existing Population Used for Performance Calculations	Total Park Acreage Used for Performance Calculations	Standard Met Under Existing Conditions?
City of Arcadia Recreation and Community Services Department	2.43	2.38[3]	56,681[4]	135	No

Source: CDPR 2021, Appendix J-4

Notes:

1 In their response letter (Appendix J-4) the CDPR gave the metric of 1.60 park acres/1,000 residents, however, this has been revised in the table to reflect the updated population of Arcadia.

2 In their response letter (Appendix J-4) the CDPR cited the population of Arcadia as 57,639, however, for the sake of consistency, that number has been updated to reflect the most recent U.S. Census Bureau data. (See section 4.11, Population and Housing for further details.)

3 In their response letter (Appendix J-4), the ARCSD gave the metric of 2.39 park acres per 1000 residents. This has been revised to reflect the updated population.

4 In their response letter (Appendix J-4), the ARCSD cited the total population of Arcadia as 56,364, however, for the sake of consistency, that number has been updated to reflect the most recent U.S. Census Bureau data. (See section 4.11, Population and Housing for further details.)

* Within a half-mile radius of the Project site

Recreation Programs and Activities

The City also offers a wide variety of recreational programs and activities for residents, which have transitioned to become entirely virtual, for the time being. Virtual offerings include soccer drills and yoga classes for kids and engaging seminars for adults and seniors. The City also maintains a website with postings related to volunteer opportunities within the City (ARCSD 2021). Additionally, the Glib Museum of Arcadia Heritage collects and preserves artifacts that celebrate the City's history, providing exhibits and educational programs to encourage community involvement. The Friends of the Arcadia Museum is a 501C3 organization that gives financial support to the Glib Museum and hosts a variety of Museum programs (APL 2021).

Library Services

There are two libraries within the City that service the Project site, a Los Angeles County Public Library (Live Oak) and the Arcadia Public Library (APL). Live Oak is located at 4153 East Live Oak Avenue and is managed by the County, while APL is the only City managed library, located at 20 West Duarte Road. Figure 4.12-4, Existing Library Facilities, identifies Live Oak and APL.

The APL offers a digital library with eBooks and Audiobooks, as well as online resources including databases, newspapers, reading sources, and general reference guides. The library plays host to almost 500,000 annual library visits and contains more than 206,000 items, including books, magazines, compact discs, and DVDs (APL 2021). The Friends of the Arcadia Public Library supports the APL through accepting memberships dues and other tax-deductible donations. There are also a number of events held at the APL for all ages.

The American Library Association no longer sets prescriptive standards for libraries in the United States as communities have different needs. The APL does use benchmarks, however, to help evaluate performance. As provided by the APL, the desired staffing ratio would be 0.90 full-time employees (FTEs) per 1,000 residents served.

Currently, the APL is not meeting the desired service ratio. The APLs current service ratio is approximately 0.47 FTEs per 1,000 residents serve, which is 0.43 below their stated goal (Appendix J-5).

4.12.2 Relevant Plans, Policies, and Ordinances

Federal

National Fire Protection Association

The National Fire Protection Association Standard 1710 calls for response time targets of 4 minutes or less for the arrival of the first arriving engine company at a fire suppression incident and 8 minutes or less for the deployment of a full crew. It also establishes EMS response times of 4 minutes or less for a first responder and 8 minutes or less for a full company. The 2020 Edition also calls for the arrival of a second "properly staffed four-person unit" to arrive within 6 minutes or less (NFPA 2020).

Title 1 Programs

While public education is generally regulated at the state and local levels, the federal government is involved in providing funding for specialized programs (i.e., school meals, Title 1, Special Education, School to Work, Child Development, and Adult Education). However, these are not used for general educational purposes and are not applicable to the discussion herein.

State

AB 1191 "Quimby Act"

California Government Code Section 66477, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fees are based upon the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park, playground, and recreational facilities or the development of public-school grounds.

California Building Code and California Fire Code

The California Building Code is a compilation of building standards, including fire safety standards for new buildings, which are provided in the California Fire Code. The California Fire Code is Chapter 9 of Title 24 of the California Code of Regulations. The California Fire Code provides regulations for safeguarding life and property from fire and explosion hazards derived from the storage, handling, and use of hazardous substances, materials, and devices. The provisions of this code apply to construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenance connected or attached to such building structures throughout the state.

California Occupational Safety and Health Administration

In accordance with California Code of Regulations, Title 8, Section 1270, Fire Prevention, and Section 6773, Fire Protection and Fire Equipment, the California Occupational Safety and Health Administration has established minimum standards for fire suppression and emergency medical services. The standards include, but are not

limited to, guidelines on the handling of highly combustible materials; fire hose size requirements; restrictions on the use of compressed air; requirements for access roads; and guidelines for testing, maintaining, and using all firefighting and emergency medical equipment.

California Constitution Article XIII, Section 35

Section 35 of Article XIII of the California Constitution at subdivision (a)(2) provides "The protection of public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50% sales tax to be expended exclusively on local public safety services. California Government Code Sections 30051–30056 provide rules to implement Proposition 172. Section 30056 mandates that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992–1993 fiscal year. An agency is required to use Proposition 172 to supplement its local funds used on fire protection services, as well as other public safety services. In City of Hayward v. Board of Trustee of California State University (2015) 242 Cal. App. 4th 833, the court found that Section 35 of Article XIII of the California Constitution requires local agencies to provide public safety services, including fire protection, emergency medical services, and police protection services.

California Education Code

The facilities and services of the AUSD are subject to the rules and regulations of the California Education Code and governance of the State Board of Education. Traditionally, the state has passed legislation for the funding of local and public schools and provided the majority of monies to fund education in the state. To assist in providing facilities to serve students generated from new development projects, the state passed Assembly Bill 2926 in 1986, allowing school districts to collect impact fees from developers of new residential, commercial, and industrial developments. development impact fees are also referenced in the 1987 Leroy Greene Lease-Purchase Act, which requires school districts to contribute a matching share of the cost of construction, modernization, or reconstruction of school facilities. Subsequent legislation has modified the fees structure and general guidelines. Section 65996 of the California Government Code designates Section 17620 of the Education Code (the mitigation fees authorized by Senate Bill [SB] 50) and Section 65970 of the Government Code to be the exclusive method for considering and mitigating development impacts on school facilities.

Senate Bill 50 and Proposition 1A

SB 50, the Leroy F. Greene School Facilities Act of 1998, was signed into law on August 27, 1998. It placed a $9.2 billion State bond measure (Proposition 1A), which includes grants for modernization of existing school and construction of new schools, on the ballot for the November 3, 1998, election. Proposition 1A was approved by voters, thereby enabling SB 50 to become fully operative. Under SB 50, a program for funding school facilities largely based on matching funds was created. Its construction grant provides funding on a 50/50 state and local match basis, while its modernization grant provides funding on a 60/40 basis. Districts unable to provide some, or all, of the local match requirement may meet financial hardship provisions and are potentially eligible for additional State funding. In addition, SB 50 allows governing boards of school districts to establish fees to offset costs associated with school facilities made necessary by new construction. Pursuant to California Government Code Section 65995, the payment of these fees by a developer serves to fully mitigate all potential impacts.

Regional and Local

City of Arcadia General Plan

The following goals outlined in the City of Arcadia General Plan Land Use Element are relevant to the Project (City of Arcadia 2010):

Goal LU-1.9: Establish standards to encourage development of land uses that provide public amenities and/or desirable facilities or features, as well as private open space and recreation areas, or other public spaces.

Goal LU-2.2: Emphasize the use of public spaces and design that are oriented toward the pedestrian and use of transit throughout the community.

Goal LU-9.3: Consider creative open space uses such as native landscaping, community gardens, or creation of wildlife habitat along right-of-ways.

Goal LU-6.1: Encourage all new commercial development, through the use of entitlement incentives and/or requirements, to provide public gathering spaces and pedestrian facilities and connections.

Goal LU-6.13: Redesign focal intersections and public areas to create outdoor amenities and improve the pedestrian experience.

Goal LU-9.1.: Ensure that new development does not infringe upon open space areas.

Goal LU-10.3.: Recognize that well-designed public open spaces are vital to the success of Downtown. Work with private developers and landowners to facilitate the construction of such spaces.

The goal, policies, and objective outlined in the General Plan Open Space and Recreation Element relevant to the Project are as follows (City of Arcadia 2010):

Policy PR-1.2: Strive to provide a minimum of 2.43 acres of parkland per 1,000 residents.

Policy PR1-1.2: Maintain and enhance pedestrian, bicycle, and transit linkages to provide better access to parks, recreation, and public spaces and meet the needs of Arcadia residents.

Policy PR-3.5: Require that new private and public developments incorporate trees in a manner that maximizes the utility of trees for passive cooling, screening, carbon sequestration, erosion and runoff control, and integration of landscape design into the overall design of the development.

Policy PR-3.6: Ensure that existing mature trees on private property are considered in the planning and development process and are retained to the greatest extent.

Policy PR-6.2: Require that new development provide adequate mitigation for impacts on area schools as provided in State law.

Policy PR-6.6: Use development impact fees to fund City Library facilities, equipment, and programs that are needed as a result of new development projects.

City of Arcadia Recreation & Parks Master Plan

The City's updated Recreation and Parks Master Plan was adopted August 1, 2017 and provides guidance to City officials regarding the planning, acquisition, development and administration of the City's recreation and parks programming. (City of Arcadia 2017). The stated goals of the updated Master Plan include the following: (1) describe current and future demographic projections and regional context; (2) examine the current conditions of parks, trails and facilities; (3) study and analyze current public demand and needs for parks, recreation and cultural facilities, programs and special events; (4) recommend improvements to existing parks, facilities, and opportunities for joint use; (5) examine and analyze current policy documents; (6) Recommend future uses and proposed amenities at Wilderness Park; and (7) describe costs and priority actions to enable the City to implement the recommendations. The current iteration of the Recreation and Parks Master Plan will act as a reference for staff in implementing best-practices strategies and making informed recommendations for future growth through the year 2037 (City of Arcadia 2017).

Arcadia Municipal Code –Chapter 1, Part 2, California Fire Code

The AFD adopts the California Fire Code with local amendments, as a result of existing local climatic, geological, and topographical conditions, that are necessary to provide sufficient and effective levels of fire safety for the protection of life, health and property. Chapter 1, Part 2, California Fire Code, of the Arcadia Municipal Code authorizes the AFD to regulate building and other construction as it relates to fire prevention.

Arcadia Development Code –Division 5, Section 9105.15.040, Park Facilities Impact Fee.

Council Resolution 6602 (adopted March 14, 2008) established a Park Facilities Impact Fee based on the following amounts: $2.85 per square foot for single-family projects and $3.73 per square foot for multifamily projects. The fees received in compliance with resolution may only be used for the purpose of providing park and recreational facilities to serve the Project, and the amount of fees shall bear a reasonable relationship to the use of the park and recreational facilities by future Project employees and residents.

Measure A

In 2017, the City residents voted to extend Measure A, a parcel tax that directly funds the AUSD, and is expected to generate approximately $77 million before it expires in 2035 (AUSD 2021b).

Conditions of Approval

The AFD is currently conducting analysis of the call response times and staffing resources that may be necessary to keep response times within the City's guidelines. This analysis may result in a AFD Program or Impact Fee that would fund solutions to address the densification and multi-story development within the City and the downtown area specifically. An anticipated solution to be funded by the AFD Program or Impact Fee to help decrease response times and increase emergency response safety would be the implementation of an alerting or pre-emption system that is integrated with the City's traffic light system. If the AFD Program or Impact Fee would be implemented by the City, the proposed Project would be subject to contributing to the fair share payment. The implementation of such a condition of approval would have no environmental impacts, as it would be a technology-based initiative.

4.12.3 Thresholds of Significance

The significance criteria used to evaluate Project impacts to public services and recreation are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to public services and to recreation would occur if the Project would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
   1) Fire protection.
   2) Police protection.
   3) Schools.
   4) Parks.
   5) Other public facilities.

b) 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.

c) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4.12.4 Impacts Analysis

Threshold 4.12a Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

1) Fire protection?

Construction

Construction activities associated with the proposed Project may temporarily (i.e., approximately 26 months during proposed construction) result in a slight increase demand for fire protection and emergency medical services. Construction activities may involve the operation of construction equipment and machinery, storage, handling, and disposal of combustible materials, and the use of flammable or toxic materials.

To comply with California Department of Industrial Relations, Division of Occupational Safety and Health and Fire and Building Code requirements, construction managers and personnel would be trained in fire prevention and emergency response, and fire suppression equipment specific to construction would be maintained on site. Project construction would comply with all applicable codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. City and state regulations and code requirements would, in part, require personnel to be trained in fire prevention and emergency response, maintenance for fire suppression equipment, and implementation of proper procedures for

storage and handling of flammable materials. Thus, compliance with regulatory requirements would reduce the potential for construction activities to expose people to the risk of fire explosion related to hazardous materials.

Section 21806 of the California Vehicle Code allows drivers of emergency vehicles to have a variety of options for avoiding traffic, such as using sirens to clear a path of travel and driving in the lanes of opposing traffic. Based on these considerations, construction of the proposed Project would not be considered a high-risk activity, and the AFD is equipped and prepared to deal with construction-related traffic and fires, should they occur. Due to compliance with applicable codes and fire safety standards, Project construction would not adversely impact firefighting and emergency services in their ability to maintain acceptable service ratios, response times or other performance objectives for fire protection. Therefore, impacts are less than significant, and no mitigation is required.

Operation

AFD currently serves the Project site and the surrounding area. Each additional development that provides net new square footage creates a greater demand on existing resources. The increased use of the Project site resulting from the Project would be expected to increase the frequency of emergency response calls relative to existing conditions. However, for the reasons enumerated below, the proposed increase in development intensity at the Project site would not result in substantial adverse physical impacts associated with the need for new or expanded fire protection facilities.

The need for new or expanded public services (such as fire protection facilities/structures/buildings) is associated with a substantial population increase, a substantial increase in developed structures, and/or a substantial increase in fire activity, such as wildfire hazards. As described in Section 4.11, Population and Housing, Project employment and new residential uses would result in a net loss of approximately 20 employees (as compared to existing conditions)[5] and 909 new residents[6] on the Project site. The proposed Project would support SCAG's goals and strategies for growth in the region as described in Section 4.11. Population and Housing of the draft EIR.

The Project site is currently served by three existing fire stations (Stations 105, 106, and 107). The AFD stated that as the City continues to develop high density projects, call volume for fire services will continue to increase, which will result in longer response times. With the addition of the proposed Project, services would be incrementally impacted. However, the AFD has indicated that the proposed Project would not directly result in the need for new facilities and/or physically altered facilities in order to maintain acceptable service ratios, response times, or other performance objectives of the AFD. No expansion of fire department facilities is currently contemplated or required to serve the proposed Project, and no new fire stations are required to serve the proposed Project (Appendix J-1). Therefore, impacts would be less than significant and no mitigation is required.

Furthermore, the proposed Project would be designed and constructed in accordance with all applicable provisions of the fire code, which includes requirements for adequate fire flows, width of emergency access routes, turning radii, automatic sprinkler systems, fire alarms, and floor to sky height limits along emergency access routes.

[5] In addition to anticipated employment numbers provided by the Applicant to support the residential component, this estimate is based on the assumption that 750 square feet of the office space would be classified as other retail and services (as described in Section 4.11, Population and Housing), which represents an employee generation factor of 424 square feet per employee. Additionally, 9,281 square feet of "other retail and services" is considered for the "work" portion of the proposed live/work units. Although the proposed Project would result in approximately 30 new employees, the existing employment capacity of approximately 50 employees from the existing office and commercial buildings to be demolished would result in a net loss of 20 jobs on site.

[6] This estimated number of new residents conservatively assumes full occupancy of all units. 319 new housing units x 2.85 persons per household = 909 residents accommodate by the proposed Project

Compliance with the fire code standards (including those listed above and in Section 4.12.2, Relevant Plans, Policies, and Ordinances) would be ensured through the plan check process and fire review prior to the issuance of building permits for the Project. More specifically, the proposed Project would be designed to include the following fire protection features, which would help prevent fire hazards: appropriate roadway access for fire lines, AFD connections and fire sprinkler system control valves, and a fire alarm system. The building would also be equipped with fire pumps and alarms consisting of smoke detection, voice alarm capability, and visual alarms. These fire safety features and compliance with fire code standards would reduce the potential demand for fire services by decreasing the likelihood and/or severity of a fire emergency at the site.

The operational phase of the proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Hazardous materials would be limited to use of commercially available cleaning products, landscaping chemicals and fertilizers, and various other commercially available substances typically used at office and residential establishments. Although the Project would introduce commercially available potentially hazardous materials, such as cleaning supplies and landscaping products, to future residents, employees, and visitors of the Project site, the use of these substances would be subject to applicable federal, state, and local health and safety laws and regulations that are intended to minimize health risk to the public associated with hazardous materials. Refer to Section 4.7, Hazards and Hazardous Materials, for a discussion of hazardous materials that are potentially associated with the Project. The use of commercially available hazardous materials would not significantly impact AFD services.

According to the Engineering Due Diligence Report (Appendix G of this Draft EIR) there are three mains located on the Project site available for domestic water and/or fire services connections. The specific location of new connections required for Project implementation and pipe sizing would be based upon the City's requirements and subject to City approval. The system must provide adequate water supply for operation of the building's domestic requirements, automatic sprinkler systems and fire hydrants. Fire flows for the proposed development must be based on the requirements listed in the California Fire Code that is in effect at the time of plan submission, as amended by the City.

The Project site is located within an urbanized area and is not located within a Very High Fire Hazard Severity Zone (CAL FIRE 2021). The Project is surrounded by roadways and developed properties on all sides and is entirely developed, so it is not susceptible to exacerbating wildfire risks. Further, the Project site does not contain extensive amounts of vegetation or wildland fuel. Therefore, the Project would not result in increased potential for wildland fire hazards that could affect AFD services.

Given the reasons described above, the proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities. Impacts would be less than significant and no mitigation is required.

Threshold 4.12a Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

2) Police protection?

Construction

There is the potential for Project construction activities to create an increase in demand for police protection services, as construction sites can be sources of attractive nuisances, can provide hazards, and can invite theft and vandalism when not properly secured. This could result in an increase in the demand for police protection services. During construction, the Project Applicant/developer or its construction contractor would implement temporary security features including security fencing, lighting, and locked entry. These features would reduce the need for police protection services during the Project's approximately 26-month construction phase. Potential short-term construction impacts to police services would not result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, and impacts would be less than significant.

Operation

As with fire protection services, the increased use of the Project site attributable to the proposed Project would be expected to increase the frequency of emergency and non-emergency calls to the APD. While the Project site currently places some demand on the APD due to the occupied commercial and office buildings, the proposed Project would increase demands relative to existing conditions. The APD has stated that the existing police station facilities are sufficient to provide service to the proposed Project and that the development of the proposed Project would not result in the need for new facilities and/or physically altered facilities to maintain acceptable service ratios, response times, or other performance objectives (Appendix J-2).

The Project site is currently served by the APD at 250 West Huntington Drive. No expansion of this facility is currently contemplated or required for the proposed Project (Appendix J-2). Payment of development fees by the Project Applicant/developer would be used to offset the costs of increased personnel or equipment that could be required to maintain acceptable service ratios, response times, and other performance objectives. The proposed Project would incorporate operational practices and design elements to increase safety and to reduce the potential for crime to occur, including constructing buildings equipped with alarm systems and access controls, and clear visibility of public spaces and pedestrian corridors. Signage and lighting would be used to facilitate wayfinding and safe pedestrian movement throughout the site and within the proposed buildings.

The APD has reported the current APD established performance standards are being achieved and the existing police station is sufficient to provide service to the proposed Project (Appendix J-2). For these reasons, the proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities and potential impacts would be less than significant.

Threshold 4.12a **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:**

3) Schools?

The proposed Project's approximately 909 residents would generate students that would attend AUSD schools. Using the student generation rates from AUSD, at 319 dwelling units, the Project could generate approximately 137 new students (Appendix J-3). [7]

Table 4.12-4 Public Schools Projected 2021 Enrollment

School	Projected Enrollment (2021)	Pre-Project Enrollment Below Capacity?	Post-Project Enrollment Below Capacity?
Holly Avenue Elementary School	727	Yes	Yes
First Avenue Middle School	680	Yes	Yes
Arcadia High School	3,010	Yes	Yes

Sources: Appendix J-3

Table 4.12-4 shows the projected 2021 enrollment for each AUSD school serving the Project site. Communication with AUSD indicates the existing schools are sufficient to support the proposed Project, and that all schools are below their capacity, even when including the projected increases due to the Project (Appendix J-3). Additionally, as previously discussed in Section 4.12.2, Education Code Section 17620 allows school districts to assess fees on new residential and commercial construction within their respective boundaries. Pursuant to California Government Code Section 65995, the payment of these fees by a developer serves to fully mitigate all potential project impacts on school facilities from implementation of a project to less-than-significant levels. Sections 65996(a) and (b) state that such fees collected by school districts provide full and complete school facilities mitigation under CEQA. These fees can be collected without special city or county approval, to fund the construction of school facilities necessitated by the impact of residential and commercial development activity.

The Leroy F. Greene School Facilities Act of 1998 (SB 50) sets a maximum level of fees a developer may be required to pay to mitigate a project's impacts on school facilities. The maximum fees authorized under SB 50 apply to zone changes, general plan amendments, zoning permits and subdivisions. Pursuant to SB 50, the applicant would be required to pay development fees for schools to AUSD prior to the issuance of the Project's building permit. The provisions of SB 50 are deemed to provide full and complete mitigation of school facilities impacts, notwithstanding any contrary provisions in CEQA or other state or local law. Therefore, with the payment of the applicable school fees, the operation of the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts to maintain acceptable service ratios, or other performance objectives for schools. As such, impacts on schools would be less than significant and no mitigation is required.

[7] The estimated increase in enrollment was provided by the AUSD. AUSD uses a "student yield rate" for each new dwelling unit being built. As of 2018, this rate is 0.430 per new dwelling unit. As such, the Project, containing 319 new dwelling units, would be projected to increase enrollment by approximately 137 students (Appendix J-3).

Threshold 4.12a **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:**

4) Parks?

The Project would include 909 new residents. At least a portion of these residents are anticipated to patronize the various public parks and recreation facilities located in proximity to the Project site. The Project would redevelop the space between the existing office building and the proposed residential building with a new paseo and outdoor plaza. This community open space area would include on-site wayfinding features, minimized vehicular access, flexible pedestrian space, seating, trees and enhanced plantings, lighting, bicycle parking. The proposed Project would provide approximately 23,957 square feet of private open space and 17,398 square feet of public open space, which exceeds the City's requirement for 31,900 square feet of open space.

As previously discussed, and shown in Table 4.12-2 above, different agencies utilize different methodologies and arrive at different standards and metrics regarding requirements for park acreage and service ratios.

As previously discussed in Section 4.12.1, the CDPR minimum standard of park space is approximately 3 acres per 1,000 residents. The Los Angeles County average is 3.3 acres per 1,000 residents, and the City's strives to provide a minimum of 2.43 acres per 1,000 residents. As shown in table 4.12-2, the City and the County currently differ on where the City stands regarding the acreage per 1,000 resident ratio because they each use different methodologies for determining the available park acreage. According to the LACDPR, under existing conditions the City currently provides 1.32 acres of parkland per 1,000 residents (Appendix J-4), and according to the ARCSD, the City provides 2.38 acres per 1,000 residents (Appendix J-4). According to both agencies, the City is not currently meeting the acre per resident goal of 3.3 acres (County) and 2.43 acres (City) per 1,000 residents, respectively. When the projected population increase related to the Project is incorporated, the City would continue to underperform when compared to the standards provided by both the City and the County.

The state utilizes a slightly different model for calculating park service ratios. As previously discussed, the CDPR FactFinder tool calculates parks acreage per 1,000 residents within a half-mile radius of a given center point (i.e. 150 North Santa Anita Avenue). According the CDPR, under existing conditions, the Project site is in a location with an abundance of park space (19.68 acres per 1,000 residents), which significantly exceeds the minimum standards provided by the CDPR, LACDPR and ARCSD. Under projected Project conditions, the City would continue to exceed the minimum acreage standards by at least a factor of five (CDPR 2021). Additionally, as shown in Table 4.12-2 above, the City does not consider the Special Parks, Joint-Use Parks and Facilities, County Parks and Facilities as municipal assets for recreation and does not take credit for these facilities in the calculation of acres of parkland per residents. However, these additional 545 acres of parks and recreation facilities within the City do provide an important asset for the City residents and towards the overall available open space and recreation amenities within the City.

Nevertheless, as discussed above, the City of Arcadia does not currently provide the 2.43 acres per 1,000 residents, as required by the City's General Plan. In order to address the additional demand on recreational facilities within the City, the proposed Project would be subject to the City's Council Resolution 6602, Park Facilities Impact Fee (Section 9105.15.040 of the City's Development Code), which requires new development projects to pay impact fees, which would support park improvements as well as fund capital costs for new and existing recreational

infrastructure. Pursuant to the Park Facilities Impact Fee resolution, the Project Applicant/developer would pay its fair share of impact fees based on the fee category and adopted impact fee rates. While the ARCSD indicates that new park facilities would be required under both existing and Project conditions to meet the City's performance standards, the mitigation fees paid to the City as part of the proposed Project would fairly compensate for the Project associated increase in demand or use of park facilities. Fees for the proposed Project are currently set at $3.73 per square foot, which applies to all multifamily housing developments (City of Arcadia 2021). Further, the Project would include common open space areas, including an outdoor pool area, fire pit, barbeque dining area, game lounge, and a lawn/grassy area, as well as an outdoor passive court. These on-site amenities would provide an alternative to off-site public parks and recreational facilities, allowing the Project's residents to recreate on the Project site while incrementally reducing impacts to off-site public parks and recreational facilities. Therefore, with required payment of fees as mandated by the City's Development Code, impacts associated with the need for new or expanded park facilities would be less than significant and no mitigation is required.

Threshold 4.12a Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

5) Other public facilities (libraries)?

Other public facilities and services provided within the City include library services. Library services are provided at the APL located at 20 West Duarte Road, approximately 0.9-mile south of the Project site. The APL indicated that although library staffing is currently not meeting their goal of a 0.9-ratio of staff per 1,000 residents, this existing staffing deficit would not result in the need to provide any new library facilities and/or physically altered facilities to maintain performance objectives of the Arcadia Public Library (Appendix J-5).

Another library located within the City boundaries is the Live Oak Library, which is managed by the County and located 2.8 miles south of the Project site at the far southern end of Arcadia. The County levies a developer fee for new residential projects within the unincorporated County and levies a special tax on parcels within 10 incorporated cities, excluding Arcadia. As such, the proposed Project is outside of the Live Oak Library service area and is not subject to any fees. The County's library is 2.8 miles away from the Project site and is not anticipated to be utilized frequently by proposed Project residents, as the APL is located almost two miles closer to the site.

The proposed Project is a mixed-use development project that would contribute to the tax revenues for the City, thereby contributing to potential funding sources for library services. As stated above, the APL has indicated that no new library facilities are required to serve the proposed Project. Therefore, impacts to other public facilities in the area resulting from the proposed Project would be less than significant and no mitigation is required.

Threshold 4.12b Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The Project would include 909 new residents. As previously discussed, the ARCSD is responsible for developed park land that provides a wide variety of attractions and amenities. The City also offers a wide variety of recreational programs and activities for residents, which have transitioned to become entirely virtual, for the time being. Virtual offerings include soccer drills and yoga classes for kids and seminars for adults and seniors. At least a portion of

the potential future residents are anticipated to patronize the various public parks and recreation facilities located in proximity to the Project site. Pursuant to the Section 9105.15.040 of the Development Code, the Project Applicant/developer would pay its fair share of impact fees based on the fee category and adopted fee rates, currently set at $3.73 per square foot for multifamily developments. While the ARCSD indicates that new park facilities would be required under both existing and Project conditions to meet the City's performance standards, the mitigation fees paid to the City as part of the proposed Project would fairly compensate for the Project associated increase in demand or use of park facilities. Fees for the proposed Project are currently set at $3.73 per square foot, which applies to all multifamily housing developments (City of Arcadia 2021, Appendix J-4). Further, the Project would include common open space areas, including an outdoor pool area, fire pit, barbeque dining area, game lounge, and a lawn/grassy area, as well as an outdoor passive court. These on-site amenities would provide an alternative to off-site public parks and recreational facilities, allowing the Project's residents to recreate on the Project site while incrementally reducing impacts to off-site public parks and recreational facilities.

As such, with payment of the required development impact fees related to parks and recreation in combination with provision of on-site recreational facilities, the Project would meet the anticipated demand for neighborhood and regional parks or other recreational facilities. Project residents and, to a certain extent, the public utilizing the improved pedestrian corridor and/or café, would have access to adequate on-site recreational facilities, which would offset increased use of existing parks and recreational facilities in the City. Therefore, implementation of the Project would not result in a substantial increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur. Impacts to neighborhood and regional parks would be less than significant and no mitigation is required.

Threshold 4.12c Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

The performance standard for different responsible park agencies ranges between 2.43 to 3.30 acres per 1,000 residents; as previously discussed in Threshold 4.12a (Parks), the City is currently underperforming on a City-wide basis. However, within the immediate Project area, there is an abundance of park space under both existing and projected Project conditions (see Table 4.12-2). The Project would also include common open space areas, as well as landscaped areas around the Project site, including an outdoor pool area, fire pit, barbeque dining area, game lounge, and a lawn/grassy area, as well as an outdoor passive court. The construction of these common open space areas and associated recreational amenities is analyzed under this EIR. As demonstrated throughout this Draft EIR, any environmental impacts as a result of Project implementation would be reduced to a less-than-significant level through the incorporation of the mitigation measures described throughout. Additionally, the Project would be subject to the Park Facilities Impact Fee resolution, which requires new development projects to pay impact fees, which would support park improvements as well as fund capital costs for other new and existing infrastructures. Pursuant to the Impact Fee, the Applicant/developer would pay its fair share of impact fees based on the fee category and adopted fee rates, currently set at $3.73 per square foot. As such, Project implementation would not require the construction or expansion of recreational facilities, and impacts would be less than significant.

4.12.5 Cumulative Impacts Analysis

As defined in the State CEQA Guidelines Section 15130, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, present, and probable future projects within the cumulative impact area for population, housing, and employment. The cumulative study area used to assess potential cumulative population and housing impacts includes the City of Arcadia, AFD and APD service areas, and

the AUSD. Cumulative impacts on public services including fire and police protection, parks, and schools would result when projects collectively increase demand on services such that additional facilities or services must be constructed or provided. Cumulative projects would likely result in an incremental increase in the demand for fire protection, police protection, parks, schools (for cumulative projects that have a residential component), and other public services. Because the City is nearly built out, the proposed Project and all cumulative projects are located in areas currently served by AFD, APD, and the AUSD.

Fire Protection

A cumulatively significant impact related to fire protection and emergency services could occur as a result of population growth and development within the AFD service area due to the Project and cumulative projects. The Project, along with cumulative projects, could result in increased calls and demands for fire protection and emergency services. The AFD stated that as the City continues to see higher density projects, call volume will continue to see an increase, which will result in longer response times. Additionally, response times would inevitably increase due to the increased burden of access associated with responding to incidents in multi-story developments—such as the proposed Project—including the need to traverse up and/or across through stairwells, elevators, and/or use of the aerial ladder. In addition, in downtown Arcadia there are a number of new mixed-use buildings of similar density to the proposed Project being contemplated.

As such, the AFD is currently conducting analysis of the call response times and staffing resources that may be necessary to keep response times within the City's guidelines. This analysis may result in a AFD Program or Impact Fee and may result in a fair share contribution from this Project, as described under “Conditions of Approval” above, as well as subsequent projects in the downtown area. This AFD Program or Impact Fee would fund solutions to address the densification and multi-story development within the City and the downtown area specifically. An anticipated solution to be funded by the AFD Program or Impact Fee to help decrease response times and increase emergency response safety would be the implementation of an alerting or pre-emption system that is integrated with the City's traffic light system. An example of such a system is HAAS ALERT. Such a system would not result in physical impacts to the environment, as such technologies generally consist of a software program that would be mounted to the existing traffic lighting system on existing streets. The AFD is currently working on a study that will apply to the downtown area.

The AFD has not identified the need for any new or altered fire stations or governmental facilities that would have the potential to result in substantial adverse physical impacts, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services. Therefore, potential cumulative impacts would be less than significant, and no mitigation is required.

Additionally, both the Project and cumulative projects would be subject to the requirements of the fire code standards (including those listed above and in Section 4.12.2). This would be ensured through the plan check process and fire review prior to the issuance of building permits for the Project and cumulative projects. Furthermore, the Project and cumulative projects would coordinate with the Arcadia Fire Department Fire Prevention Division to ensure fire flow requirements are met and any required upgrades to the existing water distribution system are addressed for each individual project. As determined by AFD, existing fire protection facilities are sufficient to meet the proposed Project (Appendix J-1). Based on the above considerations, the Project’s contribution to cumulative impacts to fire protection services would be less than significant.

Police Protection

A cumulatively significant impact related to police protection services could occur as a result of population growth within the APD service area due to the Project and cumulative projects. The APD has stated that the existing police station facilities are sufficient to provide service to the proposed Project and that the development of the proposed Project would not result in the need for new facilities and/or physically altered facilities to maintain acceptable service ratios, response times, or other performance objectives (Appendix J-2). As with the proposed Project, the applicants of the cumulative projects would be required to incorporate appropriate safety features into the design and construction of their respective projects to minimize the potential for crime and to maximize safety, ultimately minimizing the need for police protection services. In addition, the cumulative projects would contribute to funding police protection services or new facilities through development impact fees. Based on the above considerations, the Project's contribution to cumulative impacts to police protection services would be less than significant.

Schools

The increase in student population as a result of the proposed Project and cumulative residential projects could require the construction or expansion of school facilities. The proposed Project itself, as determined by AUSD would not result in significant impacts on service demand (Appendix J-3). While most cumulative projects require discretionary actions, they would incrementally increase the need for school facilities. However, as discussed above in Section 4.12.2, Education Code Section 17620 allows school districts to assess fees on new residential and commercial construction within their respective boundaries. Pursuant to California Government Code Section 65995, the payment of these fees by a developer serves to fully mitigate all potential project impacts on school facilities from implementation of a project to less-than-significant levels. Sections 65996(a) and (b) state that such fees collected by school districts provide full and complete school facilities mitigation under CEQA. Therefore, the increase in the demand for school facilities and services due to cumulative development would be less than significant level by the payment of development impact fees.

Parks and Recreational Facilities

Buildout of the Project along with cumulative projects would increase use of existing local and regional parks and could result in the accelerated deterioration of park and recreation facilities. As discussed, the Project itself would result in less than significant impacts to park and recreation facilities. The deterioration that would occur to local parks and recreational facilities from regional population growth may be offset with funding from new development through Park Facilities Impact Fees. Cumulative projects would be required to demonstrate compliance with CEQA prior to Project approval, and existing federal, state, and local regulations related to parks and recreational facilities would mitigate potential adverse impacts to the environment that may result from the expansion of such facilities. Therefore, the Project would not result in a cumulatively considerable contribution to a significant cumulative impact to park facilities.

Other Public Facilities (Libraries)

Future cumulative development would generate new tax revenues and would be subject to the City's development impact fees, which act as funding sources for City libraries. The proposed Project itself, as determined by the APL, would not result in new physical facilities (Appendix J-6). The Project and cumulative projects would be required to fund their fair share of an established fee program designed to alleviate the cumulative impact. These revenues would help offset the increase in demand for library services as a result of the Project. Therefore, cumulative impacts to library services would be less than significant.

4.12.6 Mitigation Measures

No mitigation measures are required.

4.12.7 Level of Significance After Mitigation

Impacts would be less than significant.

4.12.8 References

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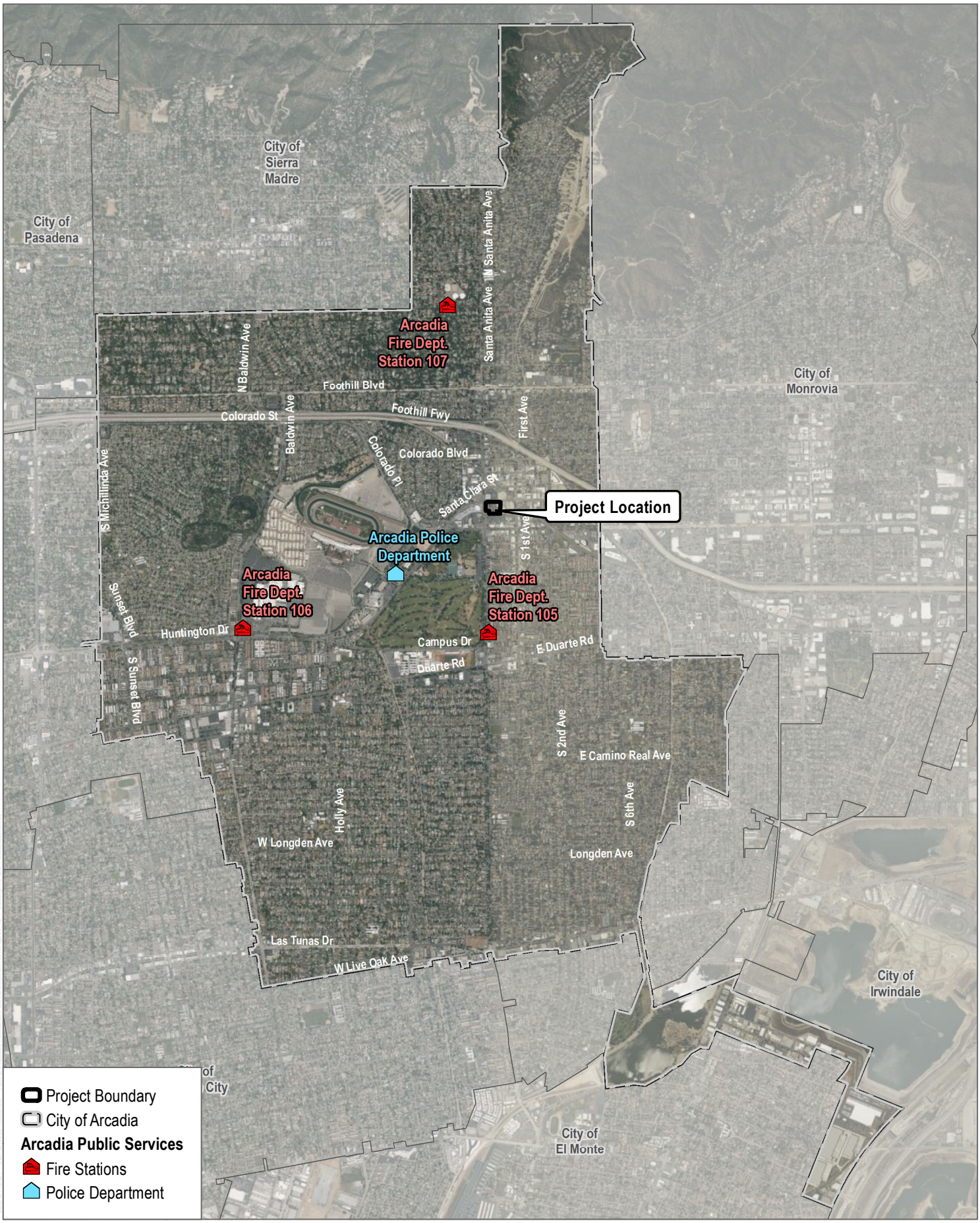

SOURCE: City of Arcadia 2021, Bing Maps 2021

DUDEK

FIGURE 4.12-1

Existing Fire and Police Stations

Arcadia Mixed-Use Project

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SOURCE: City of Arcadia 2021, Bing Maps 2021

DUDEK

0 1,800 3,600 Feet

FIGURE 4.12-2

Existing School Facilities

Arcadia Mixed-Use Project

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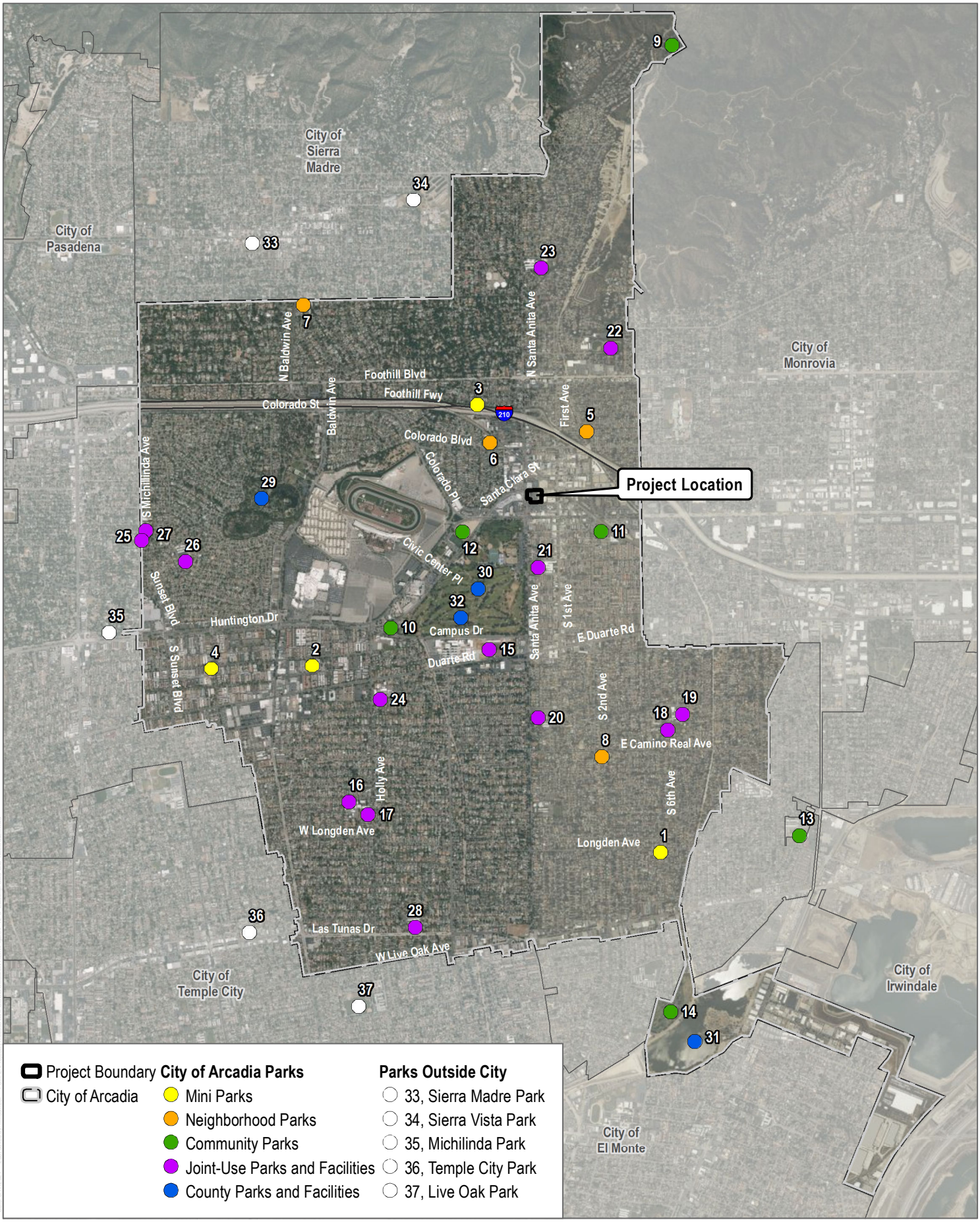

SOURCE: City of Arcadia 2021, Bing Maps 2021

DUDEK

0 1,800 3,600 Feet

FIGURE 4.12-3

Existing Parks and Recreation Facilities

Arcadia Mixed-Use Project

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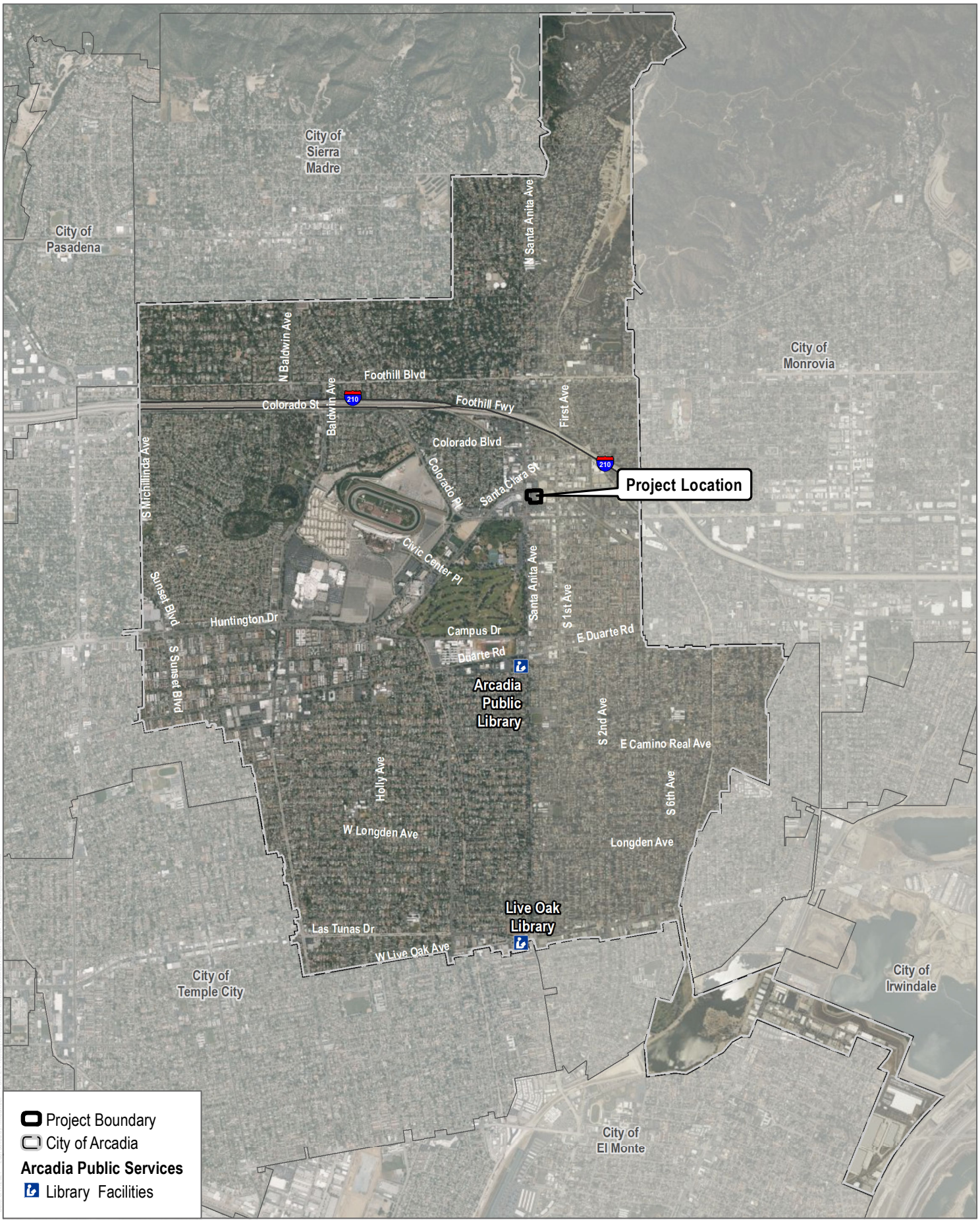

SOURCE: City of Arcadia 2021, Bing Maps 2021

DUDEK

0 1,800 3,600 Feet

FIGURE 4.12-4

Existing Library Facilities

Arcadia Mixed-Use Project

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4.13 Transportation

This section describes the existing transportation conditions of the Project site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, cumulative impacts, and identifies mitigation measures related to implementation of the proposed Project. The potential impacts of the project are analyzed based on the California Environmental Quality Act (CEQA) Guidelines Section 15064.3(b), which focuses on newly adopted criteria (vehicle miles traveled [VMT]) for determining the significance of transportation impacts. Pursuant to Senate Bill (SB) 743, the focus of transportation analysis changed from level of service (LOS) or vehicle delay to VMT. The related updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018. This new methodology was required to be used statewide beginning July 1, 2020.

The following analysis is based on the following sources, which are found in Appendix K-1 and K-2 of this Draft EIR:

Appendix K-1 San Gabriel Valley Council of Governments Vehicle Miles Traveled Evaluation Tool Report

Appendix K-2 Transportation Technical Memorandum prepared by Dudek

Other sources consulted are listed in Section 4.13.8, References. Comments received in response to the Notice of Preparation (NOP) are summarized in Table 1, Notice of Preparation and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft Environmental Impact Report (EIR). A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR.

4.13.1 Existing Conditions

This section provides a summary of the existing street network, including the major roadways serving the site, the existing transit service, and bicycle and pedestrian facilities in the study area. Figure 4.13-1, Project Site Location and Study Area provides a regional location map and the transportation study area as analyzed in the Transportation Technical Memorandum (Appendix K-2).

Existing Street Network

Regional access to the Project site is provided by Interstate [I-] 210 (Foothill Freeway) approximately 0.35 miles north of the site. The local street system serving the site includes Huntington Drive, Santa Anita Avenue, Santa Clara Street, 1st Avenue, and Wheeler Drive. Characteristics of the existing local roads within the study area are described below.

Huntington Drive is an east-west oriented roadway south of the Project site. In the Arcadia General Plan Circulation and Infrastructure Element (City of Arcadia 2010), Huntington Drive is classified as a major arterial west of Santa Clara Street and as a primary arterial east of Santa Clara Street. Huntington Drive is also a designated truck route, as well as a principal travel corridor and a planned primary transit corridor within the City. The number of through travel lanes in each direction on Huntington Drive varies from four through lanes west of Holly Avenue, to three through lanes between Holly Avenue and Santa Clara Street, to two through lanes east of Santa Clara Street. Exclusive left-turn lanes are provided on Huntington Drive at major intersections. On-street parking is generally not provided along Huntington Drive in the immediate project vicinity. The speed limit on Huntington Drive varies from 30 MPH east of Santa Clara Street to 45 MPH west of Santa Clara Street.

Santa Anita Avenue is a north-south oriented roadway and borders the Project site on the west. Direct access to the site will be provided from an existing driveway on Santa Anita Avenue. In the Arcadia General Plan Circulation and Infrastructure Element (City of Arcadia 2010), Santa Anita Avenue is classified as a primary arterial from the southern City boundary to Foothill Boulevard and as an enhanced corridor north of Foothill Boulevard. South of Foothill Boulevard, Santa Anita Avenue is also a designated truck route and a principal travel corridor. North of Foothill Boulevard, Santa Anita Avenue is designated as a secondary travel corridor. Santa Anita Avenue is also planned to serve as a primary transit corridor south of the I-210 Freeway and a secondary transit corridor north of the I-210 Freeway. Two through travel lanes are provided in each direction on Santa Anita Avenue south of Foothill Boulevard while one through travel lane is provided in each direction on Santa Anita Avenue north of Foothill Boulevard. Exclusive left-turn lanes are provided on Santa Anita Avenue at major intersections. The speed limit on Santa Anita Avenue varies from 35 MPH north of Foothill Boulevard to 40 MPH south of Foothill Boulevard.

Santa Clara Avenue is an east-west oriented roadway and borders the Project site on the north. Direct access to the site will be provided from an existing driveway on Santa Clara Avenue. In the Arcadia General Plan Circulation and Infrastructure Element (City of Arcadia 2010), Santa Clara Avenue is classified as a secondary arterial between Huntington Drive and Santa Anita Avenue and an enhanced collector between Santa Anita Avenue and the City limits. One to two through travel lanes are provided in each direction on Santa Clara Avenue, with a two-way left-turn lane (TWLTL) provided between Huntington Drive and 1st Avenue, and left-turn pockets provided at most major intersections and driveways. Parking is restricted along both sides of the street, between Huntington Drive and 1st Avenue and unrestricted between 1st Avenue and the City limits. An existing Class II bike lane (on-street striped lane) is provided on Santa Clara Street along the project frontage. Santa Clara Avenue has a posted speed limit of 30 MPH within the vicinity of the Project site.

1st Avenue is a north-south roadway east of the Project site. In the Arcadia General Plan Circulation and Infrastructure Element (City of Arcadia 2010), 1st Avenue is classified as a collector, as well as a primary transit corridor between Huntington Drive and Santa Clara Street. One through travel lane is provided in each direction on 1st Avenue, with a TWLTL provided between Wheeler Avenue and Huntington Drive, and left-turn pockets provided at most major intersections and driveways. Parking is provided along both sides of the street, where designated. 1st Avenue has a posted speed limit of 25 MPH within the vicinity of the Project site.

Wheeler Avenue is an east-west roadway adjacent to the southern boundary of the Project site. Direct access to the site will be provided from an existing driveway on Wheeler Avenue. In the Arcadia General Plan Circulation and Infrastructure Element (City of Arcadia 2010), Wheeler Drive is designated as a local road, and extends from Santa Anita Avenue to the west and Indiana Street to the east. Off-street parking is not provided between Santa Anita Avenue and 1st Avenue. Wheeler Avenue does not have a posted speed.

Existing Public Transit Services

Public transit in the project vicinity is provided by the Los Angeles County Metropolitan Transportation Authority (Metro), Foothill Transit, and Arcadia Transit. Figure 4.13-2, Existing Transit Facilities, shows the various bus routes and Metro L (previously Gold line) Line that provide service in the study area. The Arcadia Metro L Line Station is located approximately 400 feet north of the Project site at the northwest corner of 1st Avenue and Santa Clara Street. Bus stops are also located along 1st Avenue, Huntington Drive, and Santa Anita Avenue surrounding the Project site. A brief description of each service provider is provided below.

Los Angeles County Metropolitan Transportation Authority (Metro)

Metro operates local bus, express bus, and rail services throughout Los Angeles County, including 165 bus routes and six rail lines. Metro currently operates two local Metro bus transit routes in the vicinity of the Project site, providing service between downtown Los Angeles and Arcadia (Metro 2021a, 2021b). The routes have peak frequencies of between 10 minutes (within Downtown Los Angeles) and 40 minutes in Arcadia. Route 79 operates in conjunction with Route 78 within the downtown Los Angeles area, upon which the route splits into two separate lines in the City of Alhambra, with Route 79 traveling along Huntington Drive. The nearest bus stops to the Project site are located at the intersection of Huntington Drive and Santa Anita Avenue, and along Santa Clara Street in front of the Metro Station Parking garage. Route 79 serves Arcadia, Alhambra, El Sereno, and downtown Los Angeles. Additionally, Route 287 operates along Santa Anita Avenue with the nearest bust stop provided at the same locations noted above, serving the cities of El Monte, Arcadia, South El Monte, Rosemead, and Montebello. Route 287 provides an average peak weekday service frequency of 40 minutes.

The Metro L Line is a rail line that provides service between East Los Angeles and Azusa and has a weekday peak service frequency of five minutes.

Foothill Transit

Foothill Transit operates 39 bus lines in 22 cities, covering an area that stretches from downtown Los Angeles to southwest San Bernardino County (Foothill Transit 2021). Within the study area, Line 187 serves Pasadena, Arcadia, Duarte, and Azusa. This bus line provides an average peak weekday service frequency of 20 minutes. The nearest bus stop to the Project site is located at Huntington Drive and Santa Anita Avenue.

Arcadia Transit

Arcadia Transit provides fixed-route public transit service with three lines (e.g., Green, Blue and Red Lines). The Green and Red Lines operate in the vicinity of the Project site. The Green Line connects the Arcadia Metro L Line Station with Santa Anita Park, City Hall, Methodist Hospital, Westfield Santa Anita Mall, and the Los Angeles County Arboretum (City of Arcadia 2021a). The Red Line runs north-south along 1st Avenue and 6th Avenue connecting communities in the east of Arcadia to many local activity centers and the Arcadia Metro L Line Station. These lines provide headways of generally one to two buses during the weekday morning peak hour and two to three buses during the weekday afternoon peak hour.

Arcadia Dial-A-Ride is a demand-response service providing curb-to-curb transportation to seniors and persons with disabilities to and from any destination within the Arcadia city boundaries, including all shopping areas, commercial centers, the Methodist Hospital, medical centers, the civic center, parks, the racetrack, libraries, etc. The service is provided based on space availability and is open Monday through Friday from 7:00 AM to 9:00 PM and Saturday/Sunday from 7:00 AM to 7:00 PM. Trip requests can be made the same day or up to seven days in advance.

Existing Pedestrian and Bicycle Facilities

Sidewalks are generally present throughout the study area, and marked crosswalks are provided at all major arterial intersections. Pedestrian access to the Project is provided along all the roadways surrounding the Project site.

Bicycle facilities in the City are limited, however the City, on an ongoing basis, looks for funding opportunities to improve the City's transportation system (City of Arcadia 2021b). There is an existing Class II bike lane (on-street

striped lane) on Santa Clara Street along the Project frontage. The City also recently added 3.6 miles of Class II bike lanes on Huntington Drive, and approximately 2 miles of Class II bike lanes on 1st Avenue/Highland Oak Drive, between Duarte Road and Orange Grove Avenue. The bike lanes were funded through a grant through the State's Active Transportation Program (StreetsBlog LA 2020). Bike lockers and parking are also provided at the Arcadia Metro L Line Station.

4.13.2 Relevant Plans, Policies, and Ordinances

Federal

There are no applicable federal regulations related to transportation that would apply to the proposed Project.

State

Senate Bill 743

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743, which became effective on January 1, 2014. The purpose of SB 743 is to streamline the review under the California Environmental Quality Act (CEQA) process for several categories of development projects including the development of infill projects in transit priority areas and to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions. SB 743 adds Chapter 2.7, Modernization of Transportation Analysis for Transit Oriented Infill Projects, to the CEQA Statute (Public Resources Code [PRC] Section 21099). Section 21099(d)(1) provides that aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. In addition, SB 743 mandates that alternative metric(s) for determining impacts relative to transportation shall be developed to replace the use of level of service (LOS) in CEQA documents.

In the past, environmental review of transportation impacts focused on the delay that vehicles experience at intersections and on roadway segments, which is often measured using LOS. Mitigation for impacts on vehicular delay often involves increasing capacity such as widening a roadway or the size of an intersection, which in turn encourages more vehicular travel and greater pollutant emissions. Additionally, improvements to increase vehicular capacity can often discourage alternative forms of transportation such as biking and walking. SB 743 directed the Governor's Office of Planning and Research (OPR) to develop an alternative metric(s) for analyzing transportation impacts in CEQA documents. The alternative shall promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution, promoting the development of multimodal transportation system, and providing clean, efficient access to destinations. Under SB 743, it was anticipated that the focus of transportation analysis will shift from vehicle delay to vehicle miles traveled (VMT) within transit-priority areas (i.e., areas well served by transit).

Pursuant to SB 743, OPR released the draft revised CEQA Guidelines in November 2017, recommending the use of VMT for analyzing transportation impacts. Additionally, OPR released Updates to Technical Advisory on Evaluating Transportation Impacts in CEQA, to provide guidance on VMT analysis. In this Technical Advisory, OPR provides its recommendations to assist lead agencies in screening out projects from VMT analysis and selecting a significance threshold that may be appropriate for their particular jurisdictions. While OPR's Technical Advisory is not binding on public agencies, CEQA allows lead agencies to "consider thresholds of significance … recommended by other public

agencies, provided the decision to adopt those thresholds is supported by substantial evidence" (CEQA Guidelines Section 15064.7[c]).

In December 2018, the CEQA Guidelines were updated to add new Section 15064.3, Determining the Significance of Transportation Impacts, that describes specific considerations for evaluating a project's transportation impacts using the VMT methodology. This new methodology is required to be used for projects beginning on July 1, 2020.

CEQA Guidelines Section 15064.3(b) is divided into four subdivisions as follows:

(1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

(2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.

(3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

(4) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project.

Sustainable Communities Act; Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008) supports the state's climate action goals to reduce greenhouse gas emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, the California Air Resources Board sets regional targets for greenhouse gas emissions reductions from passenger vehicle use. In 2010, the California Air Resources Board established these targets for 2020 and 2035 for each region covered by one of the state's Metropolitan Planning Organizations (MPO). The California Air Resources Board will periodically review and update the targets, as needed.

Each of California's MPOs must prepare a Sustainable Communities Strategy (SCS) as an integral part of its Regional Transportation Plan (RTP). The SCS contains land use, housing, and transportation strategies that, if

implemented, would allow the region to meet its greenhouse gas emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. California Air Resources Board must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional greenhouse gas targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy to meet the targets. The alternative planning strategy is not a part of the RTP.

The Sustainable Communities Act also establishes incentives to encourage local governments and developers to implement the SCS or the alternative planning strategy. Developers can get relief from certain CEQA requirements if their new residential and mixed-use projects are consistent with a region's SCS (or alternative planning strategy) that meets the targets (see PRC Sections 21155, 21155.1, 21155.2, and 21159.28).

Regional and Local

SCAG Regional Transportation Plan/Sustainable Communities Strategy

Southern California Association of Governments (SCAG) is the designated MPOs for six Southern California counties (Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial), and is federally mandated to develop plans for transportation, growth management, hazardous waste management, and air quality. The City of Arcadia is one of the many jurisdictions that fall under SCAG.

The 2016–2040 RTP/SCS was adopted in April 2016, and presents the land use and transportation vision for the region through the year 2040, providing a long-term investment framework for addressing the region's challenges. The RTP/SCS includes goals to increase mobility and enhance sustainability for the region's residents and visitors. The RTP/SCS encompasses three principles to improve the region's future: mobility, economy, and sustainability. The RTP/SCS provides a regional investment framework to address the region's transportation and related challenges, while enhancing the existing transportation system and integrating land use into transportation planning.

The RTP/SCS recommends local jurisdictions accommodate future growth within existing urbanized areas, particularly near existing transit, to reduce VMT, congestion, and greenhouse gas emissions. The RTP/SCS approach to sustainably manage growth and transportation demand would reduce the distance and barriers between new housing, jobs, and services and would reduce vehicle travel and greenhouse gas emissions. Overall, the strategies and policies in the RTP/SCS are projected to exceed the greenhouse gas emission-reduction targets set forth by the California Air Resources Board under SB 375 (SCAG 2016).

In May 2020 the Regional Council adopted Connect SoCal for the limited purpose of submitting the plan to the Federal Highway Administration and Federal Transit Administration for review prior to the June 1, 2020, deadline, as required by the Clean Air Act. On September 3, 2020, the SCAG Regional Council unanimously voted to approve Resolution No. 20-624-1 to: (1) adopt the 2020–2045 RTP/SCS (Connect SoCal or Plan) PEIR Addendum and Revised Mitigation Monitoring and Reporting Program; (2) approve Connect SoCal in its entirety; and (3) submit Connect SoCal to the California Air Resources Board for confirmation that the Plan meets greenhouse gas reduction targets. The Connect SoCal Plan presents the land use and transportation vision for the region through the year 2045, providing a long-term investment framework for addressing the region's challenges. The following are the 2020 RTP/SCS goals: (1) encourage regional economic prosperity and global competitiveness; (2) improve mobility, accessibility, reliability, and travel safety for people and goods; (3) enhance the preservation, security, and resilience of the regional transportation system; (4) increase person and goods movement and travel choices within

the transportation system; (5) reduce greenhouse gas emissions and improve air quality; (6) support healthy and equitable communities; (7) adapt to a changing climate and support an integrated regional development pattern and transportation network; (8) leverage new transportation technologies and data-driven solutions that result in more efficient travel; (9) encourage development of diverse housing types in areas that are supported by multiple transportation options; (10) promote conservation of natural and agricultural lands and restoration of habitats (SCAG 2020).

Local

City of Arcadia General Plan

The City of Arcadia adopted its General Plan on November 16, 2010. The Circulation Element of the General Plan addresses the transportation network that allows people to move in and through Arcadia, and the utilities infrastructure that provides necessary urban service to residences, businesses, and institutions. The circulation component addresses an integrated circulation system that will meet the current and future needs of all Arcadia residents, businesses, and visitors; and a system that will be multi-modal, efficient, and effective for all users. The goals and policies from the Circulation and Infrastructure Element that are relevant to the proposed Project include the following (City of Arcadia 2010):

Goal CI-1: **An efficient roadway system that serves all of Arcadia, supports all transportation modes, and balances the roadway system with planned land uses.**

Policy CI-1.1: Pursue enhancements to the roadway network consistent with the Figure CI-3, Master Plan of Roadway, and the Transportation Master Plan.

Policy CI-1.2: Implement street design standards on arterial corridors consistent with the Master Plan of Roadways to address bicycle facilities, sidewalks, and on-street parking that are context sensitive to adjacent land uses and districts, and to all roadway users, where appropriate.

Policy CI-1.4: Require the cost of transportation mitigation and improvements necessitated by new development be borne by new development— including non-automobile solutions—through the Traffic Impact Fee Program.

Goal CI-2: **Maximized operational efficiency of the street system**

Policy CI-2.1: Implement traffic management and traffic signal operations measures, where feasible, to:

- Minimize delay and congestion for all modes, without adversely impacting transit, bicycles, and pedestrians, and
- Focus traffic onto arterial streets and minimize intrusion into residential neighborhoods.

Policy CI-2.2: Design and operate arterials and intersections for the safe operation of all modes, including transit, bicyclists, and pedestrians.

Goal CI-3: **Enhanced local and regional transit service**

Policy CI-3.2: Support Metro's and Foothill Transit's expansion of rapid bus service in the region, and particularly on routes serving the City.

Policy CI-3.4: Enhance local transit circulator service, particularly to link neighborhoods to commercial districts, and Downtown to all areas.

Policy CI-3.8: Encourage private efforts to connect Gold Line riders to local places of employment.

Policy CI-3.9: Require all new and substantially renovated office, retail, industrial, and multifamily developments to install and implement transit amenities, including bus turnouts, transit shelters, and other streetscape elements, as appropriate.

Goal CI-4: Connected, balanced, and integrated bicycle and pedestrian networks that provide viable alternatives to use of the car

Policy CI-4.1: Develop and maintain the citywide bicycle network of off-street bike paths, on-street bike lanes, and bike streets identified in Figure CI-7. Development of this plan will include use of easements and flood control channel rights-of-way.

Policy CI-4.2: Establish bike hubs (centralized locations with convenient bike parking for trip destinations or transfer to other transportation modes) at key transit and commercial nodes.

Policy CI-4.3: Encourage the establishment of secure bike parking facilities throughout the City.

Policy CI-4.6: Provide sidewalks on all arterial roadways.

Policy CI-4.7: Ensure that intersections and development at intersections are designed and maintained to provide for pedestrian safety.

Policy CI-4.8: Require that development projects within commercial districts provide pedestrian-focused access independent from vehicle entrances, as feasible.

Policy CI-4.9: Enhance pedestrian and bicycle access to local and regional transit, including connections to bus routes and the light rail station.

Policy CI-4.11: Encourage walking, biking, and use of transit through a variety of supportive land use development and urban design measures, including site planning that promotes safety, pedestrian-friendly design, and access to transit facilities.

Policy CI-4.12: Require new and substantially renovated office, retail, industrial, and multifamily developments to include bicycle and pedestrian amenities in the vicinity of the development to facilitate bicycling and walking, including on-site bike paths where appropriate, sidewalk improvements, benches, and pedestrian signal push-buttons at nearby signals.

Policy CI-4.13: Require new and major renovations to office, industrial, and institutional developments to provide secure off-street bicycle parking, and encourage such developments to provide bicycle facilities, such as showers and changing rooms.

Arcadia has not previously prepared or adopted a bikeway master plan. However, the City's General Plan Circulation and Infrastructure Element (City of Arcadia 2010) includes a Bikeway Plan (see Figure 4.13-3, Existing and Future Bicycle Facilities) that identifies bicycle routes to accommodate a future bicycle plan which will link to regional routes such as the Rio Hondo bike path system, south of the Project site (City of Arcadia 2010). The proposed Bicycle Plan includes routes planned around the Project site, including a planned Class I bike path along Santa Anita Avenue. However, it must be noted that the City has constructed routes that may differ from those shown in Figure 4.13-3 As shown in the figure, a Class II bike lane has been constructed along 1st Avenue/Highland Oak Drive, between Duarte Road and Orange Grove Avenue, in place of the Class III bike lane.

4.13.3 Thresholds of Significance

The significance criteria used to evaluate the Project's impacts to transportation are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to transportation would occur if a project would:

a) Conflict with a program, plan, 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).
d) Result in inadequate emergency access.

4.13.4 Impacts Analysis

Threshold 4.13a Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, as discussed further below.

RTP/SCS Consistency Analysis

The proposed Project's consistency with the 2020–2045 RTP/SCS (Connect SoCal) is summarized in Table 4.9-1 (see Section 4.9, Land Use and Planning). The Project would facilitate a more balanced jobs-housing profile and once constructed, would continue to support regional economic development. In addition, the Project site's vicinity is served by existing public transit including Metro Routes 79, 187, and 287 and the Metro L Line; Foothill Transit Line 187; and Arcadia Transit's Green and Red Lines. Project development would increase transit accessibility of jobs and services within the Project site's vicinity and would bring residential development the City's Downtown, which contains a mix of office and commercial development uses, thereby reducing travel demands for people. Further, the Project includes objectives to support walkability and increased pedestrian access to support connectivity with the nearby Arcadia Metro L Line Station. For these reasons, and as shown in Table 4.9-1 in Section 4.9, Land Use and Planning of this Draft EIR, the proposed Project would not conflict with the applicable goals in the RTP/SCS.

City of Arcadia General Plan

The Project would be consistent with the applicable goals and policies of the City's General Plan. The project would not hinder the City's ability to provide an efficient roadway system that serves all transportation modes, and balances the roadway system with planned land uses. The project would support the City's goals to provide a connected, balanced, and integrated bicycle and pedestrian network by developing a mixed-use project that promotes pedestrian connectivity with the City's Downtown and includes on-site improvements to facilitate circulation and community cohesion within the existing environment. Specific site improvements are further discussed below.

Transit, Bicycle, and Pedestrian Facilities

The proposed Project would support transit, bicycle, and pedestrian circulation throughout the Project site and the surrounding environment and would not conflict with any plans or policies regarding existing or proposed transit, bicycle, and pedestrian facilities in the study area.

The Project would include bicycle parking as well as on-site improvements to support pedestrian connectivity with the City's Downtown and nearby Arcadia Metro L Line Station. Site improvements include redeveloping the space between the existing office building and the proposed residential building with a new paseo and outdoor plaza. This community open space area would include on-site wayfinding features, minimized vehicular access, flexible pedestrian space, trees and enhanced plantings, lighting, and bicycle parking. Additionally, the alleyway adjacent to the eastern boundary of the Project site would be partially converted into a pedestrian and bicycle paseo and would facilitate connectivity between the Arcadia Metro L Line Station and the City's downtown amenities. Stairs and a ramp would be installed on the Project site's southwest side between the residential building and existing office tower, which would create an entrance to the paseo to the north from Wheeler Avenue. Pedestrian access is also proposed to provide access to the paseo from the garage. The northern lobby would be accessible via the alley and Santa Clara Street, and the southern lobby would be accessible via the alley and Wheeler Avenue. Sidewalks and other designated pathways would follow direct and safe routes from the external pedestrian circulation system to each building on the Project site. All pedestrian areas within the Project site would meet American Disability Act (ADA) requirements and adhere to City design guidelines. Bicyclist and pedestrian safety would be maintained at existing levels in the area. Additionally, the Project would not conflict with or result in the change of bus routes in the study area; therefore, the Project would not severely delay, impact, or reduce the service level of transit in the area. Therefore, the Project would not adversely affect, in a manner that conflicts with, an applicable program, plan, ordinance, or policy, addressing the performance of the circulation system, including public transit, roadway, bicycle or pedestrian facilities. Impacts would be less than significant.

Threshold 4.13b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines Section 15064.3(b) focuses on VMT for determining the significance of transportation impacts. The following VMT analysis is based on the City of Arcadia Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment (City of Arcadia 2020) and OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018). As shown in the analysis below, the Project would be screened from a project-level analysis and no impacts due to conflicts or inconsistencies with Section 15064.3(b) are presumed, and impacts would be less than significant.

Screening Criteria

The City's Guidelines provide three types of VMT screening that can be applied to the proposed Project to screen from a project-level VMT assessment. The screening criteria are consistent with the recommendations provided in OPR's Technical Advisory.

Transit Priority Area (TPA) Screening

Projects located within a TPA[1] may be presumed to have a less than significant impact absent substantial evidence to the contrary. This presumption may not be appropriate if the project:

1. Has a Floor Area Ratio (FAR) of less than 0.75;
2. Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
3. Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization)
4. Replaces affordable residential units with a smaller number of moderate- or high-income residential units

As shown in Appendix K-1, the proposed Project is located within a TPA. The Arcadia Metro L Line Station (East Los Angeles to Azusa) is located approximately 400 feet north of the Project site, with a weekday peak service frequency of five minutes. Additionally, the nearest bus service is provided by LA Metro Routes 79 and 287, along with Foothill Transit Route 187, with stops along 1st Avenue, Huntington Drive, and Santa Anita Avenue surrounding the Project site. Peak frequencies range between 10 minutes (78/79 within the downtown Los Angeles area) and 40 minutes (LA Metro Routes 79 and 287 within Arcadia). As previously noted, Route 79 operates in conjunction with Route 78 within the downtown Los Angeles area, upon which the route splits into two separate lines in the City of Alhambra, with Route 79 traveling along Huntington Drive. Foothill Transit Route 187 operates with peak service frequencies of 20 minutes. Although the nearby bus transit services do not operate with peak service frequencies of 15 minutes or less, the Project site is located within one-half mile of a TPA as the Arcadia Metro L Line Station serves a Major Transit Stop, operating with a weekday peak service frequency of 5 minutes. Therefore, the Project can be screened out using this criterium.

Low VMT Area Screening

Residential and office projects located within a low VMT- generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area. This presumption may not be appropriate if the Project land uses would alter the existing built environment in such a way as to increase the rate or length of vehicle trips.

For this screening, the SCAG travel forecasting model was used to measure VMT performance for individual traffic analysis zones (TAZs). TAZs are geographic polygons similar to Census block groups used to represent areas of homogenous travel behavior. Total daily VMT per service population (population plus employment) was estimated for each TAZ.

[1] A TPA is defined as a half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor per the definitions below:
Pub. Resources Code, § 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.")
Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.").

The SGVCOG screening tool (available at https://www.sgvcog.org/vmt-analysis-tool) was used to determine whether or not the proposed Project would be located in a low VMT-generating area. Per the City's guidelines, a low VMT-generating area is determined as 15% below the subarea baseline home-based VMT per capita and VMT per employee.

As shown in Table 4.13-1, the VMT per Capita for the project TAZ is 11.78, and the subarea jurisdiction's average is 15.61. Further, the VMT per Worker for the project TAZ is 15.45, and the subarea jurisdiction's average is 19.17. Therefore, the TAZ would be 27.97% and 21.49% below the subarea threshold for VMT per Capita and per Worker, respectively, which would meet the required baseline screening criteria established in the City's guidelines. As such, the proposed Project can be screened out using this criterium.

Table 4.13-1. Summary of Project TAZ VMT

Base Year (2021)	Home-based VMT per Capita	Home-based VMT per Worker
Project TAZ	11.78	15.45
Jurisdiction	15.61	19.17
% Difference (Project TAZ – Jurisdiction)	-27.97%	-21.49%
Threshold	13.27	16.30

Source: SGVCOG VMT Screening Tool (Appendix K-1)

Project Type Screening

The City's guidelines list local serving land uses that have been identified as having the presumption of a less than significant impact. The land uses include land uses such as local serving schools, parks, day care centers, and local serving retail of less than 50,000 square feet. The uses are those which should be able to demonstrate that its users (employees, customers, visitors) would be existing within the community. The screening criterion also identifies projects that would generate less than 110 daily vehicle trips and having a presumption of less than significant.[2] The proposed residential component of the Project would not fall under a local serving land use and would also generate greater than 110 daily vehicle trips; therefore, this component of the Project cannot be screened out from further VMT analysis using this criterium. However, the 750 square-foot proposed café would serve as a local serving land use and can be screened out using this criterium.

In conclusion, while the residential component of the Project would not be screened out from VMT analysis using the Project Type Screening, based on SB 743 and the revised CEQA guidelines, the City's Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment, and the San Gabriel Valley Council of Governments (SGVCOG) VMT Assessment tool, the entire Project would be screened from a project-level VMT analysis because the Project is in a Low VMT generating area within a TPA. Therefore, a VMT analysis is not required and impacts to VMT can be presumed to be less than significant.

[2] This threshold ties directly to the OPR technical advisory and notes that CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.

Threshold 4.13c Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Project would not substantially increase hazards due to a geometric design feature as further described below.

Project Access

The existing Project site is currently configured with seven access points. The driveway configurations for the Project site are as follows and illustrated in Figure 4.13-1, Project Location and Study Area. Proposed vehicular circulation to the Project site and parking structure would remove or reconfigure four access points to provide full access drive aisles as well as entrance-only and exit-only locations to and from the proposed parking garage, as follows:

- Project Driveway (Northwest)/Santa Clara Street: *ATM driveway; exit only*
- Alley Project Driveway (Northeast)/Santa Clara Street: *Full access*
- Santa Anita Avenue/Project Driveway (West): *Right-out; exit only (currently right-in; inbound only)*
- Project Driveway (Southwest)/Wheeler Avenue: *Full access*
- Existing Driveway (North)/Santa Clara Street: *To be removed*
- Existing Driveway (South)/Wheeler Avenue: *To be removed*
- Alley Project Driveway (Southeast)/Wheeler Avenue: *To be closed to non-emergency vehicular traffic*

As noted above, vehicular access to the Project site would be available from the alley on the eastern edge of the Project site from Santa Clara Street. An entrance and exit point to the parking structure is proposed along the alleyway on the east side of the Project site from Santa Clara Street. Two sets of approximately 10 removable bollards are proposed within the eastern alley's right-of-way, closing off the alleyway south of the parking garage entrance to Wheeler Drive from vehicular traffic to facilitate pedestrian and bicycle movement between the L Line Station and Downtown Arcadia. The other parking garage access point is located at the southwest corner of the garage, and can be accessed from Wheeler Avenue, which provides full access to the site. Additionally, an exit-only drive aisle would also provide direct egress to Santa Anita Avenue, south of the existing office building. It must be noted that this drive aisle currently exists and is proposed to remain; however, it is currently designated as an ingress only drive aisle and would be converted to an egress only drive aisle with the development of the proposed Project. Finally, an egress point is provided through the existing ATM exit-only drive-thru at the northwestern corner of the site.

All reconfigured driveways and internal access points would be designed and constructed to ensure appropriate line of sight and appropriate turning radii. The reconfigured driveways are also proposed to better facilitate the internal site circulation pattern to meet the needs of both the existing and proposed uses. No impacts are anticipated with the reconfigured driveways. The following design features would facilitate access to the drive-thru and maintain flow through the parking garage:

- Wayfinding signage would be provided at all parking garage ingress points for customers prior to entering the garage
- Wayfinding signage would be provided within the parking garage such that customers are directed to the ATM drive-thru, and other users of the site are channeled to parking spaces and garage exits.
- Northbound left-turning movements onto Santa Clara Street would be restricted.

On and Off-site Queuing Analysis

To ensure the Project would not result in driveway queueing onto Santa Clara street, Santa Anita Street, or Wheeler Avenue, which could create hazards to oncoming traffic, a queuing analysis was conducted at the project driveways and for specific turning movements at adjacent intersections (see Appendix K-2). The queuing analysis was prepared for all project driveways to assess the adequacy of any off-site storage lanes into the Project site, as well as the adequacy of driveway throat lengths and space on-site for vehicles to queue without impacting the internal circulation on the Project site. Queuing was analyzed utilizing the SimTraffic software, which calculates the 95th percentile (design) queue. All queuing analysis data and SimTraffic queuing worksheets are provided in Appendix K2.

As shown in Tables 4.13-2 and 4.13-3, none of the calculated 95th percentile (design) queues exceed storage capacities within the existing left-turn pockets on Santa Clara Street, Santa Anita Avenue, or the two-way-left-turn-lane along Santa Clara Street. None of the queues would conflict with turning movements into or out of the Project site, within the internal access drive aisles, or along eastbound Wheeler Avenue with the addition of Project traffic during the Existing and Opening Year (2024) conditions.

The longest 95th percentile queue is shown for the westbound, stop-controlled turning movement at the Santa Anita Avenue/Wheeler Avenue intersection, reaching 94 feet in the PM peak hour under Existing plus Project conditions and 96 feet in the PM peak hour under the Opening Year (2024) plus Project conditions. Twenty-five (25) feet is equivalent to approximately one (1) car waiting to exit from the Project driveway onto the adjacent street during the peak hour. Based on this assumption, approximately four (4) vehicles would queue up to the intersection and would not overlap into the Project driveway.

Additionally, the 95th percentile queue for the westbound left-turn lane extends approximately 10 to 15 feet past the striped left-turn pocket, but does not extend past the available stacking distance (as measured from the intersection stop bar to the ATM driveway exit). This is an acceptable queue and would not impede operations at the ATM driveway. In addition, the Project would restrict northbound left-turning movements onto Santa Clara Street given the proximity of the intersection as noted above.[3]

Table 4.13-2. Peak-Hour Queuing Summary for Existing Plus Project Conditions

Intersection or Driveway Access	Movement	Available Stacking Distance (Feet)	Existing plus Project			
			95th Percentile Queue (Feet)		*Acceptable?[1]*	
			AM Peak Hour	*PM Peak Hour*	*AM*	*PM*
Santa Anita Avenue/Santa Clara Street	WBL[2]	80	63	60	Yes	Yes
Santa Anita Avenue/Wheeler Avenue	WBLR	100	65	94	Yes	Yes
	SBL	160	46	47	Yes	Yes
Project Driveway (Northwest)/Santa Clara Street	NBR[3]	50	32	46	Yes	Yes
Access Alley Driveway (Northeast)/Santa Clara Street	WBL[4]	225	26	33	Yes	Yes
	NBLTR[5]	75	49	45	Yes	Yes
Santa Anita Avenue/Project Driveway (West)	WBR[6]	95	35	38	Yes	Yes

[3] Project trips were not routed northbound left out of the intersection for the purposes of this analysis.

Table 4.13-2. Peak-Hour Queuing Summary for Existing Plus Project Conditions

Intersection or Driveway Access	Movement	Available Stacking Distance (Feet)	Existing plus Project			
			95th Percentile Queue (Feet)		*Acceptable?[1]*	
			AM Peak Hour	*PM Peak Hour*	*AM*	*PM*
Project Driveway (Southwest)/Wheeler Avenue	SBLTR[7]	95	50	59	Yes	Yes
	EBLTR	90	13	33	Yes	Yes

Source: Appendix K
Notes: WBL = westbound left; WBLR = westbound left-right; WBR = westbound right; EBLTR = eastbound left-through-right; SBL = southbound left; SBLTR = southbound left-through-right; NBR = northbound right; NBLTR = northbound left-through-right
1 Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.
2 Pocket length striped to 50 feet; approximately 80 feet available in two-way left-turn lane (TWLTL) to project driveway.
3 Throat length measured from Santa Clara Street to driveway curve at parking garage exit.
4 Queueing available in TWLTL; measured to begin of eastbound left-turn pocket at 1st Avenue/Santa Clara Street.
5 Throat length measured from Santa Clara Street to parking garage entrance.
6 Throat length measured from Santa Anita Avenue to internal driveway from Wheeler Avenue.
7 Throat length measured from Wheeler Avenue to internal driveway from Santa Anita Avenue

Table 4.13-3. Peak-Hour Queuing Summary for Opening Year (2024) Plus Project Conditions

Intersection or Driveway Access	Movement	Available Stacking Distance (Feet)	Existing plus Project			
			95th Percentile Queue (Feet)		*Acceptable?[1]*	
			AM Peak Hour	*PM Peak Hour*	*AM*	*PM*
Santa Anita Avenue/Santa Clara Street	WBL[2]	80	64	58	Yes	Yes
Santa Anita Avenue/Wheeler Avenue	WBLR	100	70	95	Yes	Yes
	SBL	160	50	49	Yes	Yes
Project Driveway (Northwest)/Santa Clara Street	NBR[3]	50	31	49	Yes	Yes
Access Alley Driveway (Northeast)/Santa Clara Street	WBL[4]	225	23	36	Yes	Yes
	NBLTR[5]	75	54	46	Yes	Yes
Santa Anita Avenue/Project Driveway (West)	WBR[6]	95	30	35	Yes	Yes
Project Driveway (Southwest)/Wheeler Avenue	SBLTR[7]	95	47	54	Yes	Yes
	EBLTR	90	28	33	Yes	Yes

Source: Appendix K
Notes: WBL = westbound left; WBLR = westbound left-right; WBR = westbound right; EBLTR = eastbound left-through-right; SBL = southbound left; SBLTR = southbound left-through-right; NBR = northbound right; NBLTR = northbound left-through-right
1 Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.
2 Pocket length striped to 50 feet; approximately 80 feet available in two-way left-turn lane (TWLTL) to project driveway.
3 Throat length measured from Santa Clara Street to driveway curve at parking garage exit.
4 Queueing available in TWLTL; measured to begin of eastbound left-turn pocket at 1st Avenue/Santa Clara Street.
5 Throat length measured from Santa Clara Street to parking garage entrance.
6 Throat length measured from Santa Anita Avenue to internal driveway from Wheeler Avenue.
7 Throat length measured from Wheeler Avenue to internal driveway from Santa Anita Avenue

As queueing would not exceed available stacking distances, the addition of Project traffic would not create increased hazards due to a geometric design feature or incompatible uses. Impacts would be less than significant.

Threshold 4.13d Would the project result in inadequate emergency access?

Construction

Short-term adverse traffic and parking impacts could occur in the Project vicinity during construction of the Project. Additional trips generated by the truck deliveries and construction employees could affect traffic flow in the study area; construction activity could impact traffic near the Project site; and pedestrian traffic flow near the Project site could also be altered as a result of construction. Although the influx of equipment and materials to the Project site could create temporary adverse effects to the adjacent roadway, including access to the bank drive-thru, potential impacts associated with construction of the Project would be limited to those locations immediately adjacent to the Project site. Pedestrian access to the existing office buildings and bank uses on the Project site would be open, although temporary sidewalk closures around the portions of the Project site may be required in specific locations for limited time periods. To ensure adequate safeguards for pedestrian, bicycle and vehicular circulation and emergency vehicle access during short-term construction activities, Mitigation Measure (MM-) TRA-1 is required. MM-TRA-1 requires preparation of a Construction Traffic Control Plan to address pedestrian, bicycle, and vehicular circulation during construction activities. Implementation of MM-TRA-1 would reduce potential impacts related to emergency access to less than significant.

Operation

All areas of the Project site would be accessible to emergency responders for the long-term operation of the proposed Project. Local access to the Project site would be provided via Santa Anita Avenue, Santa Clara Street, Wheeler Avenue, and 1st Avenue. All the Project access points would be designed according to the City's applicable design standards. The proposed Project would provide adequate access to the Project site, including access for emergency vehicles. The internal drive aisles and loading and parking areas would be designed to comply with City's width, clearance, and turning radius requirements of the Fire Department, which were established to ensure safe and efficient vehicular circulation. Because the project would comply with all applicable local requirements related to emergency vehicle access and circulation, the project would not result in inadequate emergency access. Therefore, operational impacts associated with inadequate emergency access would be less than significant.

4.13.5 Cumulative Impacts Analysis

Plan, Program, Ordinance, or Policy Addressing Circulation

As described under the discussion for Threshold (a) and examined in Section 4.6, Greenhouse Gas Emissions, and Section 4.9, Land Use and Planning, the proposed Project is consistent with the following plans addressing the circulation system and would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities under cumulative conditions:

- SCAG 2020–20405 RTP/SCS – the proposed Project's proximity to existing public transit such as various bus routes and the Metro L Line would increase transit accessibility of jobs and services, support use of transit, and encourage sustainable land use patterns by redeveloping areas near accessible transit.
- City of Arcadia General Plan – approval of the proposed Project would ensure the proposed uses for the Project site are consistent with the General Plan.
- Metro Long Range Transportation Plan – Los Angeles County voters approved Measure M, a half-cent sales tax increase for transportation, which has allowed Metro to develop projects to improve the existing

transportation system. Metro developed the 2020 Long Range Transportation Plan (LRTP), which provides the funding plan and policies to provide a balanced comprehensive approach that considers the mobility needs of everyone in LA County and matches those access needs with Metro's expected resources to transform the County's transportation future (Metro 2020). Additionally, the 2014 Short Range Transportation Plan (SRTP) identifies projects and programs that will be implemented in accordance with the Project priorities and funding schedules through 2024 (Metro 2014). Metro is in the process of updating the SRTP to advance the 2020 LRTP. It is recognized that with these plans in place, Metro will continue to maintain and expand regional transit service to accommodate cumulative demand in the region. Although the Project (and other related projects) would cumulatively add transit ridership, Metro would continue to maintain and expand regional transit service to accommodate cumulative demand in the region; therefore, cumulative impacts on public transit would be less than significant.

Therefore, cumulative impacts related to a program, plan, ordinance, or policy related to addressing the circulation system would be less than significant.

CEQA Guidelines Section 15064.3(b)

The Project is located within a low VMT generating area and within a TPA. The Project would be screened from a project-level VMT analysis. Cumulative impacts can be presumed to be less-than-significant.

Hazardous Design Features

As discussed above, the Project's reconfiguration of the existing site access would not result in hazardous conditions into or out of the Project site. The proposed Project has a completed circulation analysis using LOS methodology provided in Appendix K-2, along with a 95th percentile queueing analysis provided in Appendix K-2 and detailed in the section above, that indicates that the trips generated by the proposed Project would not result in adverse circulation conditions. Because the impacts related to Project access points and circulation are site specific, and would be less than significant, the Project would not contribute to cumulative impacts with respect to hazardous design features.

Emergency Access

As analyzed above, the Project would not result in inadequate emergency access and Project impacts to emergency access would be less than significant. As with the proposed Project, driveways and/or circulation modifications proposed in the surrounding area would comply with applicable local, regional, state, and/or federal requirements related to emergency access and evacuation plans. Further, since modification to access are largely confined to the Project site and the immediately surrounding area, Project-specific emergency access impacts would likely not impact other cumulative projects. Therefore, the Project's contributions to cumulative impacts would be less than significant.

4.13.6 Mitigation Measures

MM-TRA-1 Prior to the issuance of demolition or grading permits, the Project applicant/developer shall develop and implement a City-approved Construction Traffic Control Plan. The Plan shall be prepared in accordance with applicable City guidelines and shall address the potential for construction-related vehicular traffic, as well as pedestrian and bicycle circulation disruption in the public right-of-way. The Plan shall describe safe detours and shall include protocols for implementing the following: temporary traffic controls (e.g., a flag person during heavy truck traffic

for soil export) to maintain smooth pedestrian and traffic flow; dedicated on-site turn lanes for construction trucks and equipment leaving the site; scheduling of peak construction truck traffic that affects traffic flow on the arterial system to off-peak hours; consolidation of truck deliveries; and/or rerouting of construction trucks away from congested streets or sensitive receptors.

4.13.7 Level of Significance After Mitigation

With incorporation of MM-TRA-1, potential significant impacts related to short-term access to the Project site would be reduced to less than significant. All other potential environmental impacts to Transportation would be less than significant.

4.13.8 References

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SCAG (Southern California Association of Governments). 2016. *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy*. Adopted April 2016. http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx.

SCAG. 2020. *2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association Of Governments*. Adopted May 7, 2020. Accessed October 19, 2021. https://www.connectsocal.org/Documents/Adopted/fConnectSoCal-Plan.pdf.

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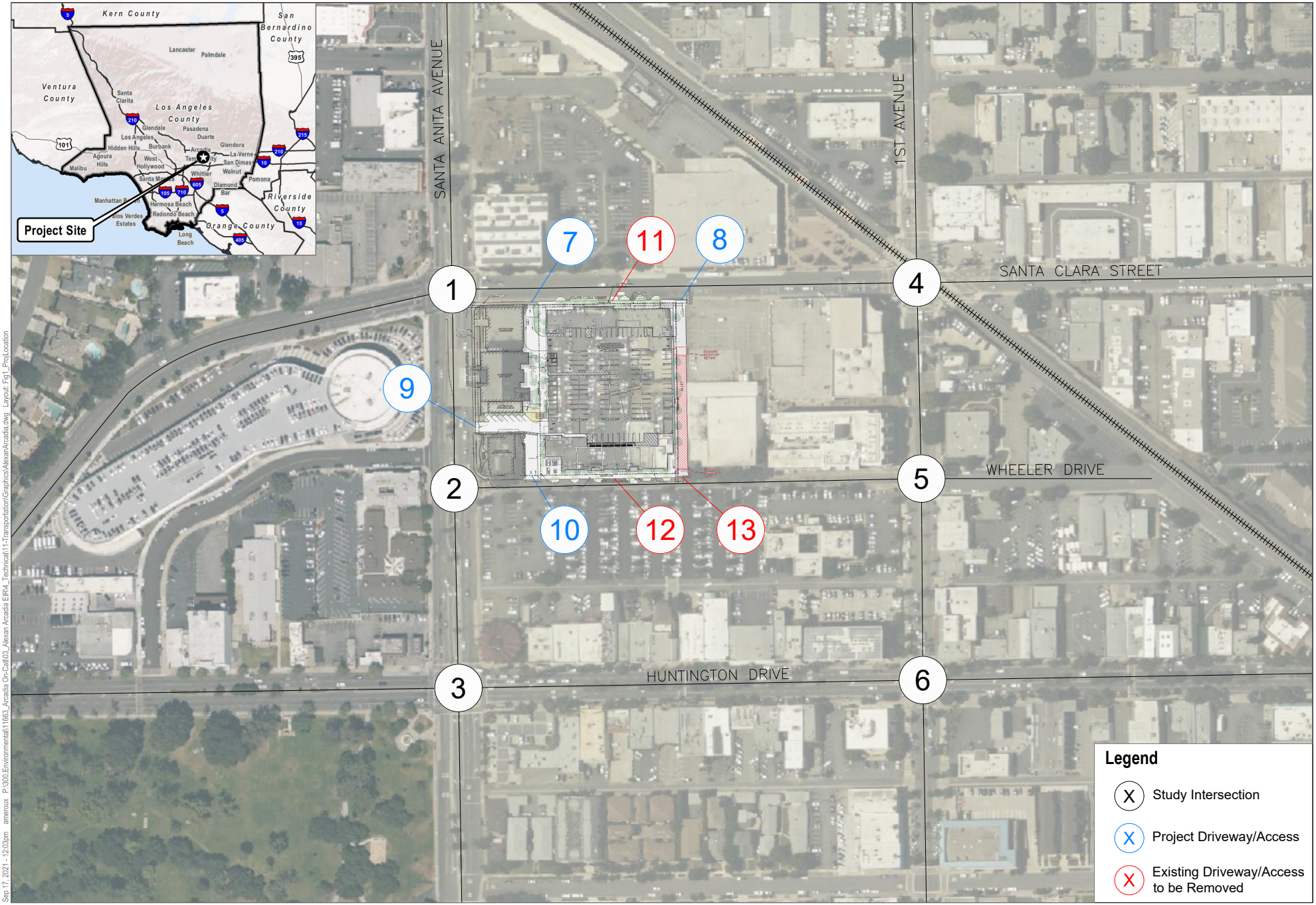

SOURCE: Bing Maps

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Figure 4.13-1

Project Location and Study Area

Alexan Arcadia

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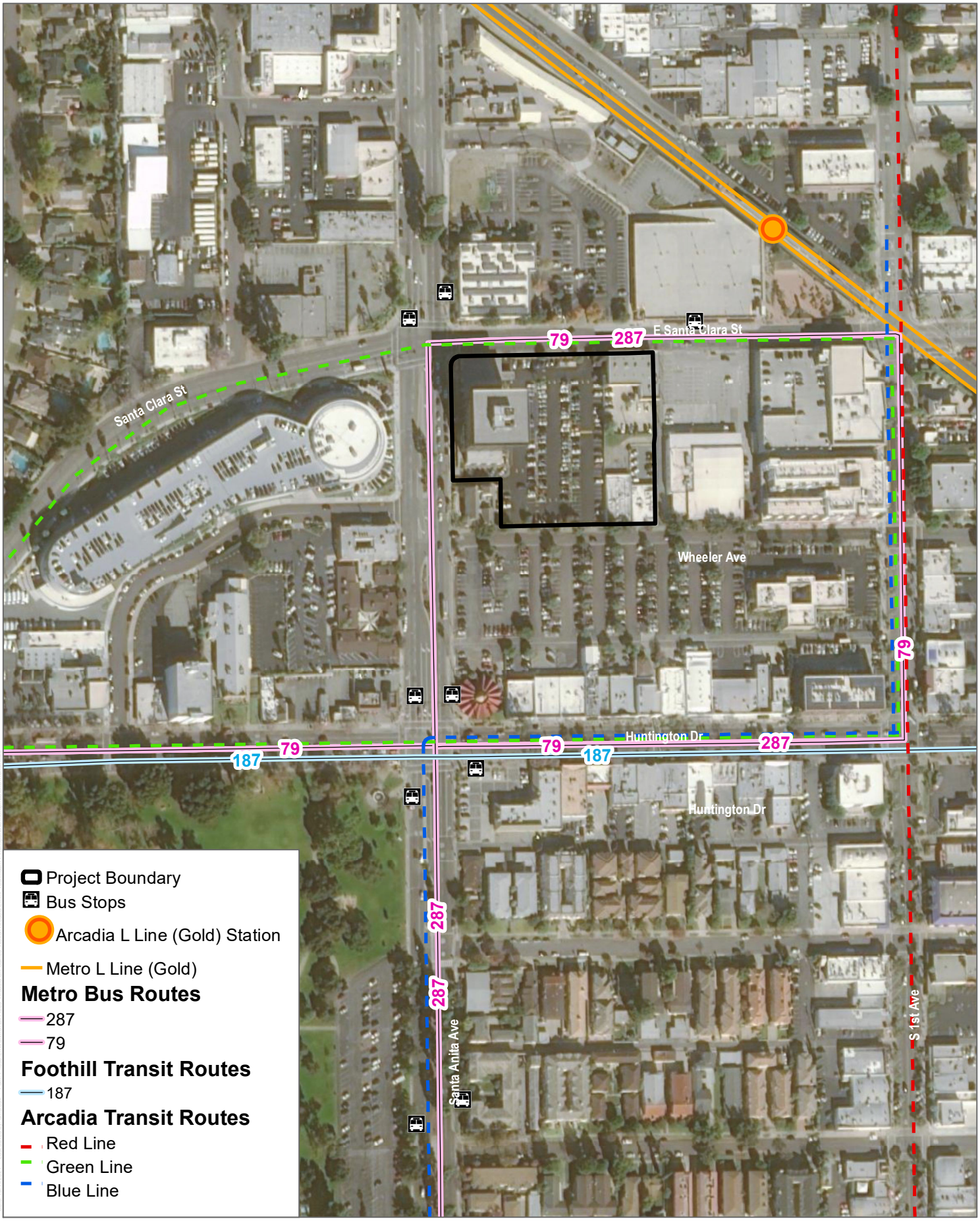

SOURCE: ESRI 2014

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0 125 250 Feet

Figure 4.13-2

Existing Transit Facilities

Alexan Arcadia

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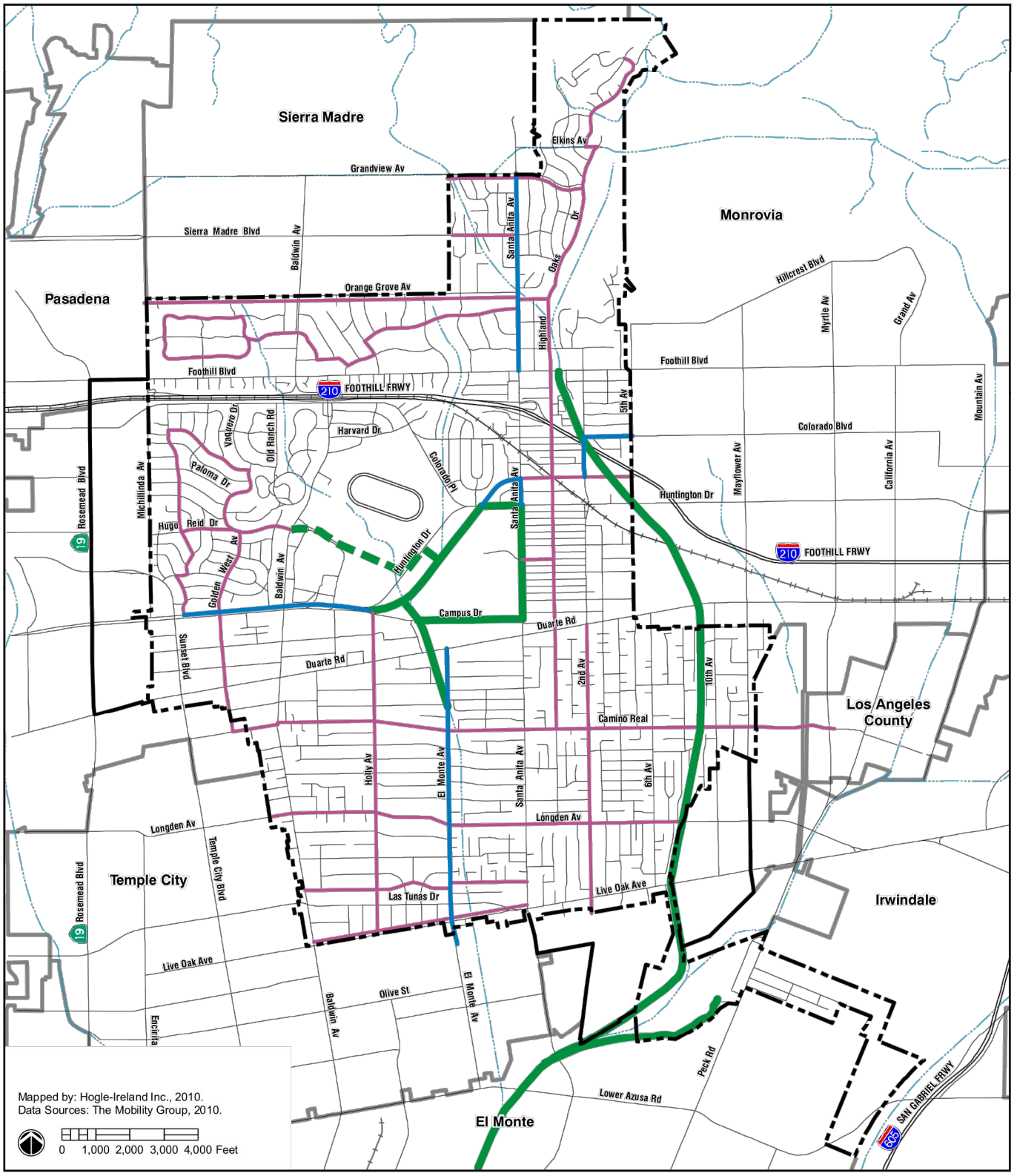

FIGURE CI-7: BIKEWAY PLAN

SOURCE: City of Arcadia 2010

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Figure 4.13-3
Bikeway Plan
Alexan Arcadia

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4.14 Tribal Cultural Resources

This section describes the existing tribal cultural resources (TCRs) conditions of the Alexan Mixed-Use Development Project (Project) site and vicinity, and identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on the following:

Appendix D Cultural Resources Technical Report for the Alexan Mixed-Use Project, prepared by Dudek.

Appendix L CONFIDENTIAL: Record of Assembly Bill (AB) 52 Consultation

Information contained in this section is based on a California Historical Resources Information System (CHRIS) records search completed on May 4, 2021, a survey conducted by Dudek on July 1, 2021, archival research, and tribal consultation pursuant to AB 52 conducted by the City of Arcadia (City).

Comments received in response to the Notice of Preparation (NOP) are summarized in Table 1-1, Notice of Preparation and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft EIR. A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR.

4.14.1 Existing Conditions

A summary of the existing conditions of the Project site, including its prehistoric and historical setting, can be found in Appendix D and is included in Section 4.3, Cultural Resources, of this Draft EIR.

Ethnohistoric Overview

The history of the Native American communities prior to the mid-1700s has largely been reconstructed through later mission-period and early ethnographic accounts. The first records of the Native American inhabitants of the region come predominantly from European merchants, missionaries, military personnel, and explorers. These brief and generally peripheral accounts were prepared with the intent of furthering respective colonial and economic aims and were combined with observations of the landscape. They were not intended to be unbiased accounts regarding the cultural structures and community practices of the newly encountered cultural groups. The establishment of the missions in the region brought more extensive documentation of Native American communities, though these groups did not become the focus of formal and in-depth ethnographic study until the early twentieth century (Bean and Shipek 1978; Boscana 1846; Geiger and Meighan 1976; Harrington 1934; Laylander 2000; Sparkman 1908; White 1963). The principal intent of these researchers was to record the precontact, culturally specific practices, ideologies, and languages that had survived the destabilizing effects of missionization and colonialism. This research, often understood as "salvage ethnography," was driven by the understanding that traditional knowledge was being lost due to the impacts of modernization and cultural assimilation. Alfred Kroeber applied his "memory culture" approach (Lightfoot 2005, p. 32) by recording languages and oral histories within the region. Ethnographic research by Dubois, Kroeber, Harrington, Spier, and others during the early twentieth century seemed to indicate that traditional cultural practices and beliefs survived among local Native American communities.

It is important to note that even though there were many informants for these early ethnographies who were able to provide information from personal experiences about native life before the Europeans, a significantly large proportion of these informants were born after 1850 (Heizer and Nissen 1973); therefore, the documentation of pre-contact, aboriginal culture was being increasingly supplied by individuals born in California after considerable

contact with Europeans. As Robert F. Heizer (1978) stated, this is an important issue to note when examining these ethnographies, since considerable culture change had undoubtedly occurred by 1850 among the Native American survivors of California.

Gabrielino (Gabrieleño)/Tongva

The archaeological record indicates that the proposed Project site and vicinity was occupied by the Gabrielino. Surrounding cultural groups included the Chumash and Tataviam to the north and west, the Serrano and Cahuilla to the north and east, and the Juaneño and Luiseño to the south and east.

The name "Gabrielino" (also spelled "Gabrieliño" and "Gabrieleño") denotes those people who were administered by the Spanish from the San Gabriel Mission, which included people from the Gabrielino area proper as well as other social groups (Bean and Smith 1978; Kroeber 1925). Therefore, in the post-Contact period, the name does not necessarily identify a specific ethnic or tribal group. The names by which Native Americans in southern California identified themselves have, in some cases, been lost. Many modern Gabrielino identify themselves as the Tongva (King 1994), within which there are a number of regional bands. Though the names "Tongva" or "Gabrielino" are the most common names used by modern Native American groups, and are recognized by the Native American Heritage Commission, there are groups within the region that self-identify differently, such as the Gabrielino Band of Mission Indians - Kizh Nation. To be inclusive of the majority of tribal entities within the region, the names "Tongva" or "Gabrielino" are used within this report.

Tongva lands encompassed the greater Los Angeles Basin and three Channel Islands, San Clemente, San Nicolas, and Santa Catalina. The Tongva established large, permanent villages in the fertile lowlands along rivers and streams, and in sheltered areas along the coast, stretching from the foothills of the San Gabriel Mountains to the Pacific Ocean. A total tribal population has been estimated of at least 5,000, but recent ethnohistoric work suggests a number approaching 10,000 (O'Neil 2002). Houses constructed by the Tongva were large, circular, domed structures made of willow poles thatched with tule that could hold up to 50 people (Bean and Smith 1978). Other structures served as sweathouses, menstrual huts, ceremonial enclosures, and probably communal granaries. Cleared fields for races and games were created adjacent to Tongva villages (McCawley 1996). Archaeological sites composed of villages with various sized structures have been identified.

The largest, and best documented, ethnographic Tongva village in the vicinity was that of Yanga (also known as Yaangna, Janga, and Yabit), which was in the vicinity of the downtown Los Angeles (McCawley 1996; NEA and King 2004). This village was reportedly first encountered by the Portolá expedition in 1769. In 1771, Mission San Gabriel was established. Yanga provided a large number of the recruitments to this mission; however, following the founding of the Pueblo of Los Angeles in 1781, opportunities for local paid work became increasingly common, which had the result of reducing the number of Native American neophytes from the immediately surrounding area (NEA and King 2004). Mission records indicate that 179 Gabrielino inhabitants of Yanga were recruited to San Gabriel Mission (King 2000; NEA and King 2004). Based on this information, Yanga may have been the most populated village in the Western Gabrielino territory. Second in size, and less thoroughly documented, the village of Cahuenga was located slightly closer, just north of the Cahuenga Pass

Father Juan Crespi passed through the area near the village of Yanga on August 2-3, 1769. The pertinent sections from his translated diary are provided here:

> Sage for refreshment is very plentiful at all three rivers and very good here at the Porciúncula [the Los Angeles River]. At once on our reaching here, eight heathens came over from a good sized village encamped at this pleasing spot among some trees. They came bringing two or three large bowls or baskets half-full of very good sage with other sorts of grass seeds that they consume; all

> brought their bows and arrows but with the strings removed from the bows. In his hands the chief bore strings of shell beads of the sort that they use, and on reaching the camp they threw the handfuls of these beads at each of us. Some of the heathens came up smoking on pipes made of baked clay, and they blew three mouthfuls of smoke into the air toward each one of us. The Captain and myself gave them tobacco, and he gave them our own kind of beads, and accepted the sage from them and gave us a share of it for refreshment; and very delicious sage it is for that purpose.
>
> We set out at a half past six in the morning from this pleasing, lush river and valley of Our Lady of Angeles of La Porciúncula. We crossed the river here where it is carrying a good deal of water almost at ground level, and on crossing it, came into a great vineyard of grapevines and countless rose bushes having a great many open blossoms, all of it very dark friable soil. Keeping upon a westerly course over very grass-grown, entirely level soils with grand grasses, on going about half a league we came upon the village belonging to this place, where they came out to meet and see us, and men, women, and children in good numbers, on approaching they commenced howling at us though they had been wolves, just as before back at the spot called San Francisco Solano. We greeted them and they wished to give us seeds. As we had nothing at hand to carry them in, we refused (Brown 2001:339-341, 343).

The Portolá party passed westward through the La Brea Tar Pits area (CA-LAN-159) the following day. This was a known area of Native American use for hunting and the gathering of tar and other area-specific resources. A pertinent excerpt from Father Juan Crespí's August 3, 1769 diary entry is provided here:

> The Captain told me that when they scouted here, in a ravine about half a league to the westward they came upon about forty springs of pitch, or tar, boiling in great surges up out of the ground, and saw very large swamps of this tar, enough to have caulked many ships. (Brown 2001: 341)

Upon leaving the La Brea Tar Pits, the Portolá expedition continued westward, camping on August 4, 1769 near what is now the route Interstate 405 before heading northward into the mountains. Details of the day's travels are provided below:

> At a quarter past six in the morning we set out from this copious spring at the San Esteban Sycamores …. We pursued our way northwestward and on going about a quarter-league [0.85 mile], we came into a little flat hollow between small knolls, and then onward across level tablelands of dark friable soil….we turned west-northwestward and on going two hours, all over level soil, came to the watering place: two springs rising at the foot of a high tableland, their origin being higher up on the large plain here….At this spot we came upon a village at the aforesaid tableland and as soon as we arrived and set up camp, six very friendly, compliant tractable heathens came over, who had their little houses roofed with grass, the first we have been seeing of this sort. They brought four or six bowls of the usual seeds and good sage which they presented to our Captain. On me they bestowed a good-sized string of the sort of beads they all have, made of white seashells and red ones, though not very bright-colored, that look to be coral. (Brown 2001: 345-349)

The name of this village referenced to be near the August 4, 1769 Portolá camp is unknown and would have been located approximately 3 miles from the named village near Santa Monica (Kuruvunga) and 5 miles from Sa'anga near the mouth of Ballona Creek. Sa'anga, has also been commonly referred to as Guaspet or Guashna, (NEA and King 2004), Saan (Kroeber 1925), or Saa'anga or Waachnga (McCawley 1996). Ethnohistoric research completed by John Johnson (1988) pertaining to the inhabitants of San Clemente Island and Santa Catalina Island has indicated that there were many marriage ties between these islands and this village in the vicinity of the Ballona

wetlands. Mission records indicate that a total of 95 neophytes came from this village; 87 of these individuals at Mission San Gabriel and the remaining eight at Mission San Fernando (NEA and King 2004). These records further suggest that marriage was common with the surrounding outside villages, but perhaps most often occurring with members of the large village of Yanga.

The Tongva subsistence economy was centered on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, deserts, riparian, estuarine, and open and rocky coastal eco-niches. Like that of most native Californians, acorns were the staple food (an established industry by the time of the early Intermediate Period). Acorns were supplemented by the roots, leaves, seeds, and fruits of a wide variety of flora (e.g., islay, cactus, yucca, sages, and agave). Fresh water and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals, were also consumed (Bean and Smith 1978: 546; Kroeber 1925; McCawley 1996).

A wide variety of tools and implements were used by the Tongva to gather and collect food resources. These included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Groups residing near the ocean used oceangoing plank canoes and tule balsa canoes for fishing, travel, and trade between the mainland and the Channel Islands (McCawley 1996).

Tongva people processed food with a variety of tools, including hammerstones and anvils, mortars and pestles, manos and metates, strainers, leaching baskets and bowls, knives, bone saws, and wooden drying racks. Food was consumed from a variety of vessels. Catalina Island steatite was used to make ollas and cooking vessels (Blackburn 1963; Kroeber 1925; McCawley 1996).

AB 52 Tribal Consultation

As further described in Section 4.14.2, AB 52 requires lead agencies to provide tribes who have requested notification with early notice of the proposed Project and, if requested, consultation to inform the CEQA process with respect to TCRs.

Pursuant to AB 52, the City contacted the two California Native American Tribal representatives (that have requested notification) who are traditionally or culturally affiliated with the geographic area of the proposed Project on August 12, 2021. These notification letters included a Project map and description and provided the tribe the opportunity to request formal consultation. AB 52 allows tribes no less than 30 days after receiving notification to request consultation. If a response is not received within the allotted 30 days, the initiating lead agency can accept consultation requests after the 30 days, but is not required to do so. One response was received as a result of the City's AB 52 consultation notification. An account of all communication thus far can be found in Table 4.14-1. The confidential AB 52 record of all communication between the City and involved tribes is on file with the City and available for review by eligible individuals.

On August 18, 2021, the Gabrieleño Band of Mission Indians Kizh Nation responded to the City's notification letter by email requesting formal consultation regarding the proposed Project. Tribal consultation pursuant to AB 52 between the City, represented by Lisa Flores, and the Tribe, represented by Mr. Andrew Salas, was conducted on September 28, 2021. Consultation was ongoing between October 2021 and January 2022. On February 3, 2022, the City sent the Tribe via email the final proposed mitigation measures and requested the closure of consultation by February 8, 2022. By February 10, 2022, the Tribe did not respond and the City closed consultation by notifying the Tribe via email.

Table 4.14-1. Assembly Bill 52 Native American Tribal Outreach Results

Native American Tribal Representatives	Method and Date of Notification	Response to City Notification Letters	Consultation Date and Results
Andrew Salas, Chairman Gabrieleño Band of Mission Indians – Kizh Nation	August 13, 2021, Letter sent via USPS certified mail	Request for consultation via email on August 18, 2021.	September 28, 2021 – Tribal consultation pursuant to AB 52 between the City represented by Lisa Flores and the Tribe represented by Mr. Andrew Salas was conducted. October 4, 2021 – Mr. Salas emailed the City outlining the Tribe's concerns and suggested mitigation measures (MMs). October 28, 2021 – The City emailed Mr. Salas and provided MMs for the Tribe's review. October 29, 2021 – Administrative specialist of the Tribe emailed to suggest alternate MMs and suggested the City adopt the revised MMs. November 10, 2021 – The City emailed the Tribe providing revised MMs for the Tribe's review. November 12, 2021 – The Tribe responded via email requesting an additional consultation meeting with the City to discuss the proposed MMs. November 17, 2021 – Administrative specialist of the Tribe emailed the City to provide further documents for the City's review. November 17, 2021 – A second tribal consultation meeting occurred between the City and the Tribal Council. December 15, 2021 – The Tribe emailed the City asking for an update on the proposed mitigation measures. December 16, 2021 – The City emailed the Tribe to state revisions were in progress. January 5, 2022 – The City emailed the Tribe the revised mitigation measures and requested closure of consultation. January 5, 2022 – The Tribe disagreed with the City's revised MMs and requested additional consultation to further the discussions. January 6, 2022 – The City asked for the Tribe's proposed changes to the MMs to be provided in writing in track changes.

Table 4.14-1. Assembly Bill 52 Native American Tribal Outreach Results

Native American Tribal Representatives	Method and Date of Notification	Response to City Notification Letters	Consultation Date and Results
			January 11, 2022 – The Tribe's attorney provided comments regarding the revised MMs. January 12, 2022 – The City asked for the Tribe's proposed changes to the MMs to be provided in writing in track changes. January 12, 2022 – The Tribe responded via email with revised MMs. February 3, 2022 – The City sent the Tribe via email the final revised MMs and requested the closure of consultation by February 8, 2022. February 10, 2022 – The Tribe did not respond by February 8, 2022. As such, the City closed consultation and notified the Tribe via email.
Sam Dunlap, Cultural Resources Director Gabrielino Tongva Tribe	August 13, 2021, Letter sent via USPS certified mail	No response.	N/A

Source: Appendix L.

4.14.2 Relevant Plans, Policies, and Ordinances

State

California Register of Historical Resources

In California, the term "historical resource" includes, but is not limited to, "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC Section 5020.1[j]). In 1992, the California legislature established the California Register of Historical Resources (CRHR) "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP), enumerated as follows. According to Public Resources Code (PRC) Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity" and (ii) meets at least one of the following 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.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

To understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (14 CCR 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

Cultural Resources

The following California Environmental Quality Act (CEQA) statutes (PRC Section 21000 et seq.) and CEQA Guidelines (14 CCR 15000 et seq.) are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- PRC Section 21083.2(g) defines "unique archaeological resource."
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) defines "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of a historical resource;" it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines "tribal cultural resources."
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b) and 21083.2(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; 14 CCR 15064.5[b]).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired" (14 CCR

15064.5[b][1]; PRC Section 5020.1[q]). In turn, the significance of a historical resource is materially impaired when a project does any of the following (14 CCR 15064.5[b][2]):

1. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
2. 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
3. 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.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any historical resources, then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance would be materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2[a]–[c]).

Section 21083.2(g) defines a unique archaeological resource as 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 (PRC Section 21083.2[g]):

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

Impacts on non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2[a]; 14 CCR 15064.5[c][4]). However, if a non-unique archaeological resource qualifies as a TCR (PRC Sections 21074[c] and 21083.2[h]), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed in PRC Section 5097.98.

California State Assembly Bill 52

AB 52 of 2014 amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 established that TCRs must be considered under CEQA and also provided for additional Native American consultation requirements for the lead agency. Section 21074 describes a TCR as a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American tribe and that is either:

- On or determined to be eligible for the California Register of Historical Resources or a local historic register; or
- 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 Section 5024.1.

AB 52 formalizes the lead agency–tribal consultation process, requiring the lead agency to initiate consultation with California Native American groups that are traditionally and culturally affiliated with the project site, including tribes that may not be federally recognized. Lead agencies are required to begin consultation prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

Section 1 (a)(9) of AB 52 establishes that "a substantial adverse change to a tribal cultural resource has a significant effect on the environment." Effects on TCRs should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource." Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects to TCRs, the consultation shall include those topics (PRC Section 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

Native American Historic Cultural Sites

The Native American Historic Resources Protection Act (California Public Resources Code Section 5097, et seq.) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the California Native American Heritage Commission (NAHC) to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the CRHR.

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (California Repatriation Act), enacted in 2001, requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The California Repatriation Act also provides a process for the identification and repatriation of these items to the appropriate tribes.

California Health and Safety Code Section 7050.5

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in California Public Resources Code Section 5097.98.

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains can occur until the county coroner has examined the remains (Health and Safety Code Section 7050.5[b]). PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the county coroner determines or has reason to believe the remains are those of a Native American, the county coroner must

contact the NAHC within 24 hours (Health and Safety Code Section 7050.5[c]). The NAHC will notify the most likely descendant (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the MLD by the NAHC. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

Local

There are no local policies related to TCRs that are applicable to the proposed Project.

4.14.3 Thresholds of Significance

The significance criteria used to evaluate Project impacts to TCRs are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to TCRs would occur if the Project 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).
   ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

4.14.4 Impacts Analysis

Threshold 4.14a Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

As described under Section 4.3 of this Draft EIR, a CHRIS records search and pedestrian survey were conducted for the Project site. The CHRIS records search, archival research, and the pedestrian survey did not identify any previously recorded archaeological resources of Native American origin within or surrounding the Project site that are listed or eligible to be listed in the CRHR or in a local register. Further, no specific TCRs have been identified by California Native American tribes as part of the City's AB 52 notification and consultation process (Appendix L) that could be eligible for listing in the CRHR or in a local register as a historical resource as defined in Public Resources Code section 5020.1(k). Therefore, the Project would not adversely affect TCRs that are listed or eligible for listing in the state or local register. Impacts would therefore be less than significant.

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

As described in Section 4.14.2, AB 52 requires lead agencies to provide tribes who have requested notification with early notice of the proposed Project and, if requested, consultation to inform the CEQA process with respect to TCRs. Two Native American tribes (the Gabrieleño Band of Mission Indians – Kizh Nation and the Gabrielino Tongva Tribe) requested to be notified of AB-52 eligible projects under the City's jurisdiction. On August 13, 2021, the City sent a notification letter for the Project via certified mail to both tribes. No response was received from the Gabrielino Tongva Tribe. The Gabrieleño Band of Mission Indians – Kizh Nation responded on August 18, 2021, via email and requested consultation.

Two consultation meetings were held between the City and the Gabrieleño Band of Mission Indians - Kizh Nation (Kizh Nation) by way of a conference call on September 28, 2021, and again on November 17, 2021. The Kizh Nation expressed concerns regarding the potential for inadvertent finds of unknown TCRs during excavation activities for the Project. However, no specific TCRs were identified by the Kizh Nation within or surrounding the Project site. The Kizh Nation provided further information and documentation regarding the Project area on October 4, 2021, October 28, 2021, and November 17, 2021 via email expressing concerns that construction ground disturbance and excavation associated with the Project may result in the inadvertent discovery of and impacts to an unknown TCR buried within the Project site. They also stated their particular concern if excavation is proposed within native soils (Appendix L). The City carefully and thoroughly reviewed the content of the information provided by the Kizh Nation. Based on this review, the City determined that the documents provided by the Kizh Nation do not substantiate the presence of a specific, known TCR that could be determined significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Additionally, since no sufficient evidence was presented to determine that a known TCR exists within or near the Project site, no significance determination could be made based on importance to a California Native American tribe.

Visual observation of the current conditions within the proposed Project site indicate that all areas have been disturbed as a result of urban development. Neither the CHRIS records search nor the pedestrian survey were able to identify any archaeological resources within the Project site. As described above, consultation under AB 52 did not identify any specific, known TCRs within the Project site. However, the geotechnical report prepared for the Project (included as Appendix E-1) states that artificial fill soils were found between 2 feet to 4 feet below ground surface within all subsurface exploratory investigations on the Project site. Because the proposed Project would involve excavations to a depth of up to 26 feet below ground surface, Project construction would involve some disturbance to native soils whether intact or previously disturbed. While no known archaeological and/or TCRs are located on the Project site, there remains some potential for a previously undiscovered resource to be encountered during excavation, particularly within native soils. If resources were to be uncovered but not properly treated, they could be destroyed or damaged, resulting in a potentially significant impact.

As described in Section 4.3, Cultural Resources, of this Draft EIR, MM-CUL-1 has been provided to ensure that potential impacts related to inadvertent discovery of archaeological resources would be less than significant. Since no substantial evidence of the presence of a TCR was found or presented as result of tribal consultation conducted on behalf of this proposed Project pursuant to AB 52, the City has determined that no known TCR exists that could be considered significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. The City has also carefully considered as yet unknown resources within the proposed Project site and their potential significance to a California Native American tribe. In consideration of the information provided by the Kizh Nation

during tribal consultation and in an abundance of caution, additional mitigation measures have been incorporated to ensure anticipatory measures are taken in the event that unknown TCRs are inadvertently encountered during Project construction-related earthwork activities. These mitigation measures are outlined in MM-TCR-1 through MM-TCR-3 intended to be implemented in concert with MM-CUL-1 from Section 4.3, Cultural Resources, of this Draft EIR. Therefore, impacts to TCRs would be less than significant with mitigation incorporated.

4.14.5 Cumulative Impacts Analysis

Cumulative impacts on TCRs consider whether impacts of the proposed Project together with other past, present, and reasonably foreseeable future projects identified within the vicinity of the Project site, when taken as a whole, significantly impact cultural or tribal resources and considers whether there is a significant cumulative impact to which a project would make a cumulatively considerable contribution. Impacts to cultural and tribal cultural resources, if any exist, tend to be site specific.

As discussed above in this section, there are no known TCRs on the Project site and as such, the Project site is not part of an existing or known grouping or district of cultural or tribal cultural resources that would be impacted as part of the cumulative impacts of other projects. However, for archaeological resources of Native American origin, past, present, and reasonably foreseeable cumulative projects may require extensive excavation in culturally sensitive areas and, thus, may result in adverse effects to known or previously unknown, inadvertently discovered archaeological resources of Native American origin. Any inadvertent discoveries associated with the proposed Project would be protected to the extent required by law and as outlined in MM-CUL-1 and MM-TCR-1 through MM-TCR-3. Upon implementation of these measures, the Project would not have a significant impact on any resources that may be inadvertently discovered during construction. As such, the Project would not have make a cumulatively considerable contribution to any significant cumulative effects on such resources. Other individual projects occurring in the vicinity of the Project site would also be subject to the same requirements of CEQA as the proposed Project and any impacts to cultural or tribal cultural resources would be mitigated, as applicable. For these reasons, cumulative impacts would be considered less than significant with incorporation of MM-CUL-1 and MM-TCR-1 through MM-TCR-3.

4.14.6 Mitigation Measures

MM-TCR-1 The project applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation ("Tribe" or "Kizh"). The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. "Ground-disturbing activity" refers to ground disturbance occurring from 1 foot above native soils and below, and it does not include movement of sediments after they have been initially disturbed or displaced by current Project-related construction.

A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.

The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or

discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.

On-site tribal monitoring shall conclude upon the earlier of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant or lead agency that all ground-disturbing activities as defined in TCR-1.A and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant or lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

Upon discovery of any Kizh TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the Kizh recovers and retains all discovered Kizh TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes. The Tribe shall have up to 48 hours to recover and retain any discovered Kizh TCRs, after which time construction activities in the immediate vicinity of the discovery may continue.

MM-TCR-2 Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.

In accordance with Health and Safety Code Section 7050.5, any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.

Consistent with California Public Resources Code section 5097.98(d)(2), any items associated with the human remains that are placed or buried with the Native American human remains are to be treated in the same manner as the remains, but do not by themselves constitute human remains.

Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.

Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

MM-TCR-3 If the Tribe is designated by the Native American Heritage Commission ("NAHC") as the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. Accordingly, if the Tribe is designated as the MLD for discovered human remains, the prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be

considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.

If the Tribe is designated by the NAHC as the MLD, the following condition will apply: If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.

If the Tribe is designated by the NAHC as the MLD, the following condition will apply: In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.

If the Tribe is designated by the NAHC as the MLD, the following condition will apply: In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.

If the Tribe is designated by the NAHC as the MLD, the following condition will apply: Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. Where the Tribe is designated as the MLD, the site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

If the Tribe is designated by the NAHC as the MLD, the following condition will apply: The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery and data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

4.14.7 Level of Significance After Mitigation

With the implementation of MM-TCR-1 through MM-TCR-3, as well as MM-CUL-1, from Section 4.3, Cultural Resources, potential impacts tribal resources would be less than significant.

4.14.8 References

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4.15 Utilities and Service Systems

This section describes the existing utilities and service systems conditions of the Alexan Mixed-Use Development Project EIR (Project) site and vicinity, and identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, and references. Information contained in this section is based on the following appendix:

Appendix G 150 North Santa Anita Avenue Due Diligence Report of Existing Infrastructure, prepared by Psomas

Appendix H Conceptual Hydrology and Low Impact Development Report for Residential Apartment Project Alexan Arcadia, 150 N. Santa Anita Avenue, prepared by Psomas

Appendix M Sewer Area Study for Alexan Arcadia, 150 N. Santa Anita Avenue, prepared by Psomas

Other sources consulted are listed in Section 4.15.8, References.

Comments received in response to the Notice of Preparation (NOP) are summarized in Table 1, Notice of Preparation and Comment Letters Summary, included in Chapter 1, Introduction, of this Draft Environmental Impact Report (EIR). A copy of the NOP is included in Appendix A-1 and the comment letters received in response to the NOP are included in Appendix A-2 of this Draft EIR.

4.15.1 Existing Conditions

Potable Water Supply

Approximately 96 percent of the City is served by the Arcadia water system, which supports approximately 13,400 service connections (City of Arcadia 2013). Other water suppliers in the City include the Sunny Slope Water Company, East Pasadena Water Company, San Gabriel Valley Water Company (SGVWC), California-American Water Company (CAWC), and the Golden State Water Company (GSWC, formerly Southern California Water Company) (City of Arcadia 2013). The City's three main sources of water include groundwater from wells in the Main San Gabriel Basin and the Raymond Basins, and direct delivery of treated imported water from Upper District (wholesaler of imported water). The current and projected water supplies are provided in Table 4.15-1, as included in the City's 2020 Urban Water Management Plan (UWMP).

Table 4.15-1. Arcadia Water Supplies – Current and Projected

Water Supply Source	2020	2025	2030	2035	2045
Groundwater (Raymond Basin)	1,837	3,400	3,400	3,400	3,400
Groundwater (Main Basin)	12,098	11,201	11,408	11,619	12,051
Total (AFY)	**13,935**	**14,601**	**14,808**	**15,019**	**15,451**

Source: City of Arcadia 2021a
Notes: All current and projected water supplies as given as acre-feet per year (AFYU)

The amount of water obtained from each of the City's main water sources varies from year to year and is primarily dependent on weather conditions and demand. Water storage is essential for the City to supply water during high demand conditions and for firefighting and emergencies. The freshwater storage capacities of the Main Basin and Raymond Basin are estimated to be approximately 9.5 million acre-feet (AF) and 8.6 million AF, respectively. In

addition to the City's 14 groundwater wells, the City's water system includes 9 booster pump stations, 15 reservoirs (44.8 million gallons (MG) storage capacity), 3 forebay reservoirs (1.55 MG of storage capacity), and 164.6 miles of water lines (City of Arcadia 2013). The City also has intertie connections with adjacent water agencies for emergency use exchange opportunities (City of Arcadia 2013).

To determine the 20% per-capita water use reduction by the year 2020 required by Senate Bill (SB) x7-7, the City used the California Department of Water Resources (DWR) methods to determine the baseline, interim, and water use target values. The individually calculated baseline for the City is 298 gallons per-capita demand (GPCD), the interim target in 2015 is 268 GPCD, and the target for 2020 compliance is 238 GPCD. The City surpassed the 2015 interim goal, and achieved an actual 2015 GPCD of 247, and has achieved the 2020 target goal of 238. (City of Arcadia 2021a).

Imported Water

The Upper San Gabriel Valley Municipal Water District (the Upper District), the retail supplier of treated imported water to the City of Arcadia, obtains its supply from the Southern California Municipal Water District (MWD) connection (USG- 6) at the northern end of the City (City of Arcadia 2013). MWD obtains water from the State Water Project (SWP), which is the delivery system for water from Northern California through the California Aqueduct (City of Arcadia 2013).

According to DWR's Final State Water Project Delivery Capability Report 2019, there is an approximate 72% likelihood of reliable SWP water delivery under existing conditions (DWR 2020). The City of Arcadia relies largely on groundwater rather than imported water due to the differing quality treatments needed between groundwater and imported water, as well as the higher cost of imported water. Groundwater management, well maintenance, and capital improvement programs by the City have minimized the use of imported water (City of Arcadia 2021a).

Recycled Water

The City of Arcadia currently does not have a direct or indirect recycled water system due to the lack of recycled water mains from downstream wastewater treatment plants to the City. However, the Main Basin Watermaster, which actively manages the basin, has declared its support for a new recycled water supply project for Main Basin replenishment. When completed, the project could supply up to 100 percent of the overall imported replenishment water requirements (City of Arcadia 2021a).

Groundwater

City water wells tap into three adjudicated groundwater basins: East Raymond, West Raymond, and Main San Gabriel (City of Arcadia 2010). The City's water supply is derived from local sources in the underlying groundwater basins and treated imported water through a contract with the Metropolitan Water District of Southern California (MWD).

The Main Basin (adjudicated by the Main Basin Watermaster) is a large groundwater basin replenished by stream runoff from the adjacent mountains and hills, by rainfall directly on the surface of the valley floor, by subsurface inflow from Raymond Basin and Puente Basin, and by return flow from water applied for overlying uses. Additionally, the Main Basin is replenished with imported water. The Main Basin serves as a natural storage reservoir, transmission system, and filtering medium for wells. There are three municipal water districts overlying and/or partially overlying the Main Basin: the Upper District, the San Gabriel Valley Municipal Water District (SGVMWD), and the Three Valleys Municipal Water District (TVMWD) (City of Arcadia 2013)

The Raymond Basin is recharged by the Arroyo Seco, a tributary to the Los Angeles River, and by Eaton Wash, Santa Anita Wash, and other streams in the San Gabriel River watershed. Pumping rights to the Raymond Basin are adjudicated and are managed by the Raymond Basin Management Board. Sixteen parties have rights to pump from the Raymond Basin, which is separated into three major subareas: Monk Hill, Pasadena, and Santa Anita. The City of Arcadia has a decreed right to a certain amount of adjudicated groundwater from the Pasadena and Santa Anita subareas (City of Arcadia 2013).

The City obtains its groundwater supply through 14 active wells, with 8 wells within the Raymond Basin and 6 wells within the Main Basin. As of 2013, the Arcadia water system's total current groundwater pumping capacity was approximately 17,300 AFY from wells in the Main Basin and is approximately 5,760 AFY from wells in the Raymond Basin (City of Arcadia 2013).

Potable Water Demand

The City of Arcadia provides water utility to approximately 58,000 people within its service area, a population that has remained relatively static over the past 10 years (U.S. Census Bureau 2019). Water use in the City, however, has declined in recent years, from approximately 18,000 AF in 2010 to 13,935 in 2020, lowering the per-capita usage from 294 GPCD to 238 GPCD (City of Arcadia 2013, 2021a).

Utility Infrastructure

Water

According to a City of Arcadia records drawing, the potable water infrastructure near the Project site includes an existing 8" cast iron water main with 50 psi static pressure on Santa Clara Street, an 8" cast iron water main with 54 psi static pressure on Wheeler Street and a 30" welded steel water main with 55 psi static pressure on Santa Anita Avenue. These three mains are available for domestic water and/or fire services (Appendix G).

Water for fire suppression is provided by three existing off-site fire hydrants owned by the City of Arcadia. According to existing site plans, two of the existing fire hydrants are adjacent to the single-story bank building (one with Santa Anita Avenue frontage and the other with Santa Clara Street frontage), while the third is adjacent to the two-story commercial building on the northeastern corner of the Project site (Santa Clara Street frontage).

Wastewater Treatment

Sewer/wastewater collection is provided by the City and the Los Angeles County Sanitation Districts (LACSD). The wastewater flow originating from the existing site discharges to an 8-inch City owned and maintained sewer line for conveyance to the LACDS' Arcadia-Sierra Madre Sections 2 and 5 15-inch Trunk Sewer. Sewer laterals are currently available within the developed portions of the site and sewer lines are in streets surrounding the Project site, including Wheeler Avenue (Appendix M).

City Facilities

Local sewer lines are maintained by the City and convey wastewater into trunk lines that are maintained by the LACSD. The City's sewer system has approximately 138 miles of sewer pipes, plus 15 miles of County-owned pipelines, 6 siphons, and 1 pump station. The City of Arcadia's sewer system serves existing developments in the City, with connections to the sewer systems of the Cities of Sierra Madre, Temple City, and Monrovia and unincorporated County areas that allow for sewage conveyance through the Arcadia system to the LACSD sewer trunk lines (discussed below) (City of Arcadia 2013). According to the General Plan 2013 EIR Update, deficiencies in the City's sewer system were identified in at the following locations:

- Huntington Drive, near Campus Drive;
- Colorado Place and Huntington Drive;
- Sixth Avenue;
- Old Ranch Drive, south of the Arboretum; and
- Baldwin Avenue, north of Duarte Road.

In order to address these deficiencies, approximately 1% of the City's existing sewer infrastructure would need to be repaired and/or replaced (City of Arcadia 2013).

The existing buildings on the Project site proposed for demolition are currently served by an existing 8" vitrified clay pipe (VCP) sewer line that runs laterally through the Project site's centerline, south along the off-site alley way, and then east along Wheeler Avenue, where it intersects with a Sanitation District of Los Angeles 15" trunk sewer line running north-south along North First Avenue. All segments of the existing 8" VCP sewer line serving the Project site are below pipe capacity (Appendix M).[1]

Sanitation Districts of Los Angeles County Facilities

The Los Angeles County Sanitation Districts (LACSD) District Nos. 15 and 22 serve the City of Arcadia and the surrounding Cities of Sierra Madre, Temple City, Rosemead, El Monte, San Gabriel, La Puente, and Baldwin Park. The LACSD sewer trunk lines and related facilities serving Arcadia generally convey wastewater southerly on major streets (toward downstream wastewater reclamation plants) and include the Santa Anita Outfall El Monte Avenue trunk sewer, the Arcadia-Sierra Madre trunk sewers, and Peck Road pumping plant (City of Arcadia 2013).

The LACSD operates three wastewater treatment facilities that treat wastewater generated in the City of Arcadia: (1) The San Jose Creek Water Reclamation Plant (SJCWRP), which is located adjacent to the I-605 and Pomona Freeway intersect, and has a design capacity of 100 million gallons of wastewater per day (mgd); (2) the Whittier Narrows Water Reclamation Plant, which is located in South El Monte, and has a design capacity of 15 mgd, and; the Los Coyotes Water Reclamation Plant, which is located in northwest Cerritos, and has a design capacity of 37.5 mgd (LACSD 2021). The wastewater generated by the proposed Project would be treated at the SJCWRP, which currently processes an average flow of 61.2 mgd (Appendix A-2).

Storm Water Drainage

The existing site has existing buildings surrounded by a paved parking lot and slopes gently to the south with a elevation change of approximately 7 feet and an approximate grade of 1.6% (Appendix H). The percentage

[1] The flow capacities of the existing 8" VCP segments serving the Project site vary between 8.71% (0.030 cubic feet per second (CSF)) to 26.96% (0.094 CFS) (Appendix M-Sewer Area Study)

impervious of the existing condition is high and estimated to be 95% impervious. Currently the development site drains via surface runoff into the adjacent Wheeler Avenue to the south and then along Wheeler Avenue as gutter flow until it discharges into the existing storm drain catch basin located at the northeast corner of the intersection of Santa Anita Avenue and Wheeler Avenue (Appendix G).

Electricity

The project site is currently served by Southern California Edison (SCE). SCE serves approximately 180 cities in 11 counties across central and southern California. SCE is the largest electric utility in California, serving more than 15 million people in a 50,000 square mile area of central and southern California (SCE 2021).

SCE provides electrical service to the City of Arcadia, with four substations located within the City (City of Arcadia 2013): (1) Anita Substation (200 West Live Oak Avenue); (2) Arcadia Substation (Second Avenue and St. Joseph Avenue); (3) Mayflower Substation (320 West Jeffries Street); and (4) Michillinda Substation (9185 East Fairview Avenue). Underground and overhead electrical distribution lines are present within City streets and yard easements, and high-voltage transmission lines exist along the I-605 Freeway. Power is provided to the Project site through an existing pole mounted transformer unit on the east side of the site (Appendix G).

The Project also proposes construction of a 100 kilowatt (kW) Solar Ready Zone, which could generate an estimated 161,000 kWh (kilowatt hours) of energy per year (DOE 2021).

Natural Gas

According to the U.S. Energy Information Administration, California used approximately 2,110,829 million cubic feet of natural gas in 2017 (EIA 2019). The majority of California's natural gas customers are residential and small commercial customers (core customers). These customers account for approximately 32% of the natural gas delivered by California utilities (CPUC 2019). Large consumers, such as electric generators and industrial customers (noncore customers), account for approximately 68% of the natural gas delivered by California utilities (CPUC 2019). CPUC regulates California natural gas rates and natural gas services, including in-state transportation over transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. California gas utilities may soon also begin receiving biogas into their pipeline systems (CPUC 2019).

The Gas Company provides natural gas services to the City of Arcadia and provides service connections up to the proposed gas meters on the Project site (Appendix G). There is an existing 2-inch Gas Company gas line along Wheeler Avenue and Santa Clara Street as well as an 8-inch gas main along Santa Anita Avenue (Appendix G).

Telecommunications

Cable and telecommunication services for the Project site would be provided by AT&T and Charter. Various communications service providers exist through existing off-site conduits within South Hill Street and Ninth Street.

Telephone services in the City of Arcadia are provided by AT&T, as the local exchange carrier, and Verizon, as a competitive local exchange carrier. Telecommunications services are offered by Time Warner Cable and Champion Broadband. There are existing telephone, telecommunication, and cable television lines and facilities throughout the City.

Solid Waste

Waste Collection and Transport

Solid Waste

Solid waste disposal is provided by the City of Arcadia Waste Management for collection and County Sanitation District for landfill.

Solid waste collection services in the City are provided by private haulers for disposal at area landfills. Waste Management, Inc. (WM) serves single-family residential uses, while multi-family and non-residential residential solid waste, including waste generated by demolition and/or construction activities, is disposed of through contracts with Republic Services, Waste Management Inc., and Valley Vista Services (City of Arcadia 2021b). These waste management services offer waste and recycling collection, green waste recycling programs, organics waste composting, special waste transportation, and transfer and materials recovery services to the City as well as many other areas in Southern California (City of Arcadia 2013).

Hazardous Waste

According to Section 4.7, Hazards, of the Arcadia General Plan 2013 Update EIR, the City has adopted the Los Angeles County Hazardous Waste Management Plan, which requires businesses that handle, store, or generate hazardous materials to obtain hazardous material handler permits and prepare risk management plans based on the amount of hazardous materials on site.

Hazardous waste associated with construction activities, as well as any industrial and/or commercial users, is subject to a number of existing regulations outlining proper disposal, including the Hazardous Material Transportation Act, the Resource Conservation and Recovery Act, the California Hazardous Waste Control Act ,a Certified Unified Program Agency (CUPA)), and the California Accidental Release Prevention Program. For further discussion of hazardous waste disposal, please see Section 4.7, Hazards and Hazardous Materials, of this EIR.

The County Department of Public Works' Hazardous Waste Management Division is responsible for Household Hazardous Waste (HHW) Disposal, including the collection of paints, oils, or pesticides that require special handling.

Landfills

Solid waste that is not hazardous is transported to municipal landfills. The only permitted and active disposal facility within 25 miles of the Project site is the Azusa Land Reclamation Landfill, located approximately 6 miles east of the Project site (WM 2021).

Construction waste is typically disposed of at inert landfills, which are facilities that accept materials such as soil, concrete, asphalt, and other construction and demolition debris. The Azusa Land Reclamation Landfill only accepts inert waste. The landfill has a maximum permitted daily capacity of 8,000 tons of waste and receives an average of 1,356 tons of inert waste per day. The landfill has a remaining capacity of 51,512,201 cubic yards and is expected to remain open for approximately 24 years, as of 2021 (CalRecycle 2021)

4.15.2 Relevant Plans, Policies, and Ordinances

Federal

National Pollutant Discharge Elimination System Permit Program

The National Pollutant Discharge Elimination System (NPDES) permit program was established as part of the Clean Water Act (CWA) to regulate municipal and industrial discharges to surface waters of the United States. A discharge from any point source is unlawful unless the discharge is in compliance with an NPDES permit. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities. The City of West Hollywood, along with the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the coastal watersheds of Los Angeles County are permittees under the NPDES Permit for Municipal Separate Storm Sewer System (MS4) discharges within the Coastal Watersheds of Los Angeles County (Order No. R4-2012-0175, NPDES Permit No. CAS004001).

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (Code Fed. Regs., Title 40, Section 268, Subpart D), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs that include federal landfill criteria. The federal regulations address the location, operation, design, and closure of landfills, as well as groundwater monitoring requirements.

State

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates natural gas utility rates and services provided by SoCal Gas, among many other gas utilities. The natural gas services regulated by CPUC include in-state transportation of natural gas over the utilities' extensive transmission and distribution pipeline systems, gas storage, procurement, metering and billing. The CPUC ensures that intra-state natural gas and liquid petroleum gas pipeline systems are designed, constructed, operated, and maintained according to safety standards set by the CPUC and the federal government. The CPUC enforces natural gas and liquid petroleum gas safety regulations; inspects construction, operation, and maintenance activities; and makes necessary amendments to regulations to protect and promote the safety of the public, the utility employees that work on the gas pipeline systems, and the environment. State and federal regulators are tasked with ensuring that pipeline and hazardous materials operators have risk management programs in place, that those programs are designed in conformance with state and federal laws and regulations, that the programs are effective in enhancing public safety, the operator's employees safety, environmental safety, and that the safety of the entire system and operation continues to improve. The CPUC conducts operation and maintenance compliance inspections, accident investigations, reviews utilities' reports and records, conducts construction inspections, conducts special studies, and takes action in response to complaints and inquiries from the public on issues regarding gas pipeline safety.

California Urban Water Management Plan (California Water Code Sections 10610-10656)

The California Urban Water Management Planning Act (California Water Code Division 6, Part 2.6, Sections 10610–10656) addresses several state policies regarding water conservation and the development of water management plans to ensure the efficient use of available supplies. The California Urban Water Management Planning Act also requires Urban Water Suppliers to develop UWMPs every 5 years to identify short-term and long-term demand management measures to meet growing water demands during normal, dry, and multiple-dry years. Urban Water Suppliers are defined as water suppliers that either serve more than 3,000 customers or provide more than 3,000 AFY of water to customers.

California Safe Drinking Water Act of 1976

California enacted its own Safe Drinking Water Act in 1976. As of July 2014, the State Water Resources Control Board is responsible for the administration of the California Safe Drinking Water Act. Title 22 of the California Administrative Code establishes the California Department of Public Health authority and stipulates drinking water quality and monitoring standards. These standards are equal to or more stringent than the federal standards.

Regional Water Conservation

SB X7-7, also known as the Water Conservation Act of 2009, was enacted in November 2009 and requires that all water suppliers increase water use efficiency. The main features of this legislation are divided into two sectors, Urban Water Conservation and Agricultural Water Conservation. The law requires, among other things, that the Department of Water Resources, in consultation with other state agencies, develop a single standardized water use reporting form to be used by both urban and agricultural water agencies.

Senate Bill 610 and Senate Bill 221

SB 610 and SB 221 became effective January 1, 2002, amending Sections 10910–10915 of the State Water Code, and requiring that counties and cities consider the availability of adequate water supplies for certain new large development projects. These statutes require that cities and counties obtain from the local water supplier written verification of sufficient water supply to serve proposed large development projects in their jurisdiction. Pursuant to SB 610, the types of projects that are required to obtain Water Supply Assessments include the following:

- A proposed residential development of more than 500 dwelling units
- A proposed shopping center or business establishment of more than 500,000 square feet of floor space or employing more than 1,000 persons
- A proposed commercial office building of more than 250,000 square feet of floor space of employing more than 1,000 persons
- A proposed hotel or motel of more than 500 rooms
- A proposed industrial, manufacturing, or processing plant or industrial park of more than 40 acres of land, more than 650,000 square feet of floor areas, or employing more than 1,000 persons
- A mixed-use project that falls in one or more of the above-identified categories
- A project not falling in one of the above-identified categories but that would demand water equal to or greater than that required by a 500-dwelling unit project

The requirements of SB 221 and SB 610 have also been incorporated into the Subdivision Map Act, which provides that "[t]he legislative body of a city or county or the advisory agency, to the extent that it is authorized by local ordinance to approve, conditionally approve, or disapprove the tentative map, shall include as a condition in any tentative map that includes a subdivision a requirement that a sufficient water supply shall be available" (see California Government Code Section 66473.7[b][1]). The public water system's written verification of either its ability or inability to provide sufficient water supplies to meet the projected demand must be supported by "substantial evidence." The "substantial evidence" may include any of the following: (1) the public water system's most recently adopted UWMP; (2) a Water Supply Assessment completed pursuant to Water Code Section 10910; or (3) other information relating to the sufficiency of the water supply that contains analytical information that is substantially similar to the assessment required by Section 10635 of the Water Code (see California Government Code Section 66473.7[c]).

Senate Bill X7-7

Senate Bill (SB) X7-7 implements water use reduction goals to achieve a 20% statewide reduction in urban per capita water use by December 31, 2020. The bill requires each urban retail water supplier to develop urban water use targets to help meet the 20% goal by 2020 and an interim 10% goal by 2015. The bill establishes methods for urban retail water suppliers to determine targets to help achieve reductions in water use. The retail agency may choose to comply with SB X7-7 as an individual or as a region in collaboration with other water suppliers. Under the regional compliance option, the retail water supplier must report the water use target for its individual service area.

Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package—AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley)—collectively known as the Sustainable Groundwater Management Act (SGMA). SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, the California Department of Water Resources provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form Groundwater Sustainability Agencies (GSAs) to manage basins sustainably and requires those GSAs to adopt Groundwater Sustainability Plans (GSPs) for medium- and high-priority groundwater basins in California.

In accordance with SGMA, California's Department of Water Resources has determined that the Hollywood Subbasin has a very low priority in regard to enacting a Groundwater Sustainability Plan. This is because less than 9,500 AFY is withdrawn from the Hollywood Subbasin, and there are no documented impacts, such as significant and unreasonable declines in groundwater levels, depletion of groundwater in storage, depletion of interconnected surface waters, etc. The groundwater use within the Hollywood Subbasin is low because overlying land uses rely primarily on imported water sources and are served by municipal water rather than domestic groundwater wells. Basins designated by DWR as very low priority are not required to prepare and implement a Groundwater Sustainability Plan (CDWR 2019). However, this does not preclude a Groundwater Sustainability Plan from being developed for the basins on a voluntary basis. The Central Basin, including the La Brea Subarea, was considered to be a high priority basin by the California Department of Water Resources (City of Beverly Hills 2021). However, in lieu of creating a Groundwater Sustainability Plan for the La Brea Subarea, the City of Beverly Hills and other stakeholders opted to develop an alternative analysis demonstrating that the La Brea Subarea is now and has been

sustainable for the last 40 years. This alternative analysis satisfies the objectives of the SGMA legislation (City of Beverly Hills 2016b). The La Brea Subarea is now designated as "very low priority" by the California Department of Water Resources (CDWR 2019; City of Beverly Hills 2021).

Assembly Bills 939 and 341: Solid Waste Reduction

The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939) was enacted as a result of a national crisis in landfill capacity, as well as a broad acceptance of the desired approach to solid waste management of reducing, reusing, and recycling. AB 939 mandated local jurisdictions to meet waste diversion goals of 25% by 1995 and 50% by 2000 and established an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. AB 939 requires cities and counties to prepare, adopt, and submit to the California Department of Resources Recycling and Recovery (CalRecycle) a source reduction and recycling element to demonstrate how the jurisdiction will meet the diversion goals. Other elements included encouraging resource conservation and considering the effects of waste management operations. The diversion goals and program requirements are implemented through a disposal-based reporting system by local jurisdictions under California Integrated Waste Management Board (CIWMB) regulatory oversight. Since the adoption of AB 939, landfill capacity is no longer considered a statewide crisis. AB 939 has achieved substantial progress in waste diversion, program implementation, solid waste planning, and protection of public health, safety, and the environment from landfills operations and solid waste facilities.

In 2011, AB 341 was passed, requiring CalRecycle to require that local agencies adopt strategies that will enable 75% diversion of all solid waste by 2020.

Senate Bill 1374: Construction and Demolition Waste Reduction

SB 1374 requires that annual reports submitted by local jurisdictions to CIWMB include a summary of the progress made in diversion of construction and demolition waste materials. In addition, SB 1374 requires the CIWMB to adopt a model ordinance suitable for adoption by any local agency that required 50% to 75% diversion of construction and demolition waste materials from landfills. Local jurisdictions are not required to adopt their own construction and demolition ordinances, nor are they required to adopt CIWMB's model by default.

Assembly Bill 1327: California Solid Waste Reuse and Recycling Access Act of 1991

AB 1327, which was established in 1991, required CalRecycle to develop a model ordinance for the use of recyclable materials in development projects. Local agencies were then required to adopt the model ordinance, or an ordinance of their own, governing adequate areas for collection and loading of recyclable materials in development projects.

Assembly Bill 1826: Mandatory Commercial Organics Recycling

In October 2014, Governor Brown signed AB 1826 Chesbro (Chapter 727, Statutes of 2014), requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste generated per week. (Organic waste is defined as food waste, green waste, landscape, and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.) This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. This law phases in the mandatory recycling of commercial organics over time. In particular, the minimum threshold of organic waste generation by businesses

decreases over time, which means an increasingly greater proportion of the commercial sector will be required to recycle organic waste.

California Code of Regulations

Title 20, Division 2, Article 4, Appliance Efficiency Regulations

Title 20, Division 2, Article 4, Section 1605.3 establishes water efficiency standards (i.e., maximum flow rates, maximum gallons per flush) for all new plumbing fittings and fixtures (e.g., showerheads, sink faucets, water closets, urinals). Among the standards, the maximum flow rate for showerheads and lavatory faucets manufactured after July 1, 2018 are 1.8 gallons per minute at 80 pounds per square inch with an optional temporary flow of 2.2 gallons per minute at 60 pounds per square inch for kitchen faucets and aerators. The standard for public lavatory faucets and aerators is 0.5 gallons per minute at 60 pounds per square inch. The standard for water closets and urinals is 1.28 gallons per flush. In addition, Section 1605.3(h) establishes state efficiency standards for non-federally regulated plumbing fittings, including commercial pre-rinse spray valves.

Title 22, Division 4, Chapter 3, Water Recycling Criteria

Title 22 regulates the sources, production and use of reclaimed water in California. In addition to defining reclaimed water uses, Title 22 also defines requirements for dual plumbed recycled water systems, indirect use for groundwater replenishment, required methods of treatment, sampling and analysis of effluent, specific design requirements for facilities, and reliability requirements for permitted uses.

Title 24 Energy Efficiency Standards

California's Energy Efficiency Standards for Residential and Non-residential Buildings was established in 1978 in response to a mandate to reduce the State's energy consumption. These standards are promulgated under California Code of Regulations Title 24, Part 6 and are commonly referred to as "Title 24". The Title 24 standards are periodically updated to reflect new or improved energy efficiency technologies and methods. The 2008 Standards went into effect on January 1, 2010 and supersede the 2005 Standards. The 2008 standards are responsive to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates reductions in greenhouse gas emissions, as well as other State mandates. A new development project is required to incorporate the most recent Title 24 standards in effect at the time the building permit application is submitted.

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

The purpose of the California Green Building Standards Code (CALGreen) 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 reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. CALGreen includes both mandatory measures as well as voluntary measures. The mandatory measures establish minimum baselines that must be met for a building to be approved. Per CALGreen standards, 65% of construction and demolition (C&D) waste from new construction must be diverted from landfills and either recycled or salvaged for reuse. The voluntary measures can be adopted by local jurisdictions for greater efficiency.

Section 5.408, Construction Waste Reduction, Disposal and Recycling, of CALGreen outlines three methods of compliance for the C&D diversion requirement, with two options below being potentially applicable to the proposed

Project. First, owners/builders can comply with the C&D diversion requirement by developing and submitting a construction waste management plan to the City that identifies the C&D waste materials to be diverted from disposal by recycling, reuse on the project, or salvage. Alternately, owners/builders may use a waste management company that can provide verifiable documentation that the percentage of C&D waste material diverted from the landfill meets CALGreen's 65% requirement.

Title 24, Building Standards Code, Part 5, California Plumbing Code

The 2019 California Plumbing Code sets forth safety requirements and regulations for plumbing systems, including but not limited to plumbing fixtures and fittings, water heaters, water supply and distribution systems, sanitary drainage, indirect wastes (e.g., food preparation), vents, traps and interceptors, storm drainage, fuel gas piping, health care facilities, firestop protection, alternative water sources for non-potable applications, and non-potable rainwater catchment systems. It also sets forth efficiency standards (i.e., maximum flow rates) for all new federally regulated plumbing fittings and fixtures, including showerheads and lavatory faucets.

Title 27, Environmental Protection, Division 2, Solid Waste

Title 27 of the sets forth regulatory standards promulgated by the CIWMB that apply to all disposal sites meaning active, inactive closed or abandoned. It governs the handling and disposal of solid waste and operation of landfills, transfer stations, and recycling facilities.

Executive Order B-29-15

Building upon the Governor's Emergency Proclamations, issued on January 17, 2014 and April 25, 2014, which declared a drought state of emergency for Californians to reduce their water usage by 20%, and strengthened the state's ability to manage water and habitat effectively in drought conditions, the Governor issued Executive Order B-29-15 on April 1, 2015, directing the SWRCB to impose restrictions to achieve a Statewide 25% reduction in potable urban water usage. In response, the California Energy Commission approved standards for water applicants that requires water appliances to consume less water, including the following:

- Toilets and urinals, except those designed for prisons or mental health facilities. Toilets shall not consume more than 1.28 gallons per flush and shall have a waste extraction score of no fewer than 350 grams. Urinals shall not consume more than 0.125 gallons per flush. (These facilities have specially-designed toilets and urinals to address security and health issues.)
- Residential lavatory faucets shall not exceed 1.2 gallons per minute flow rate.
- Kitchen faucets shall not exceed 1.8 gallons per minute flow rate and may have capability to increase to 2.2 gallons per minute momentarily for filling pots and pans.
- Public lavatory faucets shall not exceed 0.5 gallon per minute flow rate (SCEC 2015).

In response to the statewide conservation mandates, Californians reduced water use by 23.9% between June 2015 and March 2016, compared with the same months in 2013.

Regional

Integrated Water Resources Plan

The MWD's Integrated Water Resources Plan (IRP) is the long-term water resources strategy for the MWD in Southern California. As it was first adopted in 1996, the goal of the IRP has been to ensure that a reliable water system will extend into the future. The 2015 IRP Update, adopted in January 2016, provides MWD's strategy for water resource reliability through the year 2040 and establishes targets for a diversified portfolio of water supply investments. The 2015 IRP Update calls for stabilizing and maintaining imported water supplies; meeting future growth through increased water conservation and sustaining and developing new local supplies; pursuing a comprehensive transfers and exchanges strategy; building storage in wet and normal years to manage risks and drought; and preparing for uncertainty with Future Supply Actions. Overall, the strategies presented in the 2015 IRP Update include investments to maintain the reliability of imported water supplies, expansion of local water supplies and reduction in water demand through a variety of conservation and water use efficiency initiatives. The 2020 IRP is under preparation at the time of this analysis.

Urban Water Management Plans

Urban water purveyors are required to prepare and update an UWMP every 5 years, based upon city growth projections included within general plans. The City of Beverly Hills, which provides water service to a portion of the City of West Hollywood (including the project site), updates its UWMP as required, drawing in part upon the City of West Hollywood's growth projections. UWMPs are required to provide a framework for long term water planning and to inform the public of the supplier's plans to ensure adequate water supplies for existing and future demands. UWMPs are required to assess the reliability of the agency's water supplies over a 20-year planning horizon and report its progress on 20% reduction in per-capita urban water consumption by the year 2020, as required in by SB X7-7. The California Department of Water Resources reviews agency UWMPs to ensure that UWMP requirements are completed.

MWD 2020 Regional Urban Water Management Plan

The MWD 2020 Regional Urban Water Management Plan provides an assessment and summary of MWD's water service reliability outlook through 2045. In the 2020 UWMP, MWD has determined that it has supply capabilities sufficient to meet expected demands from 2025 through 2045 under a single-dry year condition and a multiple-dry year condition. MWD has plans for supply implementation and continued development of a diversified resource portfolio including programs in the Colorado River Aqueduct, State Water Project, Central Valley storage and transfers programs, local resource projects, and in-region storage that would enable the region to meet its water supply needs. MWD has also developed comprehensive plans for stages of actions it would undertake to address frequent and severe periods of droughts, consisting of six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50% shortages and greater than 50% shortages.

In its 2020 UWMP, MWD estimates that water use in its service area has decreased by 34% relative to its established baseline levels, thereby exceeding the 20% target reduction set by SB X7-7. As reported in the 2020 UWMP, MWD plans to continue investing in water efficiency measures that have helped the region achieve and exceed the target reductions.

MWD continues to set forth plans for emergency and catastrophic scenarios and has recently revised an Emergency Storage Objective to manage against potential interruption in water supplies resulting from catastrophic

occurrences within the southern California region, including seismic events. In addition, MWD continues to work with the State on the Delta Risk Management Strategy to reduce the impacts of a seismic event in the Delta that would cause levee failure and disruption of State Water Project deliveries (MWD 2021a).

Upper District's 2020 Urban Water Management Plan

The 2020 Urban Water Management Plan (UWMP) for the Upper District was prepared in compliance with the Urban Water Management Planning Act (Act), per Division 6 of the California Water Code, Sections 10610 to 10657, which has been most recently amended by SB 606 in 2018. The Act requires every "urban water supplier" to prepare and adopt a UWMP and to review it at least once every five years and make any amendments and changes which are required by the review

The UWMP addresses the future of the Upper District's water supplies and demand through the year 2045. As a member agency of MWD, the Upper District provides wholesale potable water to 18 cities and portion of unincorporated Los Angeles County through municipal water departments, investor-owned water companies and landowner held mutual water companies that in turn provide the water at retail water rates to their residential, commercial, and industrial customers. The Upper District's144-square-mile service area includes approximately one 876,069 residents in communities throughout northeastern Los Angeles County, including the City of Arcadia. The service population is projected to grow from 876,069 residents in 2020 to an estimated 949,791 in 2045, however, the UWMP estimates that total water demand will decrease by approximately 27% in this period, from 34,642 AF in 2020 to 25,366 AF in 2045 (Upper Districts 2021).

MWD Integrated Resources Plan

MWD first adopted its Integrated Resources Plan (IRP) in 1996, followed by updates every five years. The IRP 2015 Update, which was adopted in 2016, demonstrates how MWD plans to develop its water resource supply portfolio until the year 2040, including planning for hydrologic, regulatory, and other types of uncertainties. Under the strategy of the IRP 2015 Update, MWD will continue to look locally to close the gap between supply and demand, while making the necessary investments and initiatives to maintain the reliability of imported supplies. Overall, the strategies presented in the IRP 2015 Update are projected to meet the future water supply needs of southern California and identify measures that MWD can take in order to swiftly respond to the uncertainties that exist with water resource programs (MWD 2016). The 2020 IRP is currently underway and will continue to provide a blueprint for long-term water supply reliability in southern California. The 2020 plan will be a new IRP (as opposed to an update) and will incorporate different scenarios for the future, for a long-term, diversified strategy (MWD 2021b).

MWD Water Surplus and Drought Management Plan

In 1999, MWD incorporated a water shortage contingency analysis, which is required as part of any urban water management plan, into a separate, more detailed plan, called the Water Surplus and Drought Management (WSDM) Plan. The overall objective of the WSDM Plan is to ensure that shortage allocation of MWD's imported water supplies is not required. The WSDM Plan provides policy guidance to manage MWD's supplies and achieve the goals laid out in the agency IRP. The WSDM Plan separates resource actions into two major categories: Surplus Actions and Shortage Actions. The WSDM Plan considers the region to be in surplus only after MWD has met all demands for water, including replenishment deliveries. The Surplus Actions store surplus water; first inside and then outside of the region. The Shortage Actions of the WSDM Plan are separated into three subcategories: Shortage, Severe Shortage, and Extreme Shortage. Each category has associated actions that could be taken as a part of the

response to prevailing shortage conditions. Conservation and water efficiency programs are part of MWD's resource management strategy through all categories.

MWD Water Supply Allocation Plan

While the WSDM includes a set of general actions and considerations for MWD staff to address during water shortage conditions, that plan did not include a detailed water supply allocation plan or implementation approach. Therefore, MWD adopted the Water Supply Allocation Plan in February 2008, which has been implemented three times, with the most recent implementation in April 2015. The Water Supply Allocation Plan includes a formula for determining reductions of water deliveries to member agencies during extreme water shortages conditions (i.e., drought conditions or unforeseen cuts in water supplies) in MWD's service area. The formula allocates shortages of MWD supplies and seeks to balance the impacts of a shortage at the retail level, while maintaining equity on the wholesale level, and takes into account growth, local investments, changes in supply conditions, the demand aspects of nonpotable recycled water use, and the implementation of conservation savings programs. The allocation period covers 12 consecutive months, from July of a given year through the following June.

Sanitation Districts of Los Angeles County Wastewater Ordinance

In 1972, the Sanitation Districts of Los Angeles County (LACSD) adopted a Wastewater Ordinance, which was most recently amended in 1998, for the operation and financing of the LACSD's wastewater conveyance, treatment, and disposal facilities. The Wastewater Ordinance applies to all direct and indirect discharges of wastewater to any part of the sewerage system and regulates industrial wastewater discharges to protect the public sewerage system. The LACSD also charges Connection Fees and Surcharges. The Surcharge program requires all industrial companies discharging to the LACSD's sewerage system to pay their fair share of the wastewater treatment and disposal costs. The Connection Fee program requires all new users of the LACSD's sewerage system, as well as existing users that significantly increase the quantity or strength of their wastewater discharge, to pay their fair share of the costs for providing additional conveyance, treatment, and disposal facilities. The LACSD uses the fees for the expansion and improvement of their facilities, as needed, to serve existing and anticipated developments (LACSD 1998).

Municipal Separate Storm Sewer System (MS4) Permit

In 2001, the Los Angeles RWQCB (LARWQCB) issued an NPDES Permit and Waste Discharge Requirements (Order No. 01-182; NPDES No. CAS0041) (Los Angeles County MS4 Permit) under the Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act for discharges of urban runoff in public storm drains in Los Angeles County. The Los Angeles County MS4 Permit has been amended several times, most recently December 10, 2010, by Order No. R4-2009-0130. The City of Arcadia is within the jurisdiction of the LARWQCB and is subject to the waste discharge requirements of the Los Angeles County MS4 Permit. The County of Los Angeles and cities within the County are Co-permittees under the MS4 permit and have legal authority to enforce the terms of the permit in their jurisdictions.

Local

City of Arcadia General Plan

Policy CI-9.6: Require developers to pay the full costs associated with water system improvements needed specifically to service their development, as well as fair-share costs for enhancements identified in the Water Master Plan and Capital Improvement and Equipment Plan.

Policy CI-9.10: Support regional efforts to use recycled water to recharge groundwater basins.

Goal CI-10: A local wastewater collection system that provides quality service equally to all areas of Arcadia

Policy CI-10.2: Provide adequate capacity to convey all sewage flows.

Policy CI-10.5: Require developers to pay the full costs associated with sewer system improvements needed specifically to service their development, as well as fair-share costs for enhancements identified in the Capital Improvement and Equipment Plan.

Goal CI-11: Storm drain infrastructure that minimizes regional and localized flood hazards

Policy CI-11.5: Require developers to pay the full costs associated with storm drain system improvements needed specifically to service their development, as well as fair-share costs for enhancements identified in the Capital Improvement and Equipment Plan.

Policy CI-13.2: Continue to enforce City ordinances that facilitate the placement of utilities and telecommunications facilities in a manner that minimizes visual impact.

Policy CI-13.3: Continue to require the placement of utilities underground for all new developments.

City of Arcadia Municipal Code

Article VII, Chapter 4 of the Arcadia Municipal Code regulates sewer line design, connection to the City's sewer system, fees, and permits. Article VII, Chapter 5 of the Arcadia Municipal Code regulates water system connection and fees, with Part 5 addressing water use and the City's Water Conservation Ordinance and Water Efficient Landscaping Ordinance.

The City's Zoning Regulations (Article IX, Chapter 2 of the Arcadia Municipal Code) contains standards for the provision of recyclables collection and loading areas, which require lots developed with more than one dwelling unit and non-residential developments to provide an area for the collection and loading of recyclables.

Building regulations in Arcadia are specified in Article VIII, Sections 8010–8927 of the Arcadia Municipal Code, which includes adoption of the 2019 California Building Code, California Plumbing Code, California Electrical Code, and California Mechanical Code. Standard residential, commercial, and light industrial construction is governed by the CBC, which the City has amended and to which the City has provided additions that make the building regulations more stringent to specifically address geologic and wildfire considerations in the City.

City of Arcadia Water Efficient Landscaping Ordinance

In accordance with the Water Conservation in Landscaping Act of 2006, the City of Arcadia adopted a Water Efficient Landscaping Ordinance in December 2009, which was added into the City's Municipal Code as Article VII, Chapter 5, Division 4. The ordinance regulates new construction and rehabilitated landscapes for public agency projects and private non-residential development projects with landscaped areas of 2,500 square feet or more; developer-installed residential landscape areas of 2,500 square feet or more; homeowner-installed residential landscape areas of 5,000 square feet or more; existing landscape areas of 1 acre or more; and special landscaped areas (such as areas dedicated to edible plants, areas irrigated with recycled water, or areas dedicated to active play). The regulations include standards for plant selection and grouping, water features, irrigation requirements, and soil and grading requirements.

City of Arcadia Urban Water Management Plan

The 2020 UWMP for the City of Arcadia was prepared to meet the mandates of the California Urban Water Management Planning Act. The UWMP identifies historic and projected water supplies available to the City of Arcadia; existing and projected water demand; available water rights; and programs to meet demand during an average year, single-dry year, and multiple-dry years. The UWMP is the foundational document for compliance with both California Water Code Sections from SB 610 and SB 221 for projects in the City. The City of Arcadia water system's water supply sources include groundwater rights in both the Main Basin and Raymond Basin and direct delivery of treated imported water from the Metropolitan Water District of Southern California (MWD) through Upper San Gabriel Valley Municipal Water District (Upper District). As an MWD member agency, Upper District receives water from MWD. As an Upper District member agency, the Arcadia water system receives water from MWD through Upper District.

Historical prolonged droughts have caused groundwater levels to decrease resulting in the Raymond Basin Management Board to temporarily reduce the amount of groundwater which may be produced. The decreased production is designed to promote recovery of groundwater levels. At such time the groundwater levels have recovered the program may be suspended, but can be reinstated as needed in the event groundwater levels decrease in the future. Recognizing allowed pumping is limited, the City along with other Raymond Basin producers have taken steps to reduce water demands to address the potential gap between supply and demand in the event demands cannot be entirely reduced. The City has production facilities in the Main Basin and has the ability to shift production, if needed. In addition, the City has a treated water connection and has access to MWD water as an additional source of supply (Arcadia 2021a).

City of Arcadia Water Shortage Contingency Plan (2020)

The City's Water Shortage Contingency Plan is a detailed approach which presents how the City intends to act, or respond, in the case of an actual water shortage contingency. The City will manage water supplies to minimize the adverse impacts of water shortages. The plan for water usage during periods of shortage is designed to incorporate six standard water shortage levels corresponding to progressive ranges from up to a 10, 20, 30, 40, and 50 percent shortage, and greater than a 50 percent shortage. For each declared water supply shortage level, customers would be required to reduce their consumption by the percentage specified in the corresponding water supply shortage level. [2] ~~Figure~~ Table 4.15-~~12~~2, Water Shortage Contingency Planning Levels-UWMP, summarizes the water rationing stages and reduction goals.

[2] Starting July 1, 2022, in addition to preparation of a contingency plan, the City will be required to submit an "Annual Water Supply and Demand Assessment" (Annual Assessment) in accordance with Department of Water Resources' (DWR's) guidance and requirements. The Annual Assessment will include a review of the City's unconstrained water demands (i.e., water demands prior to any projected response actions the City may trigger under this Water Shortage Contingency Plan) for the current year and the upcoming (potential single dry) year. The City will also include information regarding anticipated shortages, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the City's Water Shortage Contingency Plan.

Table 4.15-2. Water Shortage Contingency Planning Levels- UWMP

Shortage Level	Percentage Shortage Range	Shortage Response Action
1	Up to 10%	The following prohibitions are to be implemented during a Shortage Level 1: (a) Prohibit use of potable water for washing hard surfaces (b) Restrict or prohibit runoff from landscape irrigation (c) Restrict water use for decorative water features, such as fountains (d) Lodging establishment must offer opt out of linen service (e) Restaurants may only serve water upon request (f) No customer shall permit water to leak from any facility on his premises. (g) Limit landscape irrigation to specific times (h) No landscape irrigation during and within 48 hours after measurable rainfall (i) Limit landscape irrigation to specific days (j) No lawn, landscape or other turf areas shall be watered in a wasteful manner
2	Up to 20%	No use of water may be made contrary to the provisions of Shortage Level 1. No customer shall make, cause use or permit the use of water from the Water Division for any purpose in an amount in excess of eighty percent (80%) of the amount used during the base period
3	Up to 30%	No use of water may be made contrary to the provisions of Shortage Level 2. No customer shall make, cause use or permit the use of water from the Water Division for any purpose in an amount in excess of seventy percent (70%) of the amount used during the base period
4	Up to 40%	No use of water may be made contrary to the provisions of Shortage Level 3. No customer shall make, cause use or permit the use of water from the Water Division for any purpose in an amount in excess of sixty percent (60%) of the amount used during the base period
5	Up to 50%	No use of water may be made contrary to the provisions of Shortage Level 4. No customer shall make, cause use or permit the use of water from the Water Division for any purpose in an amount in excess of fifty percent (50%) of the amount used during the base period
6	Greater than 50%	No use of water may be made contrary to the provisions of Shortage Level 5. No customer shall make, cause use or permit the use of water from the Water Division for any purpose in an amount more than fifty percent (50%) of the amount used during the base period

Source: City of Arcadia 2021a

Sewer Master Plan and Hydraulic Modeling

The City's Sewer Master Plan that was completed in February 2006 provides a hydraulic analysis of the City's sewer system; identifies the necessary system improvements; evaluates operation and maintenance needs; and develops a sewer rate structure to pay for services and system improvements.

The hydraulic analysis of the City's sewer system identified a number of pipe segments that had capacity limitations during dry weather conditions and that needed increases in pipe diameter to eliminate these limitations. Sewer pipes are proposed for replacement with larger pipes at various locations throughout the City. Surcharging in the trunk lines of the LACSD was also identified due to restrictions in the County's sewer trunk capacities, which require

upgrades to the LACSD trunk lines. Re-lining or replacement of the City's sewer pipes is needed where root intrusions and structural damage were identified by closed-circuit television (CCTV) inspection of the system. Relief of bends where backups occur, gates and paths for easier easement access, new equipment, and temporary staffing are also recommended to resolve known problem areas.

The Master Plan projects a 0.5 percent growth in new connections due to the development of vacant lots and the redevelopment and intensification of currently developed lots over the next 20 years. This projection was used to develop the sewer rate structure that would allow for the capture of costs for system maintenance and improvement. Considering the estimated costs to implement the recommended system improvements, the Master Plan recommends a one-time increase in sewer rates followed by annual rate increases or a delayed implementation schedule for the improvements with a more frequent maintenance schedule. The City adopted new sewer rates in June 2006, as recommended by the Sewer Master Plan.

City of Arcadia Sewer System Management Plan (2014)

On May 2, 2006, the State Water Resources Control Board (SWRCB) adopted Order No. 2006-0003, a General Waste Discharge Requirement (WDR) for all publicly owned sanitary sewer collection systems in California with more than one (1) mile of sewer pipe. The critical component of Order No. 2006-0003 is the development of a Sewer System Management Plan (SSMP). The SSMP serves as a document to properly manage and operate the sewer system. There are eleven (11) milestones identified in the that relate to the elements required in the WDR, including completion of an Operation and Maintenance Plan, Design and Performance Standards, Overflow Emergency Response Plan, Fats, Oils and Grease Control Plan, System Evaluation and Capacity Assurance Plan, Monitoring, Measurement and Program Modifications, and the final SSMP, incorporating all SSMP element. According to the SSMP, sewer system design standards must be in accordance with the City of Arcadia "Sewer Master Plan", good engineering practices, and the Sewer Design and Performance Standards Manual.

4.15.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to utilities and service systems are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to utilities and service systems would occur if the project 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.
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

4.15.4 Impacts Analysis

Threshold 4.15a Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Water Conveyance

As discussed, the City of Arcadia is its own water supplier, approximately 96 percent of the population living within the City's sphere of influence is served by the Arcadia water system, which supports approximately 13,400 service connections (City of Arcadia 2013). The City primarily sources its water from the San Gabriel Valley and Raymond Groundwater Basins, as well as from water imported from the Upper District.

The City's water distribution infrastructure comprises 164.6 miles of water lines (City of Arcadia 2013). According to the Report of Existing Infrastructure contained in Appendix G, the water lines closest to the Project site include an 8-inch cast iron water main with 50 psi static pressure on Santa Clara St, an 8-inch cast iron water main with 54 psi static pressure on Wheeler St and a 30-inch welded steel water main with 55 psi static pressure on Santa Anita Ave. These three mains are available for domestic water and/or fire services. The water service connection for domestic water and fire protection within the proposed Project site would be made to one or more of the existing City water lines the development area. The specific location of these connections and pipe sizing would be based upon the City's approval.

The proposed Project would increase water demand on the Project site relative to existing conditions, due to the proposed increase in land use intensity. As such, the Project would place additional demands on the existing water infrastructure that serves the area. To determine the potential constraints on the existing water infrastructure that could be caused by the proposed Project, water flow requirements were measured against the available water flow from the existing infrastructure. The size requirements for the water infrastructure would be based on the calculations summarized in Table 4.15-3.

Table 4.15-3 Anticipated Project Water Demand and Wastewater Generation

	Water Demand					*Wastewater Generation*		
Unit Type	Unit Count	Demand Factor (GPD/unit) [1]	Annual Gallons	Average GPD [2]	Peak GPD [3]	Load Factor (% Average GPD)	Average GPD	Peak GPD
Studio	64	120	2,803,200	7,680	15,360	90%	6,912	20,736
Live/Work	8	120	350,400	960	1,920	90%	864	2,592
One-Bedroom	168	120	7,358,400	20,160	40,320	90%	18,144	54,432
2-Bedroom	79	180	5,190,300	14,220	28,440	90%	12,798	38,394
Common Area	1	600	219,000	600	1,200	90%	540	1,620
Total	**320**	**1,140**	**15,921,300**	**43,620**	**87,240**	**–**	**39,258**	**117,774**

Source: Appendix M
GPD = gallons per day
Notes:
1 A demand factor of 60 GPD was used for each person in a multi—family residential unit. The assumed occupancy was two persons for studios, live/work, and one-bedroom units, and three persons for every two-bedroom unit.
2 Unit count multiplied by the demand factor (GPD)

[3] Peak factors for water demand were assumed to be 2.0 times the average water demand GPD and peak wastewater generation factors were assumed to be 3.0 times the average wastewater GPD.

The peak gallon per day (GPD) estimates shown in Table 4.15-3 above provide the required flow rate for the Project area for the purpose of infrastructure capacity. Through flow assessment, it was determined that the existing system would provide adequate water supply for operation of the Project's domestic requirements, automatic sprinkler systems and off-site fire hydrants, if required by the state or City Fire Marshal. Fire flows for the proposed Project would be based on the requirements listed in the version of the California Fire Code that is in effect at the time of plan submission, as amended by the City.

While it was determined that adequate water supply exists to serve the proposed Project, results of the flow test demonstrated that the static and dynamic pressure on the public water system around the Project area is relatively low. As demonstrated in the fire flow test provided by the City (Appendix G) fire and domestic water booster pumps would be required to ensure adequate pressure. The required booster pumps are included as a design feature of the Project. The booster pumps would be located on-site in a dedicated room within the ground level parking garage. Access would be provided via the alleyway along the southwest corner of the proposed residential development.

As described and substantiated under Threshold 4.15b (below), the Project's anticipated water demand falls within the future supply projections for the City of Arcadia. (These projections take into account treatment of the water supply in accordance with regulatory standards.) As such, the proposed Project would not require or result in the need for new or expanded water treatment facilities.

Water infrastructure required for the proposed Project would thus be limited to on-site infrastructure, consisting of a booster pump, new water meters and connections to the existing water system to provide domestic water, fire water, and irrigation water to the proposed Project. Connections may also be required to provide water conveyance to additional fire hydrants. The minimum number of fire hydrants required would be calculated using Table C102.1 from the California Fire Code and the minimum number of fire hydrants would be installed pursuant to the California Fire Code. Installation of new water connections would consist of either trenching to the depth of pipe placement or using trenchless technology, which causes less ground disturbance. Trenching would result in temporary stockpiling of soil along the length of the trench, pending backfilling, which could result in potential short-term erosion and siltation. Trenchless technology requires temporary stockpiling of soil adjacent to excavations on both ends of a pipe section. Environmental effects associated with soil disturbance and the potential for erosion and siltation during this process would be addressed through construction best management practices for water quality protection, including sandbag barriers, dust controls, perimeter controls, drain inlet protection, and proper construction site housekeeping practices. Construction of water infrastructure for the Project would be limited to the Project site boundaries and its immediate street frontages and would occur during the Project's construction phase. As such, impacts associated with installation of water infrastructure necessary for the Project have been analyzed in the EIR. No additional impacts outside of those analyzed and disclosed throughout this EIR would occur as a result of construction of water infrastructure. For all of the foregoing reasons, the Project's water conveyance and treatment impacts would be less than significant.

Wastewater Conveyance & Treatment

As previously discussed, the existing buildings on the Project site proposed for demolition are currently served by an existing City owned and maintained 8" diameter vitrified clay pipe (VCP) sewer line that runs laterally through the Project site's centerline, south along the off-site alley way, and then east along Wheeler Avenue, where it intersects with the LACSD's Arcadia-Sierra Madre Sections 2 and 5 Trunk Sewers. The 15-inch diameter trunk sewer line runs north-south along North First Avenue and has a capacity of 4.5 million gallons per day (mgd) and conveyed

a peak flow of 2.3 mgd when last measured in 2013 (LACSD 2021). A sewer analysis was performed by Psomas (Appendix M) to determine whether existing sewers have sufficient capacity to accommodate anticipated wastewater flows associated with the project. The existing sewer pipes were analyzed using the County of Los Angeles Department of Public Works (LACDPW) Sewer Manual S-C4 chart which requires a maximum design capacity at half full for pipes less than 15-inches and at three quarters full for pipes 15-inches and greater. Based on the analysis, the sewer system serving the Project site would remain under 50% capacity with the addition of the project's anticipated average and peak flows (Appendix M). As such, the existing sewer system would have adequate capacity to serve the proposed Project, and no new or upgraded sewer lines would be necessary as a result of the project.

According to the General Plan EIR, 1% of the City's existing sewer infrastructure needs to be upgraded to accommodate anticipated growth through 2026 (City of Arcadia 2010), however, the sections identified as requiring improvements are not located on or adjacent to the Project site and the Project itself would not necessitate the upgrades. As such, any sewer infrastructure improvements or expansions would be carried out by the City; however, the Project's development fees contribute towards any needed future capital improvements, as required through the City's regulatory requirements: Article VII, Chapter 4 of the Arcadia Municipal Code regulates sewer line design, connection to the City's sewer system, fees, and permits. Article VII, Chapter 5 of the Arcadia Municipal Code regulates water system connection and fees, with Part 5 addressing water use and the City's Water Conservation Ordinance and Water Efficient Landscaping Ordinance.

Wastewater generated by the proposed Project would be treated at the San Jose Creek Water Reclamation Plant (SJCWRP) located adjacent to the City of Industry, which has a capacity of 100 mgd and currently processes an average flow of 61.2 mg (LACSD 2021). The remaining capacity at SJCWRP is approximately 38.8 mgd, or approximately 39% of its total capacity. The existing uses on the project site generate an average flow of 0.03 CFS (Appendix M). Implementation of the project would increase the average and peak daily wastewater flows from the project site by 0.01 CFS, which is equivalent to an average flow of 0.0065 mgd (Appendix M). This increase in wastewater generation represents approximately 0.02% of the remaining capacity of the SJCWRP. As such, the project would not exceed the available treatment capacity of SJCWRP and would not, therefore, require the construction of additional wastewater treatment infrastructure.

As with water infrastructure, the on-site sewer infrastructure necessary to serve the Project would consist of meters and lateral connections to existing sewer lines. The construction processes required to install such infrastructure would be similar to those described above for the on-site water infrastructure. Similarly, construction of sewer infrastructure for the Project would be limited to the Project site boundaries and its immediate street frontages and would occur during the Project's construction phase. As such, impacts associated with installation of sewer infrastructure have been analyzed in the EIR as part of the project. No additional impacts outside of those analyzed and disclosed throughout this EIR would occur as a result of construction of wastewater infrastructure. For all of the foregoing reasons, the Project's wastewater conveyance impacts would be less than significant.

Stormwater Drainage

The proposed Project would not generate increased stormwater runoff. As described under Section 4,8, Hydrology and Water Quality of this Draft EIR, the drainage patterns of the Project site would not substantially change relative to existing conditions. .Project design, construction, and operation would be completed consistent with the Rio Hondo/San Gabriel River Water Quality Group Enhanced Watershed Management Program, and in accordance with the City Stormwater Management and Discharge Control Ordinance, and the County of Los Angeles Low Impact Development Best Management Practices Handbook (LID Manual), with the goal of capturing stormwater runoff for

infiltration and reducing the amount of pollutants in stormwater and urban runoff (City of Arcadia 2021c). The proposed Project would incorporate two drywells and one four-foot diameter primary settling chamber are proposed to be constructed on the Project site, located in the south side of the basement parking lot, which would be able to capture the required runoff volume and treat that volume as quickly as it enters the drywell system.

After installation of the infiltration drywells, the peak flow rate on the Project site would decrease by 0.73 cubic feet per second, resulting in a proposed or post-Project peak flow rate value of 8.08 cubic feet per second. Because the peak flow rate would be reduced in the proposed condition, it is understood that the existing City storm drains would not be negatively affected by implementation of the proposed Project. As such, the proposed Project would not require the construction or expansion of off-site stormwater drainage facilities, as the Project would not contribute a substantial amount of new stormwater runoff relative to existing conditions. Impacts would be less than significant.

Dry Utilities

Sempra Utilities provides natural gas to the City via distribution lines and laterals within the City streets and easements. A high-pressure gas line lies approximately 42 inches belowground and crosses the City along Duarte Road, from Holly Avenue to Mountain Avenue in Monrovia (City of Arcadia 2010). These gas lines would not be affected by the Project's construction-related activities. There is an existing 2-inch Gas Company gas line in Wheeler Avenue and Santa Clara Street as well as an 8" gas main along Santa Anita Avenue. It is considered that these lines will be adequate to provide gas service to the proposed development (Appendix G). No off-site improvements for natural gas infrastructure are anticipated with the implementation of the proposed Project.

SCE provides electricity to the City and operates four substations within the City's SOI. Both underground and overhead electrical distribution lines are present within the City streets and yard easements, and high-voltage transmission lines exist along the I-605 freeway (City of Arcadia 2010). Pole mounted transformer units currently service the existing buildings on the east side of the Project site. The portion of overhead power along the alley that is to be vacated would be demolished and a new power service feed would be established to accommodate the Project. As part of the Project, a new transfer location would be provided onsite to service the new building (Appendix G). In compliance with the City's General Plan, all utilities in the Downtown area must be placed underground. No off-site improvements for electric power infrastructure are anticipated with the implementation of the proposed Project.

If unanticipated upgrades were to be required, they would be limited the lateral connections to the Project site and not any centralized facilities. Any unforeseen upgrades would be coordinated with appropriate service providers to minimize disruptions on service and would be completed by either trenchless technology or open trenching to the depth of the underground utilities. Additionally, the Project would be required to comply with all regulatory requirements and mitigation measures outlined within this Draft EIR for the purposes of mitigating impacts associated with construction activities. No adverse physical effects beyond those already disclosed in this Draft EIR would occur as a result of implementation of the Project's proposed utility system connections. Therefore, impacts to dry utilities would be less than significant.

Threshold 4.15b Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

As stated above, according to the General Plan EIR, the City of Arcadia is its own water supplier, and provides water to approximately 96% of the population living within the City's sphere of influence. The City sources its water from

the San Gabriel (Main) Valley and Raymond Groundwater Basins and from water imported from the Upper San Gabriel Valley Municipal Water District. The City's water distribution infrastructure comprises 164.6 miles of water lines (City of Arcadia 2010).

The proposed Project does not involve enough new development to require evaluation pursuant to SB 221 or SB 610 (i.e. does not generate a water demand equal to or greater than that required by a 500-dwelling unit project), and no Water Supply Assessment is required. The proposed Project is consistent with the General Plan and does not require a General Plan Amendment; therefore, the Project would be consistent with the City's growth projections anticipated in local and regional planning documents, including the City's 2020 Urban Water Management Plan (UWMP). As stated in the UWMP, the projected populations used in the UWMP for the City's service area were based on projections obtained from the SCAG. The SCAG data incorporates demographic trends, existing land use, general plan land use policies, and input and projections from the Department of Finance and the U.S. Census Bureau.

As shown in Table 4.15-3, the proposed Project is anticipated to generate an average demand of approximately 43,620 gallons per day (gpd) of potable water (Appendix M). The City's UWMP determines the City's water demand based on projected populations in the City's service area using data provided by SCAG 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) (Connect SoCal), and incorporates demographic trends, existing land use, general plan land use policies, and input and projections through the year 2045 from the Department of Finance (DOF) and the US Census Bureau for counties, cities and unincorporated areas within Southern California (City of Arcadia 2021a). As described in Section 4.11, Population and Housing, the proposed Project falls within the growth projections of all applicable planning documents, including SCAG's Connect SoCal (see Table 4.11-2 in Section 4.11 of this Draft EIR).

As stated in the UWMP, the Main Basin and Raymond Basin have been well managed for the full period of their respective adjudications, resulting in a stable and reliable water supply for the City during average, single-dry, and multiple-dry water years (City of Arcadia 2021a). Additionally, imported water from MWD can be utilized as a supplemental source of supplies.

The Main Basin Judgment does not restrict the quantity of water, which parties may extract from the Main Basin. Rather, it provides a means for replacing all annual extractions in excess of a Party's annual right to extract water with Supplemental Water. The Main Basin Watermaster annually establishes an Operating Safe Yield for the Main Basin which is then used to allocate to each Party its portion of the Operating Safe Yield which can be produced free of a Replacement Water Assessment. If a producer extracts water in excess of its right under the annual Operating Safe Yield, it must pay an assessment for Replacement Water, which is sufficient to purchase one acre-foot of Supplemental Water to be spread in the Main Basin for each acre-foot of excess production. All water production is metered and is reported quarterly to the Main Basin Watermaster (City of Arcadia 2021a).

Historical prolonged droughts have caused groundwater levels to decrease resulting in the Raymond Basin Management Board to temporarily reduce the amount of groundwater which may be produced. The decreased production is designed to promote recovery of groundwater levels. At such time the groundwater levels have recovered the program may be suspended, but can be reinstated as needed in the event groundwater levels decrease in the future. Recognizing allowed pumping is limited, the City along with other Raymond Basin producers have taken steps to reduce water demands to address the potential gap between supply and demand in the event demands cannot be entirely reduced. The City has production facilities in the Main Basin and has the ability to shift production, if needed. In addition, the City has a treated water connection and has access to MWD water as an additional source of supply (Arcadia 2021a).

The Project would be required to include all drought-tolerant landscaping requirements included in local regulations. AMC Section 7554.4, Plan Check Requirements, requires that, as part of the broader general permitting process, a Landscape Design Plan, and a Landscape Documentation Package be prepared by a licensed landscape architect that incorporates efficient use of water and BMPs into landscape project design. The proposed Project would not include any wells that would directly deplete groundwater supplies, and the City's UWMP anticipates adequate supply through 2045. City water conservation efforts will continue into the future to reduce water demands within the City due to the recently implemented tiered water rate and Water Smart program, which are intended to encourage conservation, thereby making local supplies more reliable.

Additionally, Arcadia operates in accordance with Phase I Mandatory Water Conservation Prohibitions, which are codified by the City's Water Conservation Plan. Section 7553, Water Conservation Plan, of the City's Municipal Code sets forth the water conservation measures that are applicable to all customers and properties served by the Water Division. Restrictions include but are not limited to prohibitions on outdoor watering of sidewalks, limits on scheduling of outdoor landscape irrigation, and restrictions on provision of water to guests at restaurants, hotels, cafes, unless expressly requested by the customer, among other restrictions.

The proposed Project would adhere to the water conservation methods established in Title 24 of the California Building Code. The Project would also adhere to the City's Water Conservation Plan and Water Efficient Landscaping Ordinance, per Article VII, Chapter 5, Part 5, Division 3 and 4 of the City's Municipal Code. Additionally, the proposed Project would be subject to a development impact/connection fee, which would serve as the Project's fair share contribution to water infrastructure improvements in the City. As such, the proposed Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be less than significant, and no mitigation is required.

Threshold 4.15c Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As stated in under Threshold 4.15(a), the proposed Project would be connected to the existing 8" vitrified clay pipe (VCP) sewer line that runs laterally through the Project site's centerline, south along the off-site alley way, and then east along Wheeler Avenue, where it intersects with LACSD's 15-inch Trunk Sewer line running north-south along North First Avenue. Wastewater generated by the proposed Project would be treated at the San Jose Creek Water Reclamation Plant (SJCWRP) located adjacent to the City of Industry, which has a capacity of 100 mgd and currently processes an average flow of 61.2 mg (LACSD 2021). The remaining capacity at SJCWRP is approximately 38.8 mgd, or approximately 39% of its total capacity. The existing uses on the project site generate an average flow of 0.03 CFS (Appendix M). Implementation of the Project would increase the average and peak daily wastewater flows from the project site by 0.01 CFS, which is equivalent to an average flow of 0.0065 mgd (Appendix M). This increase in wastewater generation represents approximately 0.02% of the remaining capacity of the SJCWRP.

Based on the capacity of the SJWRP, the wastewater generated by the proposed Project would be nominal of capacity.[3] As such, the proposed Project would not exceed current capacities of the wastewater treatment system and would not significantly impact existing wastewater treatment systems such that new facilities would be

[3] According to the Sewer Area Study for the Project site (Appendix M), the Project is estimated to generate an average 52,272 gallons per day (gpd) of wastewater, with a peak generation of 156,816 gpd. However, utilizing the LACSD Table 1 Loadings calculations, the Project would only generate an average of 49,764 gpd. As such, the flow generations calculated for the Sewer Study should be considered conservative.

required. Finally, water conservation measures as established at the local and state level would be implemented and would help reduce the amount of wastewater generated by the Project. Therefore, impacts would be less than significant.

Threshold 4.15d Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Construction

The City's non-residential solid waste is disposed of through contracts with Republic Services, Waste Management Inc., and Valley Vista Services (City of Arcadia 2019b). These waste management services offer waste and recycling collection, green waste recycling programs, organics waste composting, special waste transportation, and transfer and materials recovery services to the City as well as many other areas in Southern California. These waste management services offer waste and recycling collection, green waste recycling programs, organics waste composting, special waste transportation, and transfer and materials recovery services to the City as well as many other areas in Southern California. The proposed Project would involve redevelopment of the existing surface parking lot and three existing commercial buildings. Demolition and construction activities associated with the proposed Project would result in the generation of solid waste such as scrap lumber, concrete, residual wastes, packing materials, plastics, and soils. Per CALGreen standards, 65% of construction and demolition waste must be diverted from landfills (CalRecycle 2020). As such, at least 65% of all construction and demolition debris from the site would be diverted. Additionally, any hazardous wastes that are generated during demolition and construction activities would be managed and disposed of in compliance with all applicable federal, state, and local laws. The remaining 35% of construction and demolition material that is not required to be recycled would either be disposed of in a regional landfill or voluntarily recycled at a solid waste facility with available capacity. As described in Section 4.15.1, Existing Conditions, the inert landfill in the County (Azusa Land Reclamation landfill) has a remaining capacity of 51,512,201 tons and is expected to remain open for approximately 25 years, as of 2021. Due to the temporary nature of construction and required compliance with the City's Municipal Code regulations applicable to garbage, refuse and recycling (Article V, Chapter 1), construction would not generate waste in excess of standards or in excess of the capacity of local infrastructure and would not otherwise impair the attainment of solid waste reduction goals. Impacts would be less than significant.

Operation

Once operational, the proposed Project would produce solid waste on a regular basis, in association with operation and maintenance activities. Based on the CalEEMod solid waste generation rates, the proposed Project would generate approximately 248 tons of solid waste per year (Appendix C-1, CalEEMod Outputs). This amount assumes compliance with AB 939 requirements for 50% waste diversion from landfills. Solid waste generated by the proposed Project would be collected and transported to a local or regional landfill. As previously discussed in Section 4.15.1, Existing Conditions, there is only one landfill within approximately 25 miles of the Project site: the Azusa Land Reclamation landfill (Azusa landfill), located approximately 6-miles east. The Azusa landfill has a remaining capacity of 51,512,201 tons and is expected to remain open for approximately 25 years, as of 2021. As such, the annual solid waste that is anticipated to be produced by the proposed Project would equate to approximately .00048% [4]of the available capacity of the landfill through the estimated closure date. This number would be further reduced in order to comply with CALGreen requirements for 65% waste diversion, which would require the Project Applicant/Developer

[4] To calculate the percent of available capacity, the annual estimated tonnage of solid waste of the proposed Project was divided by the existing capacity of the Azusa landfill, of 51,512,201 tons, to arrive at approximately .00048% of existing capacity.

to either submit a construction waste management plan to the City that identifies the C&D waste materials to be diverted from the landfills or use a waste management company that can provide verifiable documentation that the percentage of C&D waste material diverted from the landfill meets CALGreen's 65% requirement.

Furthermore, according to the latest annual report for the Countywide Integrated Waste Management Plan, there are landfills used by the County with up to 100 years of remaining life (County of Los Angeles 2019). For example, the Prima Deshecha Sanitary Landfill in Orange County is expected to remain open for another 85 years, the Mesquite Regional Landfill in Imperial County is expected to remain open for another 100 years, and the Simi Valley Landfill in Ventura County is expected to remain open for another 67 years (CalRecycle 2021). As such, other landfills in the region would also be able to accommodate solid waste from the proposed Project, and regional planning efforts would ensure continued landfill capacity into the foreseeable future.

For the reasons described above, Project operations 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. Impacts would be less than significant**.** No mitigation is required.

Threshold 4.15e Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The proposed Project would be required to comply with all applicable local and state regulations related to solid waste. The solid waste facility in proximity to the Azusa landfill is regulated under federal, state, and local laws. Additionally, the City is required to comply with the solid waste reduction and diversion requirements set for in AB 939, AB 341, AB 1327, and AB 1826. Per AB 1826, businesses that generate 2 cubic yards or more of commercial solid waste per week are required to arrange for organic waste recycling services. Any hazardous wastes that are generated during construction activities would be managed and disposed of in compliance with all applicable federal, state, and local laws.

In addition to the City's requirements for recycling construction and demolition waste, the state has set a goal of 75% recycling, composting, and source reduction of solid waste by 2020. To help reach this goal, the state has adopted AB 341 and AB 1826. AB 341 is a mandatory commercial recycling bill, and AB 1826 is mandatory organics recycling. Waste generated by the proposed Project would enter the City's waste stream but would not adversely affect the City's ability to meet AB 341 or AB 1826, because the proposed Project's waste generation would represent a nominal percentage of the waste created within the City and because the businesses and residents at the Project site would be subject to recycling and diversion requirements. In addition, waste diversion and reduction during Project construction and operations would be completed in accordance with CALGreen standards, CalRecycle standards, City requirements, and the County Integrated Waste Management Plan. Republic Services, Waste Management Inc., and Valley Vista Services all adhere to AB 341. As a result, the Project would comply with federal, state, and local management and reduction statues and regulations related to solid waste. Impacts would be less than significant**.**

4.15.5 Cumulative Impacts Analysis

Water

Implementation of the Project, in conjunction with cumulative projects would increase demand for water services provided in the City's water supply system. The Project area and each cumulative projects would incrementally increase the amount of water that is required in the area. However, as previously described, the existing water lines

that serve the Project site have the capacity to convey the estimated peak flow generated from the Project. Similar to the Project, the capacity of water lines associated with cumulative project development would be determined on a project-specific basis. In the event that water line upgrades are required due to cumulative projects, all construction work within the City public rights-of-way would be subject to local municipal code and applicable agency requirements and would be subject to CEQA review accordingly. Based on the analysis presented in the Report of Existing Infrastructure, (Appendix G), the proposed Project is not anticipated to contribute to a cumulative impact related to water infrastructure.

The City (through its UWMP) anticipates its projected water supplies will meet demand through the year 2045. In terms of the City's overall water supply condition, any cumulative project that is consistent with the City's General Plan has been taken into account in the planned growth of the water system.

As discussed in Section 4.15.2, Relevant Plans, Policies, and Ordinances, for projects that meet the requirements established pursuant to SB 610, SB 221, and Sections 10910–10915 of the State Water Code, a Water Supply Assessment demonstrating sufficient water availability is required on a project-by-project basis. Similar to the Project, each cumulative project would be required to comply with City and State Water Code and conservation programs for both water supply and infrastructure to partially offset the cumulative demand for water. As a result, no significant cumulative water supply impacts are anticipated from development of the Project and cumulative projects, and the Project's incremental effect would not be cumulatively considerable. No mitigation is required.

Wastewater

The Project area and each cumulative project would incrementally increase the amount of wastewater that is being generated in the area. Based on the analysis provided in Appendix M of this Draft EIR, the existing sewer lines that serve the Project site have the capacity to convey the estimated peak flow generated from the Project. All construction work within the City public rights-of-way would be subject to local municipal code and applicable agency requirements and would be subject to CEQA review accordingly.

Similarly, the proposed Project is estimated to generate an average 52,272 gallons per day (GPD) of wastewater, with a peak generation of 156,816 GPD. For even the treatment site servicing the City with the smallest capacity (Whittier Narrows), this would result in an average increase of less than 0.3%, and peak increase of approximately 1%. As cumulative increases in wastewater treatment demand within the service area require facility upgrades, the City would continue to regulate public sewer facilities in as outlined in the 2014 City of Arcadia Sewer System Management Plan, and any affected treatment plants would continue to assess potential expansions to their treatment facilities in accordance with regulatory permit requirements. As such, impacts to wastewater services would not be cumulatively considerable. No mitigation is required.

Electric Power, Natural Gas, and Telecommunication

The City of Arcadia is built-out and upgrades in electrical power, natural gas, and telecommunication capabilities are anticipated primarily due to development in the form of the revitalization of outdated or underserved areas, and redevelopment of specific properties that will increase density and require more sophisticated technology, such as the proposed Project. However, such upgrades would generally be confined to the lateral connections to the individual project sites and not any centralized facilities. Upgrades to centralized power, natural gas, and telecommunication facilities would be determined by each of the power, gas, and telecommunications providers, as build-out continues within the region. Individual projects would be required to provide for specific project needs. As a result, cumulative impacts associated with upgrades of electric, natural gas, and telecommunication facilities

would not be significant. As such, impacts to electric power, natural gas, and telecommunication services would not be cumulatively considerable.

Solid Waste

Development of the Project in combination with cumulative projects would increase land-use intensities in the area, resulting in increased solid waste generation in the service area for Azusa landfill. However, due to the built-out nature of the City, the Project and cumulative projects are considered urban infill and/or redevelopment projects. As such, solid waste is already being generated at the Project site and the majority, if not all, of the cumulative project sites. Further, AB 939, or the Integrated Waste Management Act of 1989, mandates that cities divert from landfills 50% of the total solid waste generated to recycling facilities. In order to satisfy CALGreen requirements of diverting 65% of solid waste and to offset impacts associated with solid waste, the proposed Project and all cumulative projects would be required to implement waste reduction, diversion, and recycling during both demolition/ construction and operation.

Through compliance with City and state solid waste diversion requirements, together with the City's Source Reduction and Recycling Element and applicable regulations outlined in Article V, Chapter 1, of the City's Municipal Code, impacts to solid waste services would not be cumulatively considerable**.** Impacts would be less than significant, and no mitigation is required.

4.15.6 Mitigation Measures

No mitigation measures are required.

4.15.7 Level of Significance After Mitigation

Impacts would be less than significant.

4.15.8 References

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5 Other CEQA Considerations

This chapter of the Draft Environmental Impact Report (DEIR) for the Alexan Mixed-Use Development Project (Project) has been prepared in furtherance of the content requirements set forth in the California Environmental Quality Act (CEQA) Guidelines Section 15126.2. As such, this chapter discusses the following:

- Significant and Unavoidable Environmental Impacts (Section 5.1)
- Significant and Irreversible Environmental Effects (Section 5.2)
- Growth Inducement (Section 5.3)
- Potential Secondary Effects of Mitigation (Section 5.4)
- Effects Found Not to Be Significant (Section 5.5)

5.1 Significant and Unavoidable Environmental Impacts

Section 15126.2(c) of the CEQA Guidelines requires than an EIR describe any significant impacts which cannot be avoided. Specifically, Section 15126.2(c) states the following:

> Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.

Implementation of the Project-specific mitigation measures identified in Chapter 4, Environmental Analysis, of this Draft EIR would reduce all potentially significant impacts to below a level of significance. Therefore, no Project-specific impacts can be considered significant and unavoidable.

5.2 Significant and Irreversible Environmental Impacts

The CEQA Guidelines (14 CCR 15000 et seq.) require an EIR to address any significant irreversible environmental changes that would result from the proposed Project should it be implemented. Pursuant to Section 15126.2(d), significant irreversible environmental impacts could involve any of the following:

- 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 unlikely;
- The primary and secondary impacts of the project would generally commit future generations of people to similar uses;
- Irreversible damage from environmental accidents associated with the project;
- The proposed consumption of resources is not justified (e.g., the project results in wasteful use of energy).

Determining whether the proposed Project could result in significant and irreversible effects requires a determination of whether key resources would be degraded or destroyed in such a way that there would be little possibility of restoring them.

Large Commitment of Non-Renewable Resources

Examples of irretrievable commitments provided in the State CEQA Guidelines include the use of nonrenewable resources (e.g., natural gas and other fossil fuels, lumber, and steel) during initial and continued phases of Project construction and operation. The proposed Project's potential energy consumption is discussed in greater detail in Section 4.4, Energy, of this Draft EIR.

Water use during Project construction would be limited to minor amounts of water required for various uses, such as concrete mixing and dust suppression. Water use during construction would be minor to negligible when compared to the operational demands of the Project, as well as the operational demands of the surrounding land uses. With regard to building materials, the Project would be constructed with durable materials with a significant lifespan, such as cast in place concrete and precast concrete, which would improve building longevity. As such, even though construction would result in the commitment of building materials, the materials are not expected to require replacement during the Project's estimated operational lifespan. Furthermore, per California Green Building Standards Code (CALGreen) 65% of all demolition and construction materials must be recycled (CalRecycle 2020). This regulation would ensure that portions of the existing materials on site are reused. In the event that the proposed Project were to be demolished at a future time, this regulation would ensure that a majority of the materials are recycled.

Nonrenewable resources would also be consumed during Project operation. Resources used during operation would consist primarily of water, natural gas, and other fossil fuels required for off-site electrical generation and vehicles traveling to and from the Project site. While some building materials may be consumed for building maintenance purposes, such use would be limited and would be reduced by the Project's use of durable materials, as described above. While the existing site uses generate some demand for water, electricity, gasoline, diesel fuel, and natural gas, the proposed Project would increase this demand due to intensification of the land uses on the site. The Project's use of fossil fuels during operation is discussed in detail in Section 4.4, Energy, of this Draft EIR. As concluded in that section, the proposed Project would not result in inefficient or wasteful use of electricity, natural gas, and petroleum, and would result in a less than significant impact. Although the Project would see an increase in petroleum use during construction and operation, vehicles would use less petroleum due to advances in fuel economy and potential reduction in vehicle miles traveled over time. Therefore, impacts to energy resources during operation would be less than significant.

The Project's water use is discussed in further detail in Section 4.15, Utilities and Service Systems. As concluded in that section, the proposed Project would require approximately 43,620 gallons per day upon operation. [1]However, as described in Section 4.15, this anticipated Project-related increase in water demand can be met and is accounted for within the City's Urban Water Management Plan (City of Arcadia 2021).

The proposed Project would also comply with the following applicable regulations:

- All new buildings must be designed to be energy efficient to meet or exceed Title 24 requirements.
- The Project parking lot areas must include storm water management practices that treat storm water runoff in compliance with Arcadia Municipal Code (AMC) and all applicable laws.

[1] A demand factor of 60 gallons per day was used for each person in a multi—family residential unit. The assumed occupancy was two persons for studios, live/work, and one-bedroom units, and three persons for every two-bedroom unit. The total unit count was multiplied by the demand factor to arrive at a total average daily consumption rate of 42,620. Please refer to Table 4.15-2 Anticipated Project Water Demand and Wastewater Generation, in Section 4.15, Utilities and Service Systems, for further details.

- Bicycle parking must comply with the AMC and CalGreen Code.
- Electric Vehicle parking must comply with CalGreen Code
- Exterior lighting must be energy efficient and designed to minimize light pollution.
- Low-emitting building materials must be utilized.
- Roof structures of new buildings must be designed to support solar panels.
- Reclaimed water must be utilized for all landscaped areas if available and feasible.

In addition to the above considerations, state and local laws and regulations would further reduce the Project's use of nonrenewable resources over time. Specifically, electricity consumed at the Project site would be increasingly sourced from renewable energy, pursuant to Senate Bill 100. Senate Bill 100, which passed in 2018, states that 44% of the total electricity sold to retail customers in California per year must be secured from qualifying renewable energy sources by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. SB 100 also sets forth a state policy that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California and requires that achieving 100% zero-carbon electricity does not increase carbon emissions elsewhere in the western grid or is not fulfilled through resource shuffling. As such, the Project's consumption of nonrenewable energy is anticipated to significantly decrease over time, as Senate Bill 100 is implemented statewide and overall nonrenewable energy consumption decreases.

Similarly, the vehicles that would travel to and from the Project site would be subject to increasingly stringent emissions standards over time, which would reduce the amount of fossil fuel consumed per vehicle (see Section 4.4 Energy for additional details). Furthermore, the City and state have policies in place to support decreased use of personal vehicles, to be replaced with alternative modes such as transit, walking, and biking- policies which are incentivized at the local level by the proposed Project's provision of alternative transportation amenities (e.g., pedestrian pathways and transit-oriented pedestrian corridor). As such policies are carried out, the number of vehicles traveling to and from the site may decrease over time.

The Project would be subject to compliance with the California Building Energy Efficiency Standards and CalGreen. In conclusion, while the proposed Project would result in the use of nonrenewable resources, such use would be limited primarily to building materials, fossil fuels, and water. During operation, use of such resources is expected to decrease, as increasingly stringent efficiency requirements are implemented at the local and state level. Therefore, although the proposed Project would require the use of nonrenewable resources, it would not require such a large commitment of nonrenewable resources during the initial and/or continued phases of the Project such that removal or nonuse thereafter would be unlikely. The proposed Project would not construct a new land use that required the commitment of a large amount of nonrenewable resources, such as a new fossil fuel consuming power plant. Land uses within urban centers tend to be redeveloped over time, especially when the property is underutilized and could be put to a more efficient use that better addresses the needs of the community. The replacement of underutilized buildings and surface parking lots would result in changes to the current land uses in a manner that is consistent with the City's General Plan goals and policies. Such development is commonplace and encouraged in areas near urban centers and transit facilities and would not result in a large commitment of nonrenewable resources such that removal or nonuse thereafter would be unlikely.

Commitment to Future Uses

Redevelopment of surface parking lots and underutilized buildings into residential units and mixed use spaces would be a change from the existing condition; however, because the proposed Project is a redevelopment project

within a fully developed and urbanized portion of the City, it would not commit future generations to new urban land uses. The replacement of underutilized buildings and surface parking lots would result in changes to the current land uses in a manner that is consistent with the City's General Plan goals and policies (see Section 4.9 Land Use and Planning). Such development is commonplace and encouraged in areas near urban centers and transit nodes and would not result in primary and secondary impacts that would generally commit future generations of people to similar uses.

Irreversible Damage from Environmental Accidents

The proposed Project has the potential to expose the public and the environment to hazards associated with on-site releases of hazardous materials including asbestos-containing materials, lead-based paint, polychlorinated biphenyl (PCB)-containing items, universal wastes, and other hazardous materials and wastes present in the building scheduled for demolition. Management of hazardous materials and waste during pre-demolition surveys and abatement activities would be addressed by Mitigation Measure (MM) HAZ-1. Hazardous materials present in existing office building, such as various janitorial items, are not expected to be impacted by construction, as the existing office building is not scheduled for demolition or renovation. Construction activities would not be conducted in areas where hazardous materials are stored. Therefore, Project construction impacts are not anticipated to result in irreversible damage due to environmental accidents.

As discussed in Section 4.7, Hazards and Hazardous Materials, historical activity at the Project site (and potentially other surrounding activities) has resulted in soil and soil vapor contamination on the Project site. Concentrations of contaminants of concern in soils do not exceed DTSC screening levels (SLs) for residential use; however, they do profile as regulated non-hazardous waste, the transportation and disposal of which is regulated by the State. Should these materials be transported offsite without proper handling procedures, this could result in a foreseeable upset or accident condition involving the release of hazardous materials to the environment. MM-HAZ-2 requires a soil management plan (SMP) be prepared to properly handle, transport, and dispose of contaminated soils removed from the Project site.

The Soil and Soil Vapor Investigation also identified elevated concentrations of benzene and PCE in soil vapor above applicable residential screening levels. These detected concentrations are also above applicable screening levels for a commercial/industrial setting. Therefore, a potential accident condition could occur during excavation and earth moving activities exposing onsite construction workers to contaminated soil vapor. The SMP required by MM-HAZ-2 will also include health and safety procedures, including breathing zone monitoring, to prevent exposure of onsite workers to elevated concentrations of benzene and PCE during short-term construction activities. The Project also has a potential vapor intrusion risk to proposed residential structures to be constructed on the Project site. MM-HAZ-3 requires vapor mitigation be designed and implemented for new structures on the Project site, which will reduce the potential for vapor intrusion to a less than significant level. With adherence to federal, state, and local laws and regulations, and implementation of MM-HAZ-1 through MM-HAZ-3, the potential for irreversible damage would be less than significant.

In addition, operation of the proposed Project would only require limited use of commercially available hazardous materials, including janitorial and landscaping products. Should the amount of on-site hazardous materials, including hazardous wastes, be greater than reporting thresholds (55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas), a Hazardous Material Business Plan would be required under California Health and Safety Code Division 20, Chapter 6.11, Sections 25404–25404.9. The Hazardous Material Business Plan, which would be submitted to the Los Angeles County Fire Department and/or the City of Arcadia Fire

Department (the local Certified Unified Program Agencies) via the California Environmental Reporting System, would include emergency and spill prevention and response measures, thereby reducing the potential for an upset or accident condition. Use of extremely hazardous materials and accumulation of acutely hazardous wastes are not anticipated. Operation of the proposed Project is not anticipated to impact nearby hazardous liquid pipelines or the adjacent gasoline service station. Project operational impacts are not anticipated to result in irreversible damage due to environmental accidents.

Consumption of Resources Justified

While the Project would result in increased resource consumption during construction and operation, the Project would also result in some benefits related to long-term resource consumption in the region. As demonstrated in Section 4.11, Population and Housing, of this Draft EIR, growth in population, housing, and employment is expected to occur in the City, in Los Angeles County, and throughout the southern California region into the foreseeable future. The proposed Project falls well within regional growth projections for population and housing and would locate this growth on an infill site within walking distance of a wide range of services, employment opportunities as well as commercial uses. Regarding population growth, the Southern California Associated of Governments (SCAG) estimates that Los Angeles County would have 11,674,000 residents by 2045 (SCAG 2020). The Project's contribution of an additional 909 permanent residents would amount to a nominal increase in the County's overall projected population growth estimates through 2045.[2] Additionally, the Project would provide additional housing in an employment-rich urban center, thereby facilitating a more balanced jobs-housing profile.

The proposed Project would help accommodate growth within existing developed areas, as opposed to accommodating growth through development in previously undeveloped areas. The latter development pattern generally results in permanent loss of naturalized lands and open space, as well as increased fossil fuel consumption attributable to longer commuting distances and lack of transit options. While the Project would result in some irretrievable commitment of nonrenewable resources, it would also help accommodate growth in a manner that would reduce irreversible environmental changes in the region. Furthermore, the irretrievable commitment of resources attributable to the Project would not be considered unusual when compared to typical urban infill development of the same size and scope. For these reasons, the irretrievable commitment of resources attributable to the Project would not be considered significant.

5.3 Growth-Inducing Impacts

CEQA requires a discussion of ways in which the proposed Project could be growth inducing. The CEQA Guidelines identify a project as growth inducing if it fosters economic or population growth or results in the construction of additional housing, either directly or indirectly, in the surrounding environment (14 CCR 15126.2[e]). New employees from commercial or industrial development and new population from residential development represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area. A project could indirectly induce growth by reducing or removing barriers to growth or by creating a condition that attracts additional population or new

[2] This estimated number of new residents conservatively assumes full occupancy of all units. A total of 319 new housing units multiplied by the Department of Finance estimates for average occupancy in the City of Arcadia in 2021 (2.85 persons per household) results in 909 residents accommodated by the proposed Project (DOF 2021).

economic activity. However, a project's potential to induce growth does not automatically result in growth. Growth can only happen through capital investment in new economic opportunities by the private or public sectors.

Direct growth-inducing impacts are commonly associated with the extension of new public services, utilities, and roads into areas that have previously been undeveloped. The extension of such infrastructure into a non-serviced area can represent the elimination of a growth-limiting factor, thereby inducing growth. Increases in the population may tax existing community service facilities, requiring construction of new facilities and ultimately resulting in an increase in the pace of development or the density of the existing surrounding development. Indirect growth-inducing impacts include an increased demand for housing, commodities, and services that new development causes or attracts by increasing the population or job growth in an area.

The proposed Project would directly result in building new housing where housing currently does not exist. However, the Project would not substantially increase growth in the City or region. While the Project would result in an expected 30 new full-time employees, redevelopment of the Project site would result in a net deficit of 20 jobs with the demolition of existing office and commercial buildings. As such, the loss of employment opportunities on site would not contribute to the overall expected growth in the City and would not exceed the SCAG (SCAG 2020) or the City's General Plan employment projections (City of Arcadia 2010).

The area surrounding the Project site is already developed with commercial and residential uses which would not be removed or disturbed as a result of the Project. Thus, the Project would not remove impediments to growth, such as extending infrastructure into an area that has been undeveloped. Additionally, the Project would not require any major roadway developments, which could stimulate urban sprawl. The Project site is located within an urban area that is currently served by existing utilities and infrastructure. As stated in Section 4.15, Utilities and Service Systems, of this Draft EIR, construction of water, sewer, stormwater, electricity, natural gas, and telecommunications infrastructure, for the Project would be limited to the Project site boundaries and its immediate street frontages and would occur during the Project's construction phase. As such, impacts associated with installation of such facilities necessary for the Project are analyzed throughout this EIR as part of the Project. No additional impacts outside of those analyzed and disclosed throughout this Draft EIR would occur as a result of construction of infrastructure facilities. Therefore, the Project would not indirectly induce growth through extension of infrastructure.

Overall, the Project would be consistent with local and regional policies to reduce urban sprawl, efficiently use existing infrastructure, reduce regional congestion, and improve air quality through the reduction of vehicle miles traveled. In addition, the Project site is in a highly urbanized area and is surrounded by a mix of residential uses, commercial uses, and office uses. Given the developed nature of the surrounding area, the proposed utility connections, and utility infrastructure would not induce population growth by removal of impediments to growth (e.g., constructing utility infrastructure and service systems in a previously undeveloped region). Further, the proposed Project's infrastructure plan would support the development of the proposed Project and would not accommodate the growth beyond what is proposed. The Project would not require any major roadway improvements nor would the Project open any large undeveloped areas for new use. Any access improvements would be limited to driveways necessary to provide immediate access to the Project site and to improve safety and walkability. Therefore, direct and indirect growth-inducing impacts would be less than significant.

5.4 Potential Secondary Effects of Mitigation Measures

Section 15126.4(a)(1)(D) of the CEQA Guidelines states that "if a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but, in less detail, than the significant effects of the project as proposed." With regard to this section of the CEQA Guidelines, the potential impacts that could result with the implementation of each mitigation measure proposed for the Project was reviewed. The following provides a discussion of the potential secondary impacts that could occur as a result of the implementation of the proposed mitigation measures, listed by environmental issue area.

Cultural Resources

MM-CUL-1 requires that prior to commencement of construction activities, an inadvertent discovery clause, written by an archaeologist, shall be added to all construction plans associated with ground disturbing activities. It also requires that the Project applicant shall retain a qualified archaeologist to prepare a Worker Environmental Awareness Program. In addition, MM-CUL 1 dictates that, if potential archaeological resources (i.e., sites, features, or artifacts) are exposed during construction activities for the proposed Project, the City shall be notified and all construction work occurring within 50 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan and data recovery, may be warranted. This mitigation measure is proposed to reduce potential impacts associated with archaeological resources and includes procedural actions that would not result in physical changes in the environment that could result in secondary impacts.

Geology and Soils

MM-GEO-1 requires the applicant to retain a qualified paleontologist prior to commencement of grading activities, in the event paleontological resources are discovered during grading. This mitigation measure represents a procedural action and would be beneficial in protecting paleontological resources that could potentially be encountered on site. As such, implementation of these mitigation measures would not result in adverse secondary impacts.

Hazards and Hazardous Materials

MM-HAZ-1 would require pre-demolition hazardous materials abatement to reduce construction-related impacts to a less than significant level. MM-HAZ-2 would require soil and soil vapor sampling to determine if the Project site has been impacted by VOCs. If impacts related to VOCs were to be discovered during the soil vapor sampling process, MM-HAZ-3 would be implemented which would require vapor mitigation to be engineered and installed beneath the proposed residential structure. This would reduce the impacts associated with VOC-contaminated soil vapor to less than significant levels. The mitigation measures are required to reduce potential impacts related to the hazardous materials during construction and operation of the Project. MM-HAZ-1 and MM-HAZ-2 are procedural, short-term actions that would not result in physical changes in the environment. MM-HAZ-3, if implemented, would require the integration of either passive or active vapor mitigation systems, which would be designed to protect building occupants from vapor contamination on the Project site in accordance with most recent available guidance and regulation. These vapor mitigation systems would be required to maintain their functionality for the operational lifetime of the structure(s). Any proposed vapor mitigation system would require

review and approval by the permitting agency(ies) (City of Arcadia, County of Los Angeles) prior to construction and prior to issuance of certificate of occupancy. Any necessary remediation or mitigation for potential secondary effects would be identified and addressed at that time. Construction of the vapor mitigation system would be incorporated into the proposed Project design and would be a component of the building construction, as assumed throughout this Draft EIR. Short-term construction impacts are assessed throughout this Draft EIR and specifically in Sections 4.2, Air Quality, 4.4, Energy, 4.6, Greenhouse Gas, and 4.10, Noise, which account for building construction impacts. As such, implementation of these mitigation measures would not result in adverse long-term secondary impacts.

Transportation

MM-TRA-1 requires the development and implementation of a City-approved Construction Traffic Control Plan to address the potential for emergency access and transportation circulation construction-related impacts, including pedestrian and bicycle circulation disruption in the public right-of-way. The Plan must describe safe detours and protocols for implementing the following: temporary traffic controls (e.g., a flag person during heavy truck traffic for soil export) to maintain smooth pedestrian and traffic flow; dedicated on-site turn lanes for construction trucks and equipment leaving the site; scheduling of peak construction truck traffic that affects traffic flow on the arterial system to off-peak hours; consolidation of truck deliveries; and/or rerouting of construction trucks away from congested streets or sensitive receptors. All of these measures would be temporary and would not require construction of any new facilities or otherwise create a physical impact to the environment that could result in secondary impacts.

Tribal Cultural Resources

MM-TCR-1 requires the retention of a Native American monitor from the Gabrielino Band of Mission Indians – Kizh Nation prior to ground disturbing activities. MM-TCR-2 requires procedures for an unanticipated discovery of human remains and associated funerary objects during construction activities. MM-TCR-3 requires procedures for burials and funerary remains during construction activities. These mitigation measures are proposed to reduce potential impacts associated with tribal cultural resources and includes procedural actions that would not result in physical changes in the environment that could result in secondary impacts.

5.5 Effects Found Not to Be Significant

Section 15128 of the CEQA Guidelines requires that an EIR briefly describe potential environmental effects that were determined not to be significant and therefore were not discussed in detail in the EIR. As discussed in the Notice of Preparation, released on July 19, 2021, implementation of the Project is not expected to result in any significant impacts to aesthetics[3]; agriculture and forestry resources; biological resources; mineral resources; and/or wildfire.

A summary of the analysis provided in the Notice of Preparation, for these issue areas, is provided below.

[3] Because the proposed project is considered a mixed-use residential project on an infill site within a transit priority area, aesthetic impacts of the project cannot be considered significant, pursuant to PRC Section 21099(d). However, the EIR contains an informational-only aesthetics discussion to respond to community concerns regarding aesthetics issues (see Section 4.1 of this EIR).

5.5.1 Agriculture and Forestry Resources

The Project site is located in an urban area on a site that is fully developed with buildings and asphalt paving and is entirely within the Downtown Mixed Use (DMU) zone ("Downtown Mixed Use" General Plan land use designation), with adjacent DMU and Central Business District (CBD) zone ("Commercial" General Plan land use designation) parcels. There are no existing agriculture or forestry activities on the site. No readily available opportunities for agricultural or forestry operations exist on site or in the surrounding area. According to the California Department of Conservation's California Important Farmland Finder, most of Los Angeles County, including the City of Arcadia, is not mapped as part of the state's Farmland Mapping and Monitoring Program; thus, the Project site does not contain Prime Farmland, Unique Farmland, or Farmland of State Importance (collectively "Important Farmland") (DOC 2021), nor does it contain any parcels under a Williamson Act contract (DOC 2018). Additionally, the Project site nor the surrounding area contain forestland or timberland. Therefore, impacts associated with agricultural and forestry resources would not occur.

5.5.2 Biological Resources

Under the existing conditions, the Project site is developed with paved surfaces and buildings, with no native or naturalized vegetation communities present. A limited amount of landscaped area is located within the Project site and adjacent to the public rights-of-way, consisting of small areas of ornamental trees, shrubs, and turf (Google 2021). This vegetation is ornamental in nature, entirely surrounded by urban development, and does not form a cohesive plant community that would provide quality suitable habitat for candidate, sensitive or special status wildlife species, or would support wildlife movement.

Special-Status Species

On June 25, 2021 a qualified Dudek Senior Biologist conducted electronic searches of California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), and the U.S. Fish and Wildlife Services (USFWS) databases. The database search results indicated that there were 84 special-status plant species and 49 special-status wildlife species with recorded occurrences in the U.S. Geologic Survey's Baldwin Park, California 7.5-minute topographic quadrangle, in which the project is located, and surrounding eight quadrangles (CDFW 2021, CNPS 2021, USFWS 2021a) (see Appendix N, Biological Resources Memorandum). The Project is not located within any designated critical habitat (USFWS 2021). No natural vegetation communities, soils, or hydrology occur on the Project site, so no special-status plant or wildlife species are expected on the Project and no impact would occur.

Riparian Habitat/Sensitive Natural Communities

The Project site is developed with paved surfaces and buildings, with no native or naturalized vegetation communities present. No riparian or wetland features are present to support riparian habitat (USFWS 2020b). No impacts would occur.

Wetlands

No wetlands or other jurisdiction waters are within the Project site (USFWS 2021b). Water from rainfall flows across the impervious surfaces found on the Project site and enter the municipal stormwater system. No impacts would occur.

Wildlife Movement/Use of Nursery Sites

There are no on-site drainages or ponds that may serve as habitat for fish species. The Project site is developed and surrounded by developed area, and it does not reside within any designated wildlife corridors and/or habitat linkages identified in the South Coast Missing Linkages analysis project (South Coast Wildlands 2008) or California Essential Habitat Connectivity project (Spencer et al. 2010; CDFW 2014), so the Project would not affect the movement of any native resident or land-based wildlife species, nor would it affect established native resident or migratory wildlife corridors.

Ornamental vegetation located on the Project site could provide suitable nesting habitat for some urban-adapted bird species. All development activities are subject to the requirement to protect nesting birds, in compliance with the Migratory Bird Treaty Act and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code, which prohibits the accidental or "incidental" taking or killing of migratory birds. The Project would be required to comply with the Migratory Bird Treaty Act and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code by preventing the disturbance of nesting birds during Project construction activities. This would generally involve clearing the Project site of all vegetation outside the nesting season (from September 1 through January 31) or if construction would commence within the nesting season (which generally runs from February 1 through August 31 and as early as February 1 for raptors), conducting a pre-construction nesting bird survey to determine the presence of nesting birds or active nests at the Project site. Any active nests and nesting birds must be protected from disturbance by construction activities through buffers between nest sites and construction activities. The buffer areas may be removed only after the birds have fledged. No impacts would occur.

Conflict with Biological Resources Protection Policies and Ordinances

Any development activities associated with implementation of the Project would be required to comply with all applicable requirements set forth by the City, including adherence to tree preservation and maintenance requirements. The Project site includes 27 on-site trees, as well as nine (9) off-site street-trees adjacent to the Project's northern and southern boundary lines. All 27 on-site trees would be removed, including six (6) protected species, as a result of Project implementation. In addition, one (1) off-site City owned street located on Santa Clara Avenue would be removed, and eight (8) City owned trees within the public right-of-way along Wheeler Avenue would be encroached upon. According to Division 10, Section 9110.01, Tree Preservation, of the City's Development Code, a permit is required prior to removal of any protected tree, as well as prior to any encroachment into the protected zone of any protected tree. As required by Section 9110.01.080, for every protected tree that was approved to be removed, it shall be replaced with a minimum of two (2) new 24-inch box trees (2:1 ratio). As discussed in Appendix B, Arborist report, Dudek further recommends replacement of non-regulated tree species as a ratio of 1:1, resulting in a total of 14 protected replacement trees, and 21 non-regulated replacement trees. According to the landscape plans, the Project proposes to plant 56 on-site replacement trees of varying size and species type.

Additionally, Article IX, Chapter 8, Comprehensive Tree Management Program, of the City's Municipal Code governs the planting, maintenance, removal and replacement of City-owned trees on public property. City-issued permits are not required for removal of tree limbs or pruning or trimming branches of street trees in conjunction with construction activities; however, the City requires that pruning or trimming be completed in accordance with the industry standards as set forth by the International Society of Arboriculture or the American National Standards Institute (ANSI), and in consultation with a Certified Arborist. Section 9812, Tree Planting and Maintenance Regulations, of Chapter 8 also mandates that the owner of property adjacent to a parkway or public right-of-way shall have the responsibility to maintain in good condition all street trees in the parkway or public

right-of-way. Further details are included in Appendix B, Arborist Report, of this Draft EIR. Due to the required adherence to City regulations, impacts associated with biological resources protection policies and ordinances would be less than significant and would not require further evaluation in the Draft EIR.

Conflict with Habitat Conservation Plan/Natural Community Conservation Plan

The Project site is located in a highly urbanized area, and there is no adopted Habitat Conservation Plan or Natural Community Conservation Plan for the site or the surrounding area. No conflict with a Habitat Conservation Plan or Natural Community Conservation Plan would occur with the Project. No impacts would occur.

Therefore, impacts associated with biological resources would be less than significant and would not require further evaluation in the Draft EIR.

5.5.3 Mineral Resources

There are no oil wells or oil/mineral extraction activities on the Project site (CalGEM 2021). Current on-site land uses do not allow for oil/mineral extraction. According to the Department of Conservation's California Geological Survey, the City is within a Mineral Resources Zone-2 area, which is classified as an area or areas where "adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists" (DOC 2010). Ordinarily, classification of a mineral deposit as MRZ-2 would constitute adequate evidence that an area contains significant mineral deposit; thus, the Project could result in the loss of mineral resources of known importance to the state (DOC 2002). However, in recognition of the fact that much of the MRZ-2 designated lands within the San-Gabriel Valley Production-Consumption Region have become highly urbanized, and therefore incompatible with mineral extraction enterprises, the zone has been further designated into discreet Sections (DOC 2014). The Project site is not located in a Section currently identified as being suitable for mineral extraction (DOC 2014). As the site is not considered suitable for mineral extraction, and as there are no oil wells or oil extraction activities on the site, Project impacts associated with mineral resources would not occur.

5.5.4 Wildfire

According to the California Department of Forestry and Fire Protection's Fire Hazard Severity Zone maps and the City General Plan Safety Element, the Project site is not within a Fire Hazard Severity Zones (CAL FIRE 2021; City of Arcadia 2010a). Due to the urban setting of the Project site, the potential for wildland fire hazards in the immediate Project vicinity are extremely limited, however, portions of the City approximately 0.75 miles north of the Project Site are within a Very High Fire Hazard Severity Zone (VHFHSZ). The proposed Project would result in an increase in permanent residents in the Downtown Core, which could potentially have an impact on City wide evacuation routes. The City General Plan EIR Section 4.7, Hazards and Hazardous Materials, identifies the I-210 (running east-west through the City) and I-605 (running along the City's southeastern corner) as the official area-wide evacuation routes. As identified by CAL FIRE, all of the incorporated Fire Hazard Severity Zones within and adjacent to the City are north of the I-210, as are the main arterial roadways that would likely be utilized by residents of these zones in the event of a wildfire evacuation (CAL FIRE 2021). The Proposed project area is located to the south of the I-210 and to the far west of 1-650. As such, potential residents of the proposed Project would likely not access the designated area-wide evacuation routes via the same arterial roadways as the northern residents living in and around the VHFHZs and/or other Low, Moderate/High/Fire Hazard Severity Zones. As such, the Project would not exacerbate or expose people or structures to wildfire risks or substantially impair an adopted emergency response plan.

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6 Alternatives

This chapter describes and evaluates alternatives to the Alexan Mixed-Use Development Project (Project). This chapter implements the requirements set forth in the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.), and identifies the Environmentally Superior Project Alternative, as required by CEQA Guidelines Section 15126.6(e)(2).

6.1 Introduction

CEQA requires that Environmental Impact Reports (EIRs) "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" (14 CCR 15126.6[a]). The CEQA Guidelines direct that the selection of alternatives be governed by "a rule of reason" (14 CCR 15126.6[a] and [f]). As defined by the CEQA Guidelines (14 CCR 15126.6[f]):

> The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the Lead Agency determines could feasibly attain most of the basic objectives of the project.

As presented in prior sections of this Draft EIR, the Project would not result in significant and unavoidable impacts after implementation of all mitigation measures. Consistent with CEQA, the analysis presented in this chapter considers a reasonable range of alternatives to the proposed Project and evaluates their comparative environmental impacts. The selection of alternatives and their discussion must "foster informed decision making and public participation" (14 CCR 15126.6[a]). Therefore, this chapter identifies potential alternatives to the proposed Project and evaluates them, as required by CEQA.

The inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact "feasible." The final decision regarding the feasibility of alternatives lies with the decision maker(s) for a given project, who must make the necessary findings addressing the potential feasibility of an alternative, including whether it meets most of the basic project objectives (further described in Section 6.2, Project Objectives) or reduces the severity of significant environmental effects pursuant to CEQA (California Public Resources Code, Section 21081; see also 14 CCR 15091).

This Draft EIR includes the analysis of two alternatives to the proposed Project:

- Alternative A – No Project/Existing Development
- Alternative B – Increased Commercial-Use Alternative: Conversion of Live/Work Units to Commercial

6.2 Overview of Significant Project Impacts

Alternatives should focus on reducing or avoiding significant environmental impacts associated with the Project as proposed. As described in Chapter 4, Environmental Analysis, the Project would result in the following significant or potentially significant environmental impacts. All of these impacts would be reduced to a less-than-significant level

through incorporation of mitigation measures. The proposed Project would not result in significant impacts during operations.

- **Impact CUL-1: Archaeological Resources.** The proposed Project could potentially cause a substantial adverse change in the significance of an archeological resource in the event of an inadvertent discovery during ground disturbance activities during construction.
- **Impact GEO-1: Geotechnical Investigation**. The proposed Project could potentially exacerbate hazards associated with geology and soils associated with soil types, settlement, seismic design criteria and other soil characteristics that need to be considered in the structural design and construction of buildings and infrastructure.
- **Impact GEO-2: Paleontological Resources.** The proposed Project could potentially directly or indirectly impact a unique paleontological resource in the event of an inadvertent discovery during ground disturbance activities during construction.
- **Impact HAZ-1: Demolition and Abatement Procedures.** Demolition of structures that contain asbestos or other hazardous materials/wastes could potentially result in a hazard to the public or the environment during transport and disposal of construction debris.
- **Impact HAZ-2: Contaminated Soil Management.** The proposed Project could potentially result in the disturbance or unearthing of contaminated soils during Project construction, resulting in a significant hazard to the public or the environment.
- **Impact HAZ-3: Vapor Mitigation**. The proposed Project could potentially result in a potential vapor intrusion risk to proposed residential structures to be constructed on the Project site, resulting in a significant hazard to the public or the environment.
- **Impact TRA-1: Inadequate Emergency Access**. The proposed Project could potentially result in inadequate pedestrian, bicycle and vehicular circulation and emergency vehicle access during short-term construction activities.
- **Impact TRC-2: Tribal Cultural Resources.** The proposed Project could potentially cause a substantial adverse change in the significance of a tribal cultural resource in the event of an inadvertent discovery during ground disturbance activities during construction.

6.3 Project Objectives

CEQA Guidelines Section 15124 requires an EIR to include a statement of objectives sought by the Project. The objectives assist the City of Arcadia (City) in developing a reasonable range of alternatives to be evaluated in the EIR. The Project's specific objectives are as follows:

1. To efficiently develop currently under-utilized property within a Transit Priority Area into a mixed-use, high-density, urban development that provides convenient access to alternative forms of transportation, including bicycling, bus lines and the Metro L (Gold) Line light-rail station.
2. To provide new multifamily residential housing, including affordable housing, that helps meet the City's Regional Housing Needs Allocation (RHNA) requirements
3. To provide compact, mixed-use development in the Downtown Arcadia established Land Use Focus Area to further facilitate the City as "a destination stop on the L (Gold) Line".
4. To propose development that is consistent with the existing Downtown Mixed-Use zoning and land use designation.

5. To promote pedestrian connectivity within the Downton Mixed-Use area and to the Metro L (Gold) Line Station by integrating plazas, paseos, and attractive landscaping into Project design.
6. To encourage building design that creates a cohesive, vibrant look in Downtown Arcadia and that minimizes the appearance of expansive parking lots on major commercial corridors.

6.4 Significant and Unavoidable Impacts

As discussed throughout Chapter 4, Environmental Analysis, of this EIR, implementation of the proposed Project would not result in any significant and unavoidable impacts on the environment. Prior to mitigation, the proposed Project would result in potentially significant impacts related to cultural resources, geology and soils, hazards and hazardous materials, transportation, and tribal cultural resources. However, with implementation of mitigation measures provided in Table ES-1, Summary of Project Impacts, of Chapter ES, Executive Summary, all potentially significant impacts would be mitigated to below a level of significance.

6.5 Alternatives Considered and Eliminated During the Project Planning Process

CEQA Guidelines Section 15126.6(c) recommends that an EIR identify any alternatives that were considered by the lead agency but were rejected as infeasible and briefly explain the reasons for their rejection. Among the factors described by CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in an EIR are failure to meet most of the basic objectives of a project, infeasibility, or inability to avoid significant environmental impacts.

With respect to the feasibility of potential alternatives to a project, CEQA Guidelines Section 15126.6(t)(l) states the following:

> Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries … and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

In determining an appropriate range of Project alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and then rejected Two alternatives for the Project were considered, but ultimately rejected from further analysis in the Draft EIR, consistent with Section 15126.6(c) of the CEQA Guidelines. A description of the potential alternative considered, but not carried forward, and the rationale for rejection is provided below.

6.5.1 Alternative Location

The City considered the potential for alternative locations to the Project even though Public Resources Code section 21155.2, subdivision (c)(2), states that an EIR for a transit priority project "is not required to analyze off-site alternatives to the transit priority project." As stated in Section 15126.6(f)(2)(A), the key question and first step in analyzing alternative sites is whether any of the significant effects of a project would be avoided or substantially

lessened by putting that project in another location. Only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR.

Potential for an Alternative Site Location to Reduce Project Significance Findings

The proposed Project would allow for the continued operation of the existing occupied eight-story office building and bank building, while converting the existing surface parking lot and existing commercial buildings to a mixed-use development that would accommodate 319 residential units, amenity spaces, pedestrian/open space, and associated parking garage. Additionally, within the existing eight-story office building, interior renovation would take place for development of a ground level café. There are no significant and unavoidable environmental impacts associated with the proposed Project, as described throughout Chapter 4 of this Draft EIR. Further, there are no impacts that would be substantially lessened or avoided by considering development of the Project on another site in the City, as further explained below.

The Project's proposed location is in an area of the City surrounded by a variety of land uses, including mixed-use, recreational, office, and commercial uses. The current General Plan designation for the Project site is Downtown Mixed-Use. Since the City is largely built-out, few available properties of similar size as the Project site exist for the proposed Project. Due to the generally built-out nature of the City, there are currently no vacant, undeveloped parcels in proximity to the Metro L Line station that could accommodate the proposed Project.

Assuming any development near the Metro L Line would require demolition of existing structures, constructing the proposed Project on an alternate site would result in similar construction-related impacts, such as similar levels of construction noise, similar presence of hazards and/or quantities of hazardous materials, and similar levels of construction traffic and energy consumption. Currently, the proposed Project is far enough away from sensitive receptors (e.g. residences, schools) that no significant short-term air quality or noise impacts to those sensitive receptors would result, and no mitigation would be required. Because of the City's urban nature, mix of land uses, and the presence of a variety of sensitive receptors throughout the City, it is unlikely that an alternate site would be situated any further away from sensitive receptors to substantively lessen the impacts of the proposed Project during construction. Similarly, development at an alternate site would not reduce impacts to transportation, as the Project site is situated within a Transit Priority Area (TPA) in an area surrounded by several transportation options and is across the street from the Metro L Line station.

Regardless of its location, an alternate location for the proposed Project would generally place similar demands on the City's public services, utilities and services systems, and recreational facilities. Regarding the visibility and appearance of the Project, the current Project site location within a recognized TPA means that it is exempt from any impacts related to aesthetics and parking under Public Resources Code (PRC) Section 21099(d). Any alternative Project site location outside of the TPA would result in a requirement to analyze and potentially mitigate aesthetic impacts, which would likely increase the level of significance of a Project that is currently exempt from this issue. For these reasons, use of an alternative site would not likely result in a substantial reduction in the impacts of the proposed Project.

Potential for an Alternative Site Location to Better Achieve Stated Project Objectives

A key objective of the Project is to increase pedestrian connectivity and use within a recognized TPA. With the planned integration of the public plaza/paseos and attractive landscaping, the Project would increase pedestrian connectivity to the light-rail system, and provide a compact, mixed-use development in what is arguably the City's most important transit-oriented Land Use Focus Area (Downtown Arcadia). Another Project objective is to efficiently

develop currently under-utilized property within a TPA, such as large surface parking-lots, which provide potential redevelopment opportunities for mixed-use, high-density, urban development.

There are several parking lots in the immediate Project area, including some parking lots within their own parcels within the TPA in the downtown area that could potentially be redeveloped with a mixed-used residential development. Some of the closest parking lots to the Project site are identified in Figure 6.1, Considered and Eliminated Alternative Site Locations and include the following:

1. 13 East Santa Clara Street (AIN 5773-006-053)
2. 41 Wheeler Avenue (East Santa Clara Street frontage) (AIN 5773-006-907)
3. 30 South Santa Anita Avenue (5773-012-023)
4. City of Arcadia Parking Lot (AIN 5773-012-901)

Redevelopment of these parcels or similar parcels within the TPA could potential satisfy the proposed Project's objectives and may not require the demolition of existing buildings. However, one of the factors for feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." Neither the 13 East Santa Clara Street, 41 Wheeler Avenue, nor the 30 South Santa Anita Avenue parking lot parcels are owned by the Project Applicant and are all associated with occupied businesses (e.g. USPS, REI). The lot adjacent to 30 South Santa Anita Avenue is owned by the City and currently provides a parking amenity for the City as a whole. Additionally, none of the parcels independently are of the equivalent size as the current Project site.

In conclusion, the proposed Project would not result in any significant unavoidable environmental impacts for any threshold or subject of analysis, including those related to the Project's location. Further, as a result, the consideration to locate the Project in an alternate location was rejected, and is not further analyzed in this Draft EIR.

6.5.2 Reduced Density Alternative

Another alternative considered, but ultimately rejected from further analysis in the Draft EIR, involved a development reduction via elimination of the 35% housing density bonus provided for by SB 1818 (Government Code section 65915, also known as Density Bonus Law). As previously discussed, the proposed Project would result in the construction of a 7-story multi-family residential building consisting of 319 dwelling units. Under the City's Downton Mixed Use (DMU) zoning regulation, the Project site would have an allowable base density of 80 units per acre, allowing for a total of 236 dwelling units on the 2.96-acre site. The Project applicant proposes to utilize a 35% density bonus under Density Bonus Law, which would increase the allowable dwelling unit count to 319 total units. In order to qualify for the 35% bonus, the Project would be required to dedicate either twenty percent of the total number of residential units for lower income households, or eleven percent for very low-income households, as defined in Sections 50079.5 and 50105, respectively, of the California Health and Safety Code.

In accordance with Density Bonus Law, the Project as proposed would include 26 very-low-income affordable dwelling units. Thus, the final proposed unit mix would consist of 293 market rate units, and 26 affordable units, totaling 319 dwelling units. The Reduced Density Alternative considered reducing the residential unit count by 83 in order to comply with the City's existing DMU zoning base density of 80 units per acre. Under the Reduced Density alternative, no affordable housing units would be included, and thus the project would not qualify for a density bonus under Density Bonus Law, and would remain at 236 units, or an allowable base density of 80 units per acre, in accordance with the City's existing zoning requirements. By reducing the residential unit count, this alternative

would subsequently allow for a reduction in overall building height from a proposed seven stories to six stories. However, for the reasons discussed below, this Project alternative was ultimately rejected by the City, in accordance with PRC Section 15126.6(c).

The Project, as proposed, would be seven stories, which is consistent with the City's height requirements for developments located in the DMU and H-8 overlay zones. The existing site zoning allows for a maximum building height of eight stories, therefore, a reduction in building height would not result in a reduction of any significant impacts. While the reduction in building height could potentially reduce an impact related to aesthetics (i.e., visual consistency for scale, mass, and character with the surrounding neighborhood), CEQA does not consider the change in visual character in its aesthetic analysis of urban infill projects. In addition, a six-story building would still require the removal of 27 on-site trees, and encroachment upon nine (9) project adjacent street trees. Additionally, under PRC Section 21099(d), aesthetic impacts for this Project are not required to be evaluated under CEQA and would not be considered significant impacts on the environment.[1]

Additionally, the Project as proposed would create new housing and would include affordable housing in accordance with Density Bonus Law. The proposed very low-income units would satisfy a portion of the City's mandated 6th Cycle Regional Housing Needs Allocation (RHNA) allocation. By utilizing the 35% density bonus, the proposed Project also would provide additional housing opportunities within the City. Together, the affordable housing inclusion and allowable density bonus help attain a basic Project objective: "To provide new multifamily residential housing, including affordable housing, that helps meet the City's RHNA requirements". In addition, it is not within the City's authority to disallow the density bonus granted through Density Bonus Law, which is a State law. Lastly, in accordance with PRC Section 15126.6(b), as the proposed Project has no significant unavoidable impacts, no aspects of this alternative would avoid or substantially lessen any unmitigated significant Project effects. As a result, the consideration to reduce Project density was rejected, and is not further analyzed in this Draft EIR.

6.6 Alternatives Selected for Further Analysis

This section discusses a reasonable range of alternatives to the proposed Project, including a no project alternative in compliance with CEQA Guidelines Section 15126.6(e). These alternatives include the following:

- Alternative A – No Project/Existing Development
- Alternative B – Increased Commercial-Use Alternative: Conversion of Live/Work Units to Commercial

Pursuant to Section 15126.6(d) of the CEQA Guidelines, each alternative is 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 Project. Each alternative is also evaluated to determine whether the Project objectives would be substantially attained.

[1] Aesthetic impacts, irrespective of significance, are not required to be evaluated under CEQA per SB 743 (PRC Section 21099(d)), because the Project, as proposed and under the Reduced Density Alternative, meets the criteria of an infill residential development within a Transit Priority Area (TPA). See Section 4.1, Aesthetics, of this Draft EIR for a more detailed discussion surrounding PRC Section 21099(d) and TPAs.

6.6.1 Alternative A – No Project/No Development

Alternative Description

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate the specific alternative of "no project" along with its impact. As stated in this section of the CEQA Guidelines, the purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving a proposed project. As stated in Section 15126.6(e)(3)(A), when a project is the revision of an existing land use or regulatory plan or policy or an ongoing operation, the no project alternative will be the continuation of the plan, policy, or operation into the future. Section 15126.6(e)(3)(B) further states that "in certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained." The proposed Project does not include a General Plan Amendment or a Zone Change. Accordingly, Alternative A assumes the proposed Project would not proceed, no new permanent development or land uses would be introduced within the Project site, and the existing environment would be maintained. The existing uses would continue to operate as they do currently. The existing office and commercial uses would remain in place and operational, the existing surface parking lots would be retained, no new buildings or subterranean parking would be constructed, and no on-site landscaping improvements or pedestrian connections would occur. Additionally, all 36 onsite trees, including six (6) protected species under Section 9110.01 of the City's Tree Preservation Ordinance, would be preserved under this alternative, and none of the nine (9) Project adjacent street-trees would be encroached upon.

Ability to Meet Project Objectives

1. To efficiently develop currently under-utilized property within a Transit Priority Area into a mixed-use, high-density, urban development that provides convenient access to alternative forms of transportation, including bicycling, bus lines and the Metro L (Gold) Line light-rail station.

   Alternative A would not satisfy this Project Objective. Alternative A assumes existing commercial, surface parking, and office uses located on separate parcels would remain and that the surface parking would not be developed. Therefore, Alternative A would not develop the property within the City's Transit Priority Area into a mixed-use, high-density, urban development and would not increase the City's population near the Metro L Line. Alternative A would have no impact on existing access to alternative forms of transportation.

2. To provide new multifamily residential housing, including affordable housing, that helps meet the City's Regional Housing Needs Allocation (RHNA) requirements.

   Alternative A would not satisfy this Project Objective. Alternative A would not provide for additional housing opportunities, and therefore, would not provide new multifamily residential housing, including affordable housing, that could help meet the City's RHNA requirements.

3. To provide compact, mixed-use development in the Downtown Arcadia established Land Use Focus Area to further facilitate the City as "a destination stop on the L (Gold) Line".

   Alternative A would not satisfy this Project Objective. Alternative A assumes existing land uses and surface parking would remain, and therefore, would not provide compact, mixed-use development in the Downtown Arcadia established Land Use Focus Area, and would not further facilitate the City as "a destination stop on the L (Gold) Line".

4. To propose development that is consistent with the existing Downtown Mixed-Use (DMU) zoning and land use designation.

Alternative A would satisfy this Project Objective. Alternative A assumes existing land uses and surface parking would remain. Although no new development would be proposed, Alternative A would be consistent with the existing DMU zoning and General Plan designation.

5. To promote pedestrian connectivity within the Downton Mixed-Use area and to the Metro L (Gold) Line station by integrating plazas, paseos, and attractive landscaping into Project design.

   Alternative A would not satisfy this Project Objective. Alternative A assumes existing land uses and surface parking would remain. The existing site does not currently support any plazas or paseos, and there are no planned pedestrian amenities or connectivity improvements. As such, the Alternative A would not promote pedestrian connectivity within the Downton Mixed-Use area and to the Metro L Line station.

6. To encourage building design that creates a cohesive, vibrant look in Downtown Arcadia and that minimizes the appearance of expansive parking lots on major commercial corridors.

   Alternative A would not satisfy this Project Objective. Alternative A assumes existing land uses and surface parking would remain and would not eliminate the large surface parking lot that is visible from both Santa Clara Avenue and Wheeler Avenue. Therefore, Alternative A would not encourage building design that creates a cohesive, vibrant look in Downtown Arcadia, and would not minimize the appearance of expansive parking lots on major commercial corridors.

Comparison of the Effects of Alternative A to the Project

Aesthetics

Alternative A analyzes the effects of continued operations of the Project site. Since no changes would occur under Alternative A, the existing site would continue to be consistent with the zoning and General Plan designation and the existing site would continue to qualify as a TPA as defined in PRC Section 21099. As such, neither the proposed Project's nor the existing site's impacts related to aesthetics would be considered significant impacts pursuant to PRC Section 21099(d). Both the proposed Project and Alternative A would be consistent with the City's General Plan goals and policies related to aesthetics. Alternative A would not introduce new sources of glare and light to the Project site and surrounding area. However, the City's Zoning requirements and the General Plan policies require new development to avoid glare impacts and be considerate of light trespass on adjacent residential neighborhoods. Thus, the proposed Project impacts related to light, and glare would be less than significant. Additionally, while the proposed Project would be in accordance with City regulations governing tree preservation and management, including 9110.01 of the City's Development Code, as well as Chapter 8 of the City's Municipal Code, and would therefore not result in any significant impacts, no tree removals or encroachments upon existing trees would occur under Alternative A. However, because there would be no changes related to aesthetics under Alternative A, aesthetic impacts under Alternative A would be **less than** those anticipated from the proposed Project.

Air Quality

Construction Impacts: Alternative A would not alter the existing condition of the Project site or require any construction activities, and, therefore, would not result in any construction emissions associated with construction worker and construction truck traffic, or the use of heavy-duty construction equipment. Therefore, impacts under Alternative A would be **less than** those anticipated from the proposed Project.

Operational Impacts: Under Alternative A, operations and operational emissions would remain in the current condition, whereas the proposed Project would generate additional emissions of criteria pollutants. Under Alternative A, the existing commercial and office uses would continue and would not result in additional employees

or residents to the Project site. Alternative A would result in fewer operational emissions, as no new development would occur at the Project site, although the population growth associated with the proposed development would be expected to occur elsewhere in the City or the region. Because no operational air quality emissions would be generated under Alternative A, air quality impacts under Alternative A would be **less than** those anticipated from the proposed Project.

Cultural Resources

Under Alternative A, there would be no demolition of existing structures and no impact to historic resources. Alternative A would not have the potential to impact culturally significant resources because no ground disturbance would occur on the Project site. The Project site would remain as is and potential construction impacts (including ground-disturbing activities such as grading or other earthwork) that could result in disturbance of previously unknown resources, would not occur. Therefore, MM-CUL-1 would not be applicable to Alternative A for the unanticipated discovery of archaeological resources and although the proposed Project would comply with Section 7050.5 of the California Health and Safety Code, if human remains are found, Alternative A would result in no potential impacts to human remains because no construction would occur. Mitigation requirements set forth in Section 4.3, Cultural Resources, would not be required under Alternative A. Therefore, impacts under this alternative would be **less than** those anticipated from the proposed Project.

Energy

***Short-Term Impacts*:** Although the proposed Project would have no significant impacts on energy and no mitigation measures were required, there would be no construction activity and no temporary use of electricity, natural gas, and petroleum under Alternative A. Therefore, short-term impacts under this alternative would be **less than** those anticipated from the proposed Project.

***Long-Term Impacts*:** The natural gas and electricity usage would not increase under Alternative A when compared to the existing condition. Although the proposed Project would be constructed in compliance with applicable regulations governing energy efficiency and would have no significant impacts on energy and no mitigation measure were required, because the Project would result in an increase in population and intensity of energy use, impacts under Alternative A would be **less than** those anticipated from the proposed Project.

Geology and Soils

Alternative A would not result in erosion or loss of topsoil because no ground disturbance would occur on the Project site. Alternative A would not introduce new development to the Project site, and therefore, would not introduce new earthwork or structures that could have the potential to exacerbate geologic hazards. The Project site would remain as is and potential construction impacts (including grading, excavations, and trenching) that could risk potential disturbance of paleontological resources, would not occur. Therefore, MM-GEO-1, requiring adherence to the recommendations set forth in the Geotechnical Investigation (Appendix E-1) and MM-GEO-2, requiring measures to reduce impacts to paleontological resources, would not be required under Alternative A. Therefore, impacts under Alternative A would be **less than** those anticipated from the proposed Project.

Greenhouse Gas Emissions

Short-Term Impacts: Alternative A would not alter the existing condition of the Project site or require any construction activities, and, therefore, would not generate any short-term construction-related greenhouse gas

(GHG) emissions. Even though no significant impacts would result and no mitigation was required for the proposed Project, because Alternative A would result in no short-term impacts to GHG emissions, impacts under Alternative A would be **less than** those anticipated from the proposed Project.

Long-Term Impacts: Under Alternative A, operations and operational emissions would remain the same as in the current condition. Under the proposed Project, operational conditions would be greater than that of existing conditions; however, impacts would be less than significant and no mitigation measures would be required. Under Alternative A, the Project site would remain in its existing condition and the potential benefits of the proposed Project related to providing new living and working opportunities in close proximity to transit would not occur. Although no significant impacts would result and no mitigation was required for the proposed Project, Alternative A would have no long-term impact on GHG emissions; therefore, impacts under Alternative A would be **less than** those anticipated from the proposed Project.

Hazards and Hazardous Materials

Short-Term Impacts: Under Alternative A, there would be no construction activity and no potential use or release of hazards and hazardous materials resulting from demolition and construction would occur. Alternative A would not result in the demolition of the existing surface parking lot, a two-story office building, and two single-story commercial buildings where asbestos-containing materials are present, and polychlorinated biphenyls (PCBs), mercury, and other universal wastes are likely present. Alternative A would also not result in ground disturbing activities, which have the potential to unearth contaminated soils due to the current bank drive-thru location's previous use as laundry facility. Therefore, mitigation requirements related to short-term construction, including MM-HAZ-1, requiring abatement procedures for the removal of materials containing asbestos, and MM-HAZ-2, requiring preparation of a soil management plan, as set forth in Section 4.7, Hazards and Hazardous Materials, would not be required under Alternative A. Conversely, Alternative A would not remediate any existing, historical contamination. Therefore, short-term impacts related to hazards and hazardous materials under this alternative would be **less than** those anticipated from the proposed Project.

Long-Term Impacts: Under Alternative A, operations would remain the same as in the current condition. Although the proposed Project would not create a significant long-term hazard to the public or the environment, the proposed Project would increase routine transport, use, and disposal of hazardous materials and/or wastes on the Project site compared to the existing conditions under Alternative A due to increased intensity of use. Additionally, the Project would require vapor mitigation and monitoring (MM-HAZ-3) to ensure that concentrations of volatiles in indoor air would be below applicable Department of Toxic Substance Control (DTSC) Screening Levels (SLs) in the proposed structure. Therefore, operational impacts on hazards and hazardous materials under Alternative A would be **less than** those anticipated from the proposed Project.

Hydrology and Water Quality

Short-Term Impacts: Alternative A would not alter the existing condition of the Project site or require any construction activities, and, therefore, would not generate any short-term construction-related hydrology or water quality impacts. Even though no significant impacts would result and no mitigation was required for the proposed Project, because Alternative A would result in no short-term impacts to hydrology and water quality, impacts under Alternative A would be **less than** those anticipated from the proposed Project.

Long-Term Impacts: Under Alternative A, the operational state would remain the same as in existing conditions and there would be no increase in surface water runoff nor alterations to existing water drainage systems. However, two

drywells and one primary settling chamber are proposed to be constructed on the Project site, located in the south side of the basement parking lot, which would be able to capture the required runoff volume and treat that volume as quickly as it enters the drywell system. As such, upon construction and operation of the drywells, groundwater recharge at the site would increase in comparison to existing conditions and consistent with the requirements of applicable Low Impact Development (LID) requirements. Therefore, because Alternative A does not include any improvements related to LID and onsite infiltration of surface drainage, the long-term impacts to hydrology or water quality under Alternative A would be **slightly greater than** those anticipated from the proposed Project.

Land Use and Planning

Alternative A would allow for the continued operations of the Project site and the existing 2-story office building, parking lot, and two 1-story commercial buildings would continue to operate as under existing conditions. Since no changes would occur under Alternative A, no new land use entitlements would be required. Unlike the proposed Project, Alternative A would not redevelop underutilized areas within a TPA and would not provide a mix of land uses, including high-density residential, which would help the City to achieve its goals and policies related to land use, circulation, economic development, and housing the potential benefits of the proposed Project related to providing new living and working opportunities in close proximity to transit would not occur. The proposed additional density on the Project site directly south of the Metro L Line light-rail station, which would encourage alternative modes of transportation to an automobile for the proposed residents of the Project, would not occur. Further, the proposed Project would not provide new multifamily residential housing, including affordable housing. Therefore, although Alternative A would not result in land use impacts, impacts under Alternative A would be **slightly greater than** those anticipated from the proposed Project because Alternative A would not facilitate the City's stated goals, policies, and objectives related to zoning and land-use in Downtown Arcadia.

Noise

Short-Term Impacts: Alternative A would not involve construction that could result in noise from the temporary use of heavy-duty construction equipment or generation of construction traffic, including worker and haul truck trips to the Project site. Construction noise and vibrations generated by the proposed Project would be less than significant, but would still be greater than would occur under Alternative A. Because Alternative A would result in no short-term impacts to noise, impacts under Alternative A would be **less than** those anticipated from the proposed Project.

Long-Term Impacts: Under Alternative A, the operational state would remain the same as in existing conditions. Addition of proposed Project traffic to the roadway network would not result in a discernable increase in noise, while noise impacts from increased stationary operational noise would be less than significant. However, there would be no additional on- or off-site noise resulting from Alternative A. Therefore, operational impacts on noise under this alternative would be **less than** those anticipated from the proposed Project.

Population and Housing

Alternative A would not generate part-time and full-time jobs associated with construction, because no construction would occur, whereas the proposed Project would require a temporary construction workforce. Under Alternative A, no change from the existing conditions would occur, and therefore, no population growth or new residential units would result as part of implementing Alternative A. Comparatively, the proposed Project would result in population growth from the proposed 319 residential units, in accordance with City projections, and would satisfy a portion of the City's mandated 6th Cycle RHNA allocation. Although the proposed Project would result in a net reduction in employment on the Project site due to the elimination of existing office/commercial structures, the City is currently

considered a jobs rich community and the modest reduction in employment would not be a significant impact. Because Alternative A would result in no changes to population, housing, and specifically affordable housing that would help the City reach its RHNA allocation requirements, impacts under Alternative A would be **greater than** those anticipated from the proposed Project.

Public Services and Recreation

Alternative A would not alter the existing condition of the Project site or require any construction activities, and, therefore, would not generate increased demand for fire protection and police services, or parks and library services. Alternative A would not result in changes to existing uses on the Project site. While the Project site currently places some demand on fire protection and police services and parks and library services due to the occupied office and commercial buildings, the proposed Project would increase demands relative to existing conditions. Even though no significant impacts would result and no mitigation was required for the proposed Project, because Alternative A would result in no impacts to public services and recreation, impacts under Alternative A would be **less than** those anticipated from the proposed Project.

Transportation

***Short-Term Impacts*:** Alternative A would not generate short-term traffic or transportation impacts because no construction would occur. Construction activities associated with the proposed Project have the potential to temporarily impact emergency vehicle access to the Project site. To ensure adequate safeguards for pedestrian, bicycle and vehicular circulation and emergency vehicle access during short-term construction activities, MM-TRA-1 is required. Because Alternative A would not generate construction traffic, MM-TRA-1 would not be required. Therefore, short-term impacts to transportation under this alternative would be **less than** those anticipated from the proposed Project. Mitigation measures set forth in Section 4.13, Transportation, would not be required under Alternative A.

Long-Term Impacts: Under Alternative A, the operational state would remain the same as in existing conditions, whereas the proposed Project would generate new vehicle trips from the Project site. New trips would result in impacts associated with Transportation, although the proposed Project's characteristics (e.g., mixed land uses, infill development, its proximity of nearby destinations and pedestrian connections) would encourage localized trips and trips made by walking, biking, carpool, or transit, and the Project would redevelop a surface parking lot and construct a mix of land uses that would help the City to achieve its goals and policies to increase density with a TPA, increase use of transit services, and enhance pedestrian connectivity. Although the Alternative A would not result in additional VMT impacts, it would not further the goals of the City's General Plan to develop currently under-utilized property within a TPA, resulting in a greater reduction of VMT overtime as compared to existing conditions (see Land Use and Planning above). Therefore, impacts under Alternative A would be **less than** those anticipated from the proposed Project.

Tribal Cultural Resources

The proposed Project would require earthwork for the excavation associated with the proposed Project, and specifically the subterranean parking levels, which would result in the potential to impact tribal cultural resources. Alternative A would not impact culturally significant tribal cultural resources because there would be no ground-disturbing activities and no excavation into native soils; therefore, MM-TCR-1 would not be required. Because this alternative would not affect tribal resources, impacts under Alternative A would be **less than** those anticipated from the proposed Project.

Utilities and Service Systems

Alternative A would not result in changes to the existing condition, and therefore, would not result in an additional demand for potable water, generation of wastewater, or generation of solid waste. Alternative A would not require the construction of new on-site water or sewer or stormwater distribution infrastructure (e.g., pipes, valves, meters, booster pumps) and as such, would not result in the expansion, construction, or relocation of utilities. The proposed Project would result in an intensification of use on-site, which requires additional wet and dry utilities, including telecommunication and cable facilities, whereas development under Alternative A would not. Under the proposed Project, MM-UTL-1 would be required to address cumulative impacts to wastewater infrastructure, which would not be required under Alternative A. Because Alternative A would not affect utilities and service systems, impacts under Alternative A would be **less than** those anticipated from the proposed Project.

6.6.2 Alternative B – Increased Commercial-Use Alternative: Conversion of Live/Work Units to Commercial

Alternative Description

CEQA requires that EIRs "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" (14 CCR 15126[a]).

As presented in prior sections of this EIR, the Project would not result in significant and unavoidable impacts after implementation of all mitigation measures. Therefore, Alternative B considers an alternative design that would not substantively alter the environmental impacts of the proposed Project, but would potentially improve the Project's consistency with local policies related to increasing density near transit, and provide more employment-generating uses.

As stated in Section 4.9, Land Use and Planning, the Downtown Mixed Use (DMU) land use designation permits service and retail uses, commercial businesses, professional offices, and residential uses within the City's downtown, at a maximum floor area ratio (FAR) of 1.0 (in which only commercial square footage is counted in calculation of FAR) and a maximum unit density of up to 80 dwelling units per acre (City of Arcadia 2018). The proposed Project satisfies the allowable 80 dwelling units per acre (i.e. 236 units on the 2.95-acre site), and with addition of the 35% density bonus under Density Bonus Law, the Project proposes a dwelling unit count to 319 total units, which would include 293 market-rate and 26 affordable dwelling units. Alternative B proposes a slight adjustment to this unit count by converting the 8 live-work units to all-commercial, without altering the 26 affordable units, resulting in a total of 311 units.

The purpose of converting these live-work units to all-commercial would be to increase the amount of employment-generating commercial uses on the Project site. Under the proposed Project, with the existing 83,253 square feet of commercial uses and the additional 9,281 square feet of "work" uses[2] from the proposed live-work units, the total non-residential square footage on site would be 92,534 square feet, resulting in a FAR of 0.72[3]. Under Alternative B, as demonstrated in Table 6-1, Alternative B, Project Land Use Summary, the conversion of 5,864 square feet from residential to commercial would increase the FAR to 0.77.

[2] 15,145 square feet is proposed of live-work units. Approximately 9,281 square feet (61%) is designated for "work" and 5,864 square feet (39%) is designated for "live".

[3] The total of 83,253 square feet of existing commercial/office uses + 9,281 square feet of "live" space = 92,534 square feet. The Project site has a total lot area of 128,510 square feet. Therefore, 92,534/128,510 = 0.72 FAR

Alternative B would generate residents associated with the 311 units and employment associated with construction of the 15,145 square feet of commercial use, which is 5,864 square feet more than the proposed Project and would generate an additional approximately 14 employees. Under Alternative B, due to the increased commercial square footage, the number of potential employees would increase from 30 under the proposed Project (a net deficit of 20 employees when compared to the existing conditions- See Table 4.11-8 in Section 4.11, Population and Housing), to 44 under Alternative B (a net deficit of 6 employees when compared to the existing conditions).

Table 6-1. Alternative B – Project Land Use Summary

Structures and Lot Area		Proposed Project				Alternative B: Increased Commercial-Use Alternative			
Structure Status?	*Description*	*Residential Units*	*Residential (SF)*	*Commercial (SF)*	*Office (SF)*	*Residential Units*	*Residential (SF)*	*Commercial (SF)*	*Office (SF)*
Existing	Bank of America (1-story)	—	—	6,534	—	—	—	6,534	—
	Office building (8-stories)	—	—	—	75,133	—	—	—	75,133
	Office building (1-story)	—	—	—	1,586	—	—	—	1,586
Proposed	Mixed-Use Building (7-stories)	319	258,341	—	9,281	311	252,477	15,145	—
		Subtotals	*258,341*	*6,534*	*86,000*	*Subtotals*	*252,477*	*21,676*	*76,719*
Total Lot Area(SF)	**128,510**		**Total**	**350,875**			**Total**	**350,875**	
			Non-Residential	*92,534*			*Non-Residential*	*98,398*	
		Project FAR		***0.72***		***Alternative B FAR***		***0.77***	

Source: Studio one Eleven, 2021

Ability to Meet Project Objectives

1. To efficiently develop currently under-utilized property within a Transit Priority Area (TPA) into a mixed-use, high-density, urban development that provides convenient access to alternative forms of transportation, including bicycling, bus lines and the Metro L (Gold) Line light-rail station.

   Alternative B would satisfy this Project Objective. Alternative B would decrease the amount of residential use and increase the amount of commercial use by 5,864 square feet, thereby increasing employment generation at the site when compared to the proposed Project. Similar to the proposed Project, Alternative B would develop currently under-utilized surface parking lot and commercial properties within a TPA into a mixed-use, high-density, urban development, and would provide more convenient access for City residents and workers to alternative forms of transportation.

2. To provide new multifamily residential housing, including affordable housing, that helps meet the City's Regional Housing Needs Allocation (RHNA) requirements.

Alternative B would satisfy this Project Objective. Although residential square footage would decrease under Alternative B by 5,864 square feet, it would still develop 311 new multifamily residential units, including 26 units of affordable housing. Similar to the proposed Project, Alternative B would help meet the City's RHNA requirements.

3. To provide compact, mixed-use development in the Downtown Arcadia established Land Use Focus Area to further facilitate the City as "a destination stop on the L (Gold) Line".

   Alternative B would satisfy this Project Objective. Alternative B would decrease the amount of residential use and increase the amount of commercial use by 5,864 square feet, thereby increasing employment generation at the site when compared to the proposed Project. Therefore, similar to the proposed Project, Alternative B would provide compact, mixed-use development in the Downtown Arcadia established Land Use Focus Area and would further facilitate the City as "a destination stop on the L (Gold) Line".

4. To propose development that is consistent with the existing Downtown Mixed-Use (DMU) zoning and land use designation.

   Alternative B would satisfy this Project Objective. Alternative B would not require a zone change or General Plan Amendment, similar to the proposed Project. Therefore, Alternative B would be consistent with the existing DMU zoning and General Plan land use designation.

5. To promote pedestrian connectivity within the Downton Mixed-Use area and to the Metro L (Gold) Line station by integrating plazas, paseos, and attractive landscaping into Project design.

   Alternative B would satisfy this Project Objective. Alternative B would maintain the proposed Project design, which includes integration of plazas, paseos and attractive landscaping. Similar to the proposed Project, Alternative B would be a mixed-use, high-density, urban development, that would provide more convenient access for City residents and workers to downtown and the Metro L Line. As such, similar to the proposed Project, Alternative B would promote pedestrian connectivity within the Downtown Mixed-Use area and to the Metro L (Gold) Line station.

6. To encourage building design that creates a cohesive, vibrant look in Downtown Arcadia and that minimizes the appearance of expansive parking lots on major commercial corridors.

   Alternative B would satisfy this Project Objective. Alternative B would maintain the proposed Project site location, layout, building massing, and cohesive, modern design features, and would include the redevelopment of the existing expansive surface level parking. As such, similar to the proposed Project, Alternative B would encourage building design that creates a cohesive, vibrant look in Downtown Arcadia, and would minimize the appearance of expansive parking lots on major commercial corridors.

Comparison of the Effects of Alternative B to the Project

Aesthetics

PRC Section 21099 sets forth guidelines for evaluating project impacts under CEQA, as follows: "Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within transportation priority area (TPA) shall not be considered significant impacts on the environment." PRC Section 21099 applies to the both the proposed Project and Alternative B. Alternative B meets the criteria established by SB 743 and would also be exempt from aesthetic impacts. Alternative B would result in same aesthetics impacts as the proposed Project, as analyzed in Section 4.1, Aesthetics, because the exterior of the building façade, massing, and height would not be altered. Commercial signage and lighting may be more prominent along Wheeler Avenue, and any lighting that would be implemented as part of the Alternative B would adhere to the City's

Development Code, Section 9103.01.120, which establishes the standards for exterior lighting in the City. Therefore, impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

Air Quality

Short-Term Impacts: Because there would be the same construction activity under Alternative B, there would be the same construction emissions associated with construction truck traffic and the use of heavy-duty construction equipment. As such, impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

Long-Term Impacts:

Under Alternative B, the live/work units would be converted to commercial use. The operational emissions associated with the proposed Project would be roughly the same under Alternative B for criteria air pollutants, but because commercial results in more automobile trips than residential, the conversion of 5,864 square feet of residential to commercial would result in an increase in criteria pollutants. However, emissions under both scenarios would remain under threshold and similar to the proposed Project, impacts to long-term air quality emissions under Alternative B would be less than significant and no mitigation is required. However, as shown in Table 6-2, because Alternative B would generate slightly more vehicle trips from commercial activities, operational impacts on regional air quality under Alternative B would be **slightly greater than** those anticipated from the proposed Project.

Table 6-2. Estimated Maximum Daily Net Operational Criteria Air Pollutant Emissions – Alternative B

	Emission Sources					
	VOC	*NO_x*	*CO*	*SO_x*	*PM_{10}*	*$PM_{2.5}$*
Change in Net Criteria Air Pollutant Emissions	*Pounds per Day*					
Alternative B Total	**14.26**	**11.71**	**82.03**	**0.155**	**12.82**	**3.9**
Proposed Project Total	*12.40*	*9.75*	*65.52*	*0.13*	*10.21*	*3.19*
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Alternative B - Exceeds thresholds?	**No**	**No**	**No**	**No**	**No**	**No**
Proposed Project - Exceeds thresholds?	No	No	No	No	No	No
Total Change				**+**		**+**
(Alternative B Emissions) - (Proposed Project Emissions) = Δ	**+ 1.86**	**+ 1.96**	**+ 16.51**	**0.0025**	**+ 2.61**	**0.71**

Source: Appendix C-1, Appendix O-1
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.

Cultural Resources

Under Alternative B the same intensity of development would occur, including the excavations for the subterranean parking garage. Therefore, MM-CUL-1 related to the salvage and treatment requirements of potential archaeological resources would continue to be required under Alternative B. Therefore, impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

Energy

Short-Term Impacts: Construction activity under Alternative B would be the same under proposed Project. There would be equivalent demands for the temporary use of electricity and petroleum during construction. As such, impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

***Long-Term Impacts*:** Under Alternative B, the same intensity of development would occur, and the natural gas, electricity, and petroleum usage associated with Alternative B would be approximately the same as that of the proposed Project. As such, operational impacts under this alternative would be **the same as** those anticipated from the proposed Project.

Geology and Soils

Under Alternative B the same earthwork and building development would occur. Therefore, MM-GEO-1 related to the adherence to the measures set forth in the Project-specific Geotechnical Investigation would continue to be required under Alternative B. Therefore, impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

Greenhouse Gas Emissions

Short-Term Impacts: The construction scenario under Alternative B would result in the same construction-related Greenhous Gas (GHG) emissions as compared to the proposed Project. As such, Alternative B would result in the same GHG emissions, and short-term impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

Long-Term Impacts: Under Alternative B, the live/work units would be converted to commercial use. As shown in Table 6-3, the operational GHG emissions associated with the Alternative B would be slightly greater than the proposed Project emissions by a measure of approximately 473metric tons per year due to the fact that commercial uses result in more automobile trips than residential uses. However, emissions under both scenarios would remain under threshold, and similar to the proposed Project, impacts to long-term greenhouse gas under Alternative B would be less than significant and no mitigation is required. However, as shown in Table 6-3, because Alternative B would generate slightly more vehicle trips from commercial activities, operational impacts on GHG emissions under Alternative B would be **slightly greater than** those anticipated from the proposed Project.

Table 6-3. Estimated Net Operational Greenhouse Gas Emissions – Alternative B

Change in Net GHG Emissions	
Alternative B Emissions	**2,873**
Proposed Project Emissions	2,400
SCAQMD GHG Threshold	*3,000*
Alternative B - Exceeds thresholds?	**No**
Proposed Project - Exceeds thresholds?	No
Total Change	
(Alternative B Emissions) - (Proposed Project Emissions) = **Δ**	**+ 473**

Source: Appendix C-1, Appendix O-1
Notes: Emissions are given in metric tons per year, and are comprised of emission sources O_2, CH_4, N_2O, & CO_2e.
CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent; GHG = Green House Gas
The values shown are the maximum summer or winter daily emissions results from CalEEMod.

Hazards and Hazardous Materials

Short-Term Impacts: Alternative B would have the same subterranean parking, building design, massing, and height; therefore, construction activities would be the same as the proposed Project. Therefore, Alternative B would continue to require implementation of MM-HAZ-1 to reduce potential impacts from asbestos-containing materials, PCBs, mercury, and other universal wastes, similar to the proposed Project. Alternative B would also result in ground disturbing activities, which have the potential to unearth contaminated soils due to the current bank drive-thru location's previous use as laundry facility, requiring implementation of MM-HAZ-2 and the preparation of a soil management plan. Because Alternative B would have the same construction impacts and require the same construction related mitigation measures as the proposed Project, short-term impacts related to hazards and hazardous materials under this alternative would be **the same as** those anticipated from the proposed Project.

Long-Term Impacts: Alternative B would have the same operational impacts as the proposed Project, and the conversion of 5,864 square feet of residential to commercial would not substantively alter any operational aspects of hazards-related impacts. Alternative B would still require vapor mitigation and monitoring (MM-HAZ-3) to reduce concentrations of volatiles in indoor air below applicable DTSC SLs in the proposed structures. Therefore, impacts under this alternative would be **the same as** those anticipated from the proposed Project.

Hydrology and Water Quality

Short-Term Impacts: Alternative B would have the same subterranean parking, building design, massing, and height; therefore, construction activities would be the same as the proposed Project. No mitigation was required for short-term impacts to hydrology or water quality under the proposed Project, therefore, impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

Long-Term Impacts: Alternative B would have the same subterranean parking, building design, massing, and height; therefore, construction activities would be the same as the proposed Project. Therefore, similar to the proposed Project, long-term impacts to hydrology and water quality under Alternative B would be less than significant and no mitigation is required. A such, impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

Land Use and Planning

While the types of land uses would be modified under Alternative B, neither the proposed Project nor Alternative B would result in any significant land-use impacts, and neither would require any mitigation. Both the proposed Project and Alternative B would be consistent with the DMU land use designation and zoning. Due to the increased 5,864 commercial square footage under this alternative, the overall Project FAR would increase from 0.72 under the proposed Project to 0.77 under Alternative B, thereby creating a slight increase in the commercial development intensity at the Project site. Further, traditional commercial development, rather than live/work units, would better facilitate the City's goal of providing a vibrant streetscape in the downtown area because there would a greater opportunity for pedestrian traffic due to the customer interface. While the appearance of the building structure and massing would not change, a traditional commercial use would facilitate a more engaging corridor along Wheeler Avenue. Similar to the proposed Project, Alternative B would redevelop underutilized areas within a TPA and would provide a mix of land uses, including high-density residential and commercial, which would help the City to achieve its goals and policies related to land use, circulation, economic development, and housing. Therefore, land-use impacts Alternative B would be **the same as** those anticipated from the proposed Project.

Noise

Short-Term Impacts: Under Alternative B, there would the same levels of construction noise from the temporary use of heavy-duty construction equipment or generation of construction traffic, including worker and haul truck trips to the Project site. Because Alternative B would result in in the same amount of construction noise, short-term impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

Long-Term Impacts: Under Alternative B, the operational state would be similar to the proposed Project. While the addition of traffic associated to vehicle trips under Alternative B would be slightly increased when compared to the proposed Project due to the conversion of residential to commercial, the associated noise on the roadway network would not result in a discernable increase in noise when compared to the proposed Project and impacts would be less than significant. Because the increase in Project generated off-site traffic noise would be imperceptible, operational impacts on noise under Alternative B would be **the same as** those anticipated from the proposed Project.

Population and Housing

Short-Term Impacts: Similar to the proposed Project, Alternative B would generate part-time and full-time jobs associated with the construction of the Project between the start and end of construction. The construction employment generated by Alternative B and the proposed Project would be the same, as the building design and square footage would not change, and is not expected to increase the residential population of the City and would not induce population growth or require permanent housing. Therefore, short-term impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

Long-Term Impacts: Once operational, Alternative B would generate residents associated with the 311 units and employment associated with construction of the 15,145 square feet of commercial use, which is 5,864 square feet more than the proposed Project and would generate an additional approximately 14 more employees. Under Alternative B, due to the increased commercial square footage, the number of potential employees would increase from 30 under the proposed Project (a net deficit of 20 employees when compared to the existing conditions-See Table 4.11-8 in Section 4.11, Population and Housing), to 44 under Alternative B (a net deficit of 6 employees when compared to the existing conditions).

Using the same calculations used in Section 4.11, Population and Housing, with a persons per household rate of 2.85, Alternative B would generate approximately 886 permanent residents compared to the Project's 909 new residents. According to the U.S. Census Bureau, the forecasted population growth for the City of Arcadia is 5,519 persons between 2020 and 2045. As such, both the proposed Project and Alternative B would result in population growth that would not exceed regional forecasts.

As discussed in Section 4.11.1 of this Draft EIR, the City maintains an approximately 1.7:1 jobs to housing ratio, which translates to being a jobs-rich community. While employment opportunities would increase by approximately 14 employees under Alternative B when compared to the proposed Project, Alternative B would still help with the jobs/housing imbalance by adding housing compared to the existing conditions. As with the proposed Project, no significant impacts would result, and no mitigation would be required. However, because employment would increase under Alternative B when compared to the proposed Project, impacts under Alternative B would be **slightly less than** those anticipated from the proposed Project.

Public Services and Recreation

Because construction activity would remain the same under Alternative B, there would be the same level of short-term demand for fire protection and emergency medical services and police protection services, as compared to the proposed Project. Alternative B would generate residents associated with the 311 residential units and part-time and full-time jobs associated with construction of the 15,145 square feet of commercial use. Alternative B would generate less demand on schools, parks, libraries, and other recreational services due to the moderately reduced residential population from 909 under the proposed Project to 886 under Alternative B. However, in both instances all impacts would be less than significant and no mitigation would be required. Because Alternative B would result the same overall square footage of development, with slightly fewer residents and slightly more employees, impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

Transportation

Short-Term Impacts: Alternative B would have the same as construction impacts related to the amount of construction traffic from truck deliveries and construction employees. As such, construction activities associated with the Alternative B would have the potential to temporarily impact emergency vehicle access to the Project site, and MM-TRA-1, which requires preparation of a Traffic Control Plan, would still be required. Because Alternative B would result in the same amount of short-term transportation impacts and would still require implementation of MM-TRA-1, impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

Long-Term Impacts: Both the proposed Project and Alternative B characteristics (e.g., mixed land uses, infill development, its proximity of nearby destinations, pedestrian and bicycle connections, etc.) would encourage localized trips and trips made by walking, biking, carpool, or transit. Per the City's Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment, conversion of the live/work units to commercial/retail use would qualify as "low-VMT" under the City's screening levels,[4] and Alternative B would have a less than significant impact. As discussed in Section 4.13, Transportation of this Draft EIR, the City's Traffic Impact Analysis (TIA) guidelines provide three types of VMT screening that can be applied to a project to screen from a project-level VMT assessment. According to the TIA's Step 1, Transit Priority Area (TPA) Screening: "Projects located within a TPA [such as the proposed Project] may be presumed to have a less than significant impact absent substantial evidence to the contrary. This presumption may not be appropriate if the project… [h]as a Floor Area Ratio (FAR) of less than 0.75." As demonstrated above in Table 6-1, Alternative B, Project Land Use Summary, the additional commercial square footage would increase the overall Project FAR to 0.77 for Alternative B, thereby meeting the TIA Step 1 FAR screening criteria of an overall Project FAR greater than 0.75. Both the proposed Project and Alternative B would have a less than significant impact on VMT and no mitigation is required. Impacts under Alternative B would be generally **the same as** those anticipated from the proposed Project due to the slightly increased commercial density and mixed-use nature of the development, resulting in a slightly increased FAR, as well as considering slightly increased trips associated with commercial.

Tribal Cultural Resources

Under Alternative B the earthwork associated with Project development would continue to occur, including the excavations for the subterranean parking garage. Therefore, MM-TCR-1 related to the salvage and treatment requirements of potential tribal resources would continue to be required under Alternative B. Similar to the Project, impacts would be less than significant after mitigation. Because Alternative B would still require subsurface

[4] According to the City's Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment, local serving retail uses of less than 50,000 SF would be assumed to have a less than significant impact, absent substantial evidence to the contrary.

excavations into native soils and MM-TCR-1 would still be required, impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

Utilities and Service Systems

The new development associated with Alternative B would result in new water service connections, an interior booster pump station, sewer laterals, on-site stormwater infrastructure, and underground utility conduit systems for electricity and telecommunications, similar to the proposed Project. Impacts related to construction of utilities and the demand for potable water, generation of wastewater, and generation of solid waste would be similar to the proposed Project because the building massing and square footage of development would not change. Because Alternative B would still require sewer improvements in the cumulative condition impacts under Alternative B would be **the same as** those anticipated from the proposed Project.

6.7 Summary of Alternatives to the Proposed Project

Table 6-4 below summarizes the potential environmental impacts associated with Alternative A and Alternative B when compared to the proposed Project, as suggested in CEQA Section 15126.6(d). Table 6-4 below highlights any changes in impacts if the given alternative *eliminated* the need for mitigation or required *new* mitigation. As such, Alternative A could be considered to have reduced impacts, while Alternative B would not. Because no additional mitigation measures were determined to be necessary under either of the considered alternatives, neither would be considered to have impacts greater than those of the proposed Project.

Table 6-4. Summary and Comparison of Impacts for Considered Alternatives

Environmental Issue Area	Proposed Project	Alternative A - No Project/Existing Development	Alternative B - Increased Commercial-Use
Aesthetics	LTS	Reduced impacts	Same impacts
Air Quality: Short-Term Long-Term	 LTS LTS	 Reduced impacts Reduced impacts	 Same impacts Slightly greater impacts
Cultural Resources	LTS-MM	**No MM:** Reduced impacts	Same impacts
Energy: Short-Term Long-Term	 LTS LTS	 Reduced impacts Reduced impacts	 Same impacts Same impacts
Geology and Soils	LTS-MM	**No MM:** Reduced impacts	Same impacts
Greenhouse Gas Emissions: Short-Term Long-Term	 LTS LTS	 Reduced impacts Reduced impacts	 Same impacts Slightly greater impacts
Hazards and Hazardous Materials: Short-Term Long-Term	 LTS-MM LTS-MM	 **No MM:** Reduced impacts **No MM:** Reduced impacts	 Same impacts Same impacts
Hydrology and Water Quality: Short-Term Long-Term	 LTS LTS	 Reduced impacts Slightly greater impacts	 Same impacts Same impacts
Land Use and Planning	LTS	Slightly greater impacts	Same impacts

Table 6-4. Summary and Comparison of Impacts for Considered Alternatives

Environmental Issue Area	Proposed Project	Alternative A - No Project/Existing Development	Alternative B - Increased Commercial-Use
Noise: Short-Term Long-Term	 LTS LTS	 Reduced impacts Reduced impacts	 Same impacts Same impacts
Population and Housing: Short-Term Long-Term	LTS	Greater impacts	 Same impacts Slightly reduced impacts
Public Services and Recreation	LTS	Reduced impacts	Same impacts
Transportation: Short-Term Long-Term	 LTS-MM LTS	 **No MM:** Reduced impacts Reduced impacts	 Same impacts Same impacts
Tribal Cultural Resources	LTS-MM	**No MM:** Reduced impacts	Same impacts
Utilities and Service Systems	LTS	**No MM:** Reduced impacts	Same impacts

Notes:
MM mitigation measure
LTS less than significant impact
LTS-MM less than significant impact with mitigation

Table 6-5 compares the alternatives in terms of whether they meet the Project objectives.

Table 6-5. Potential for Alternatives to Meet Project Objectives

Does the Alternative Meet the Following Project Objectives?	Alternative A	Alternative B
To efficiently develop currently under-utilized property within a Transit Priority Area into a mixed-use, high-density, urban development that provides convenient access to alternative forms of transportation, including bicycling, bus lines and the Metro L (Gold) Line light-rail station.	No	Yes
To provide new multifamily residential housing, including affordable housing, that helps meet the City's Regional Housing Needs Allocation (RHNA) requirements	No	Yes
To provide compact, mixed-use development in the Downtown Arcadia established Land Use Focus Area to further facilitate the City as "a destination stop on the L (Gold) Line".	No	Yes
To propose development that is consistent with the existing Downtown Mixed-Use zoning and land use designation.	Yes	Yes
To promote pedestrian connectivity within the Downton Mixed-Use area and to the Metro L (Gold) Line Station by integrating plazas, paseos, and attractive landscaping into Project design.	No	Yes
To encourage building design that creates a cohesive, vibrant look in Downtown Arcadia and that minimizes the appearance of expansive parking lots on major commercial corridors.	No	Yes
How many project objectives are met?	1	6

6.8 Environmental Superior Alternative

An EIR must identify an "environmentally superior" alternative; and, where the no project alternative is environmentally superior, the EIR is then required to identify an alternative from among the others evaluated as environmentally superior (14 CCR 15126.6[e][2]).

As shown in Table 6-4, Alternative A would result in reduced impacts to all environmental topics in the short-term because construction activity would not occur. Alternative A would therefore eliminate all mitigation requirements for short-term construction activity. Similarly, Alternative A would result in reduced environmental impacts to most environmental topics in the long-term because no operational changes would occur. However, increased environmental impacts would occur for the following topics: (1) Hydrology/water quality, due to the continued operation of the site that does not currently contain any low-impact development features; (2) Population and Housing, due to the lack of additional housing units that could help meet the City's RHNA goals and growth projections; and (3) Transportation, due to the underutilization of the site that would not contribute to a reduction in cityside VMT and associated GHG attributed to increased development in a TPA. The proposed Project would redevelop surface parking lots and construct a mix of land uses including residential and commercial, within a TPA and the established Downtown Arcadia focus area, which would help the City to achieve its goals and policies related to land use, circulation, economic development, and housing, which would not occur under Alternative A. Nevertheless, the elimination of all construction and operational impacts associated with the proposed Project would result in an environmentally superior alternative when compared to the proposed Project or Alternative B.

As required under CEQA Guidelines Section 15126.6(e)(2), if the environmentally superior alternative is the "no project" alternative, the EIR must also identify an environmentally superior alternative among the other alternatives. The proposed Project has no significant unavoidable impacts that could be addressed by the adoption of any alternative. Alternative B would have similar environmental impacts when compared to the proposed Project for almost all environmental topics and would not eliminate the need for any proposed mitigation measures. Alternative B would result in slightly increased impacts associated with Air Quality and Greenhouse Gas Emissions, and result in slightly decreased impacts associated with Population and Housing. Therefore, because Alternative B would not reduce or eliminate any of the significant impacts of the proposed Project, the proposed Project would be the environmentally superior alternative.

6.9 References

City of Arcadia. 2010. City of Arcadia General Plan (Updated 2013). Accessed August 26, 2021. https://www.arcadiaca.gov/shape/development_services_department/planning___zoning/general_plan.php#outer-446

City of Arcadia. 2021. City of Arcadia Housing Element Update. Accessed May 10, 2021. https://www.arcadiaca.gov/shape/development_services_department/planning___zoning/housing_element_update.php

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SOURCE: ESRI 2014

DUDEK

0 80 160 Feet

FIGURE 6.1

Considered and Eliminated Alternative Locations

Arcadia Mixed-Use Development Project

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7 List of Preparers

7.1 City of Arcadia

Lisa Flores, Planning & Community Development Administrator

Jason Kruckeberg, Assistant City Manager/Development Services Director

7.2 Dudek

Kristin Starbird, Senior Project Manager

Brandon Whalen-Castellanos, CEQA/NEPA Planner

Samantha Robinson, CEQA/NEPA Analyst

David Larocca, Air Quality and Greenhouse Gas Specialist

Michael Cady, Senior Biologist

Sarah Corder, MFA, Architectural Historian

Kate Kaiser, MSHP, Architectural Historian

Heather McDevitt, Archeologist

Linda Kry, Archeologist

Eric Schniewind, Geologist

Michael Williams, Paleontologist

Glenna McMahon, Principal Engineer

Audrey Herschberger, P.E., Hazards Engineer

Michael Greene, INCE, Senior Noise Specialist

Pete Vitar, Noise Specialist

Lisa Valdez, Senior Transportation Planner

Amanda Meroux, EIT, Assistant Transportation Planner

Hailee McOmber, GIS Analyst

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