777 North Front Street Project

Draft Environmental Impact Report

SCH# 2018041012

prepared by

City of Burbank

Community Development Department
150 North Third Street
Burbank, California 91502
Contact: Leonard Bechet, Senior Planner

prepared with the assistance of

Rincon Consultants, Inc.

250 East 1st Street, Suite 301
Los Angeles, California 90012

March 2019

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Executive Summary

This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the proposed 777 North Front Street Project (hereafter referred to as the “proposed Project” or “Project”). This section summarizes the characteristics of the proposed Project, alternatives to the proposed Project, and the environmental impacts and mitigation measures associated with the proposed Project.

Project Synopsis

Project Applicant

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Project Description

This EIR has been prepared to examine the potential environmental effects of the 777 North Front Street Project. The following is a summary of the full Project description, which can be found in Section 2, *Project Description*.

The Project site is located at 777 North Front Street in the City of Burbank, California. The Project site is a generally flat, irregularly-shaped parcel with an area of 352,297 square feet (8.09 acres). It is bounded by North Front Street to the west, Burbank Boulevard to the north, the Golden State Freeway (Interstate 5 or I-5) to the east, and West Magnolia Boulevard to the southeast. The Project site currently contains mounds of soil and construction materials throughout the Project site as a result of its current use as a construction material storage site for the California Department of Transportation (Caltrans) during the I-5 Freeway project. Figure 2-1 in Section 2, *Project Description*, shows the regional location of the Project site and Figure 2-2 shows the location of the Project site in its neighborhood context. The Project site is in an industrial and commercial area, has been previously graded and is mostly paved, and is surrounded by transportation corridors and urban structures (commercial, office, and industrial buildings/facilities).

The Project site has a General Plan land use designation of Downtown Commercial and is designated as Mixed Commercial/Office/ Industrial in the Burbank Center Plan (Specific Plan). The current zoning classification for the Project site is Auto Dealership (AD). The proposed Project would require the following approvals: a Specific Plan Amendment to the Burbank Center Plan; Rezoning Planned

Development (PD) zone and Zone Map Amendment; Development Agreement between the City and the Project applicant; Vesting Tentative Tract Map; Purchase and Sale Agreement to sell a City parcel to the Project applicant; and approval of associating building and engineer permits to facilitate the creation of open space and pedestrian access to and from Downtown Burbank to the Project site via a new pedestrian bridge and elevator.

Project Characteristics

The proposed Project would involve clearing and excavation of the Project site and construction of three multistory buildings: two residential buildings and one building for a hotel. A total of 1,454 on-site parking spaces would also be developed as part of the Project.

The residential component of the Project would include construction of one 279,162 square-foot, seven-story building containing 252 units and one 346,644 square-foot, eight-story building containing 321 units for a total of 573 residential units. In addition, a total of 1,206 parking spaces would be provided for tenants of both residential buildings. The proposed Project would also include 106,400 square feet of open space, including courtyards, a pool deck, publicly accessible ground floor plaza, and private balconies. Associated residential common areas and amenities constructed may include, but would not limited to a rooftop terrace, business center/internet café, coffee bar, demonstration kitchen, billiards room, resident lounge, fitness center with indoor exercise studio, resort-style pools with cabanas, Jacuzzis, public plaza and bike trail access, pet grooming station, pet park, concierge services, and bike storage. Residential courtyards and balconies would be located within the interior sides of the buildings.

The hotel component of the Project would include construction of one 212,250 square-foot, seven-story building at the southeastern end of the Project site containing 307 hotel rooms and ancillary uses and 327 associated parking spaces. Associated hotel amenities may include, but would not be limited to 1,800 square feet of restaurant space, café, bar, pool terrace, fitness center, meeting rooms, and lounge. The hotel's ancillary commercial uses would include accessory retail and restaurant uses on the ground floor. In addition, a 1,067-square foot retail gallery would be provided on Front Street near the intersection of Burbank Boulevard that would have 4 total parking spaces. Additional ancillary uses would include public and private recreational spaces consisting of courtyards, residential balconies, and sky terraces at both parking structure roof levels. The proposed Project would include a publicly accessible plaza area on the adjacent City-owned property located to the south of the Project site.

Plans and renderings for the proposed Project are included in Section 2, *Project Description*, of this EIR. Table ES-1 summarizes the project characteristics.

Table ES-1 Project Characteristics

Component	Floor Area (SF)	Height	Units/Rooms
Residential[1]	645,806	–	–
Building 1	279,162	7-story, 80'-4"	252
Building 2	346,644	8-story, 82'-6"	321
Retail Gallery	1,067	1-story	–
Hotel[2]	212,350	7-story	307
Total	**859,223**	–	–
Open Space Area			
Courtyards	26,950		
Pool Deck	32,300		
Publicly Accessible Plaza	27,800		
Private Balconies	19,350		
Total Area	**106,400**		
Parking Stalls			
Type	**Residential**	**Hotel**	**Retail**
Standard	1,121	296	4
ADA Accessible	22	11	–
Tandem	63	20	–
Total			**1,537**
Bicycle Stalls			
Type	**Residential**	**Hotel**	**Retail**
Short-term	14	4	–
Long-term	43	12	–
Total			73

[1] Residential area includes 20,000 square-foot buffer to the proposal residential area as well as the residential space in both Buildings 1 and 2.

[2] Hotel area includes square footage of 307 hotel rooms, 1,800 sf of restaurant space, a lounge, a bar, a meeting room, and a fitness club.

sf = square feet

Parking and Site Access

The Project would include 1,143 parking spaces for the residential uses, four parking spaces for the retail gallery, and 307 parking spaces for the hotel. Total parking would be 1,537 spaces. The Project would include one subterranean level for parking at the southern half of the Project site. One to two levels of parking would be between grade and the residential units in both residential buildings, as well as a seven-story parking structure between the residential buildings. There would also be a five-story parking structure adjacent to the hotel for hotel parking.

The Project would include bicycle parking spaces for both the residential, retail gallery and the hotel uses. The residential portion would provide 14 short term bicycle parking spaces near the main entrance and 43 long term spaces in the garage. The hotel and retail gallery portion would provide four short term bicycle parking spaces near the main entrance and 12 long term spaces in the garage. The total bicycle parking for the proposed Project would include 73 spaces.

The primary entries for the hotel, retail gallery, and apartments would be provided along Front Street. Loading for the residential units would be provided at two loading areas along the Project site's Front Street frontage lane, and loading for the hotel would be provided via a loading dock located at the northwest corner of the building with access along the fire truck access lane. The Project would include widening Front Street to include a turn lane and a bike lane.

Drainage

The Project would include installation of two storm drains along the easterly boundary of the Project site. Installation of a storm drain connector to route on-site sheet flow to the regional City-owned stormwater drainage system would be included in the southeastern portion of the site.

Utilities

The City of Burbank Public Works Department provides the following utility services to the Project site: solid waste, wastewater, and stormwater. Burbank Water and Power (BWP) supplies electricity and water and the Southern California Gas Company provides gas to the Project site.

To comply with the City's Low Impact Development (LID) standards, the Project would implement an LID Plan and 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 evapotranspiration, bioretention, and/or rainfall harvest and use.

Construction and Grading

Construction of the Project is expected to be completed in three phases over a period of approximately five years, with construction beginning in September 2019 and ending in September 2025. The anticipated schedule for construction as follows:

- **Phase 1: Residential Building 1 and Earthwork**
  - Site Preparation: September – December 2019
  - Grading: January – March 2020
  - Building Construction: April 2020 – July 2022
- **Phase 2: Residential Building 2**
  - Building Construction: April 2020 – September 2025
- **Phase 3: Hotel**
  - Building Construction: April 2020 – September 2025

The entire Project site would be graded and approximately 90,000 cubic yards of cut soil would be exported from the Project site. Building construction would involve widening of Front Street to include a bike lane adjacent to the Project site that would require approximately 15,000 square feet of additional excavation and paving. Excavated soil and material would be utilized on-site.

Subsurface Assessment and Remediation

Extensive environmental assessment has been conducted since the early 1990s at the Project site, and remediation was conducted from 1998 through 2001. Based on a review of documents provided by the Applicant, as well as review of pertinent documents available on the State Water Resources Control Board (SWRCB) GeoTracker database, identified contaminants of potential concern (COPCs) have been detected in the subsurface at the Project site. COPCs include metals and volatile organic compounds (VOCs). Specifically, copper, lead, and hexavalent chromium (CrVI), have been identified as COPCs detected in shallow soils (up to 12 feet below ground surface (bgs)) and tetrachloroethylene (PCE) and trichloroethylene (TCE) have been identified as COPCs detected in soil vapor at depths of up to 90 feet bgs. The Project site is currently under the oversight of the Los Angeles Regional Water Quality Control Board (LARWQCB).

Soil vapor assessment conducted following the 1998-2001 remedial activities indicated that PCE and TCE remained in soil vapor at concentrations exceeding the worst-case human health risk assessment risk-based concentrations (RBCs). In December 2018, the Applicant submitted to LARWQCB a revised draft Response Plan (RP) in accordance with the provisions of the California Land Reuse and Revitalization Act (CLRRA) of 2004. The RP was prepared by Geosyntec and will address identified subsurface contamination resulting from historical operations at the Project site. A Soil Contingency and Management Plan (SCMP) prepared by Leighton is included as an appendix to the RP (included as Appendix G of this DEIR).

Geosyntec's RP will address elevated VOCs in soil and soil vapor, and the SCMP will address elevated metals present in shallow soil. PCE, copper, lead, and Cr(VI) have been detected in soil above their respective US EPA Regional Screening Levels (RSLs). Section 4.6, *Hazards and Hazardous Materials*, of this EIR includes a detailed summary of environmental assessments previously conducted, as well as remediation and engineering controls currently planned for the site.

Green Building Features

The Project would be designed to be the equivalent of the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) Gold Certified. The Project site would also be designed to obtain the WELL Certified under the USGBC[1]. The Project is oriented and designed to maximize pedestrian-oriented landscaped open space. Project materials include sustainable products and locally sourced materials that would include an energy efficient HVAC system and MERV filters, cool roofs, roof top solar, LED lighting, and high performance glazing. Water efficient appliances and fixtures, drip irrigation, and drought tolerant landscaping and use of recycled water would be included. Indoor environmental quality favors formaldehyde-free finishes, low-allergen materials, and use of products with minimum off-gassing or low volatile organic compounds (VOC's). Development under the proposed Project would also comply with all Tier 1 applicable provisions of the 2016 California Green Building Standards Code (CALGreen Code).

Project Objectives

- Reduce vehicle trips by providing a mixed-use, Transit Oriented Development in close proximity to transit.
- Help meet Citywide housing demand and RHNA requirements through the provision of new, quality living options in the City.
- Enhance linkages to transit by creating a streetscape that encourages pedestrian activity with a widened sidewalk and installing a new bike lane.

[1] The WELL Building Standard is a performance-based system for measuring, certifying, and monitoring features of the built environment that impact human health and wellbeing. WELL Certified spaces and developments aim to create a built environment that improve nutrition, fitness, mood, and sleep patterns. (USGBC 2018).

- Enhance the value of the site and economic vitality of the City of Burbank through the development of a project at an existing underutilized site that is responsive to market demands.
- Contribute to the economic health of the City though development of a Project that would generate new construction and long-term jobs, house new residents to support local businesses, and provide additional long-term revenues for the City, in the form of transient occupancy and sales taxes.
- Help meet the recreational needs of Project and other residents at no cost to the City by providing publicly accessible, privately maintained open space.

Alternatives

As required by the California Environmental Quality Act (CEQA), this EIR examines alternatives to the proposed project. Studied alternatives include the following four alternatives:

Alternative 1: No Project

The No Project Alternative assumes that the proposed residential buildings, totaling 573 residential units, as well as the 307-room hotel and 1,067 sf retail gallery, would not be constructed. Current uses on the Project site could continue intermittently under the No Project Alternative. However, this alternative would not involve physical changes, and the Project site would remain vacant. As such, the existing conditions on the Project site would generally remain the same with respect to all resource areas, including air quality and greenhouse gas (GHG) emissions, noise, and traffic. Construction impacts associated with the Project were found to be less than significant, but because there would be no demolition or construction under this alternative, even the Project's less than significant construction impacts, such as air quality emissions, construction stormwater runoff, and equipment noise, would be avoided. However, the No Project Alternative would not achieve the basic project objectives.

Alternative 2: Existing Zoning

The Existing Zoning Alternative would involve development consistent with the existing AD zoning and Downtown Commercial and Mixed Commercial/Office/Industrial land use designations for the Project site. Development under this alternative would involve construction of two automobile dealerships. Dealership 1 would include a three-story showroom, lobby, and office area totaling approximately 63,000 square feet. Adjacent to the showroom would be a one-story office and service center building, totaling approximately 47,000 square feet. Both buildings would include rooftop parking for customers, employees, and inventory. Additional inventory would be parked in parking lots surrounding the buildings. Dealership 2 would consist of a single, one-story showroom and office building with rooftop parking, totaling approximately 45,000 square feet. In addition to the buildings, the dealerships would include approximately 175,000 square feet of paved area for parking, inventory display, and circulation throughout the Project site. Dealership 1 would provide 363 parking spaces for visitors and employees, and additional spaces for inventory. Dealership 2 would provide 149 spaces for visitors and employees, plus additional inventory spaces. The Existing Zoning Alternative would result in reduced trip generation, a substantially shorter construction period, and reduced excavation, which would reduce air quality, noise, and transportation and traffic impacts relative to the Project. Nevertheless, this alternative would not avoid the Project's significant and unavoidable impact to area intersections, as intersections would still exceed standards due to additional trips generated by the automobile dealerships under this alternative.

Alternative 3: No Hotel

The No Hotel Alternative would involve construction of the two residential buildings and the 1,067 sf retail gallery on the Project site and would eliminate the proposed hotel. Under this alternative, the seven-story, 85-foot tall building proposed for hotel use under the Project would not be constructed, and the area occupied by the proposed hotel's building footprint would instead be additional open space. Residential Buildings 1 and 2 would be constructed as proposed under the Project and would include 252 units in Residential Building 1 and 321 units in Residential Building 2. As with the Project, a total of 573 residential units would be constructed on the Project site under this alternative.

The total square footage constructed under this alternative would be reduced by 212,350 sf to 646,873 sf. Parking spaces provided for Residential Buildings 1 and 2 would remain the same as under the Project, with 1,143 spaces provided (not including tandem spaces). However, this alternative would not require construction of parking for the hotel and, therefore, would avoid construction of the five-story parking structure and one level of subterranean parking. The No Hotel Alternative would result in similar overall water demand, but reduced wastewater, solid waste, and trip generation, in turn reducing impacts to utilities and transportation and traffic relative to the Project. However, the reduction in trip generation under this alternative would not be sufficient to avoid significant and unavoidable impacts to area intersections.

Alternative 4: Reduced Density

The Reduced Density Alternative would involve a 45 percent reduction in all land uses proposed under the Project. Like the Project, residential, hotel, and retail gallery land uses would be constructed on the Project site. However, Residential Building 1 would be reduced to four stories and approximately 46 feet in height while Residential Building 2 would be reduced to five stories and approximately 52 feet in height. The residential buildings would contain 63 studios, 135 one-bedroom units, 98 two-bedroom units, and 19 three-bedroom units, consistent with the breakdown of proposed housing units under the Project. In total, the residential component of the Reduced Density Alternative would provide 315 housing units across 344,193 square feet of floor area. The hotel component would involve construction of 169 hotel rooms across 116,793 square feet of floor area. The hotel building under this alternative would be reduced to four stories and approximately 49 feet in height. Additionally, the Reduced Density Alternative would involve construction of a 587-square-foot retail gallery and 990-square-foot high-turnover restaurant. Under this alternative, construction of pedestrian linkages, the publicly-accessible transit plaza, and the bike lane improvements to Front Street would still occur. This alternative would also involve a reduction in parking constructed on the Project site relative to the Project. The Reduced Density Alternative would provide a total of 809 spaces, including 628 residential spaces, 169 hotel spaces, two spaces to serve the retail component, and 10 spaces to serve the restaurant. Given the reduced parking required, this alternative would not involve construction of subterranean parking under the residential buildings and would require only one level of subterranean parking under the hotel building. The Reduced Density Alternative would reduce overall trip generation by approximately 45 percent relative to the Project. While this reduction would avoid certain peak hour impacts to area intersections, overall impacts to area intersections would remain significant an unavoidable. Nonetheless, Alternative 4 would meet all project objectives, though to a lesser degree than the Project given the reduction in housing that would be constructed, and would result in similar reduction in trip generation relative to the Project as Alternative 3. Because Alternative 4 would meet all project objectives while resulting in reduced environmental impacts, it would be the environmentally superior alternative.

Refer to Section 6, *Alternatives*, for the complete alternatives analysis.

Areas of Known Controversy

During the public comment period for the Notice of Preparation (NOP), commenters communicated concerns regarding impacts related to air quality, hazards, noise, and traffic and transportation. Table 1-1 in Section 1, *Introduction*, provides a list of commenters' areas of concerns, and where these concerns are addressed in the EIR. With the exception of traffic impacts to the Burbank Boulevard and I-5 Southbound Off-Ramps/Front Street intersection which was found to be significant and unavoidable, impacts to the aforementioned areas of concern were determined to be less than significant, or less than significant with incorporation of mitigation.

Issues to be Resolved

The primary issues to be resolved are whether or not the City should grant approval of the requested Specific Plan Amendment to allow residential uses to change the underlying subarea of the project site from City Center West to City Center/City Center Access to the Regional Intermodal Transportation Center; approval of a Rezoning Planned Development (PD) zone and Zone Map Amendment to change the zoning from AD to Planned Development (PD); approval of a purchase and sale agreement to sell a City parcel to the Project applicant; and approval of associated building and engineering permits to facilitate the creation of open space and pedestrian access to and from Downtown Burbank to the Project site view a new pedestrian bridge and elevator.

Issues Not Studied in Detail in the EIR

Table 1 in Section 1.4, *Introduction*, summarizes issues from the environmental checklist that were addressed in the Initial Study (Appendix A). As indicated in the Initial Study, there is no substantial evidence that significant impacts would occur to the following issue areas: Agricultural Resources, Biological Resources, Mineral Resources, and Recreation.

Summary of Impacts and Mitigation Measures

Table ES-2 summarizes the environmental impacts of the proposed Project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required). Although distinct from mitigation measures, Project Design Features (PDFs) proposed by the applicant are also listed because they will be included as conditions of approval by the City to reduce or negate potential impacts concerning light and glare, air quality emissions, nesting birds during the construction period, geological hazards, hazardous materials at the Project site, hydrology, signage and noise. Impacts are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.

- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.
- **Less than Significant.** An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table ES-2 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measure (s)	Residual Impact
Aesthetics		
Impact AES-1. The Project site is not located in an area with views of the Verdugo Mountains. Additionally, the Project would not interfere with views of the Santa Monica Mountains to the southwest. the Project site is relatively flat and does not provide views of either identified scenic vista.	None required	No impact
Impact AES-2. The Project site does not contain any scenic resources, nor are there any existing or proposed County or State scenic highways located in the vicinity of the Project site.	None required	No impact
Impact AES-3. Project construction activities and operation would not substantially degrade the existing visual character or quality of the Project site or its surroundings.	None required	No impact
Impact AES-4. The proposed Project would introduce new sources of light and glare to the Project site. However, illumination resulting from the proposed Project would be consistent with existing light and glare emanating from surrounding land uses, including commercial and residential development in downtown Burbank.	None required	No impact
Impact AES-5. The building heights under the proposed Project would introduce new sources of shade and shadows on the Project site. However, the shadows would not substantially increase the shading experienced by nearby shadow-sensitive uses.	None required	No impact

Impact	Mitigation Measure (s)	Residual Impact
Air Quality		
Impact AQ-1. The proposed Project would introduce additional housing to the area and contribute to population growth. However, growth would be consistent with the growth assumptions in the Air Quality Management Plan. This impact would be less than significant.	None required	Less than significant
Impact AQ-2. Construction of the proposed Project would result in temporary generation of air pollutants, which would affect local air quality. Short-term emissions, including CO, PM_{10}, $PM_{2.5}$, and ROG would not exceed SCAQMD regional or LST thresholds. NO_x would exceed the SCAQMD threshold without proper mitigation. Therefore, this impact is less than significant with implementation of the proposed mitigation measure.	**AQ-2 High Efficiency Truck Engines.** All haul trucks used during construction shall have engine model years between 2010 and 2018 to ensure that all truck engines have higher average total fuel efficiency.	Less than significant
Impact AQ-3. Operational emissions would not exceed SCAQMD's daily significant thresholds. Therefore, this impact would be less than significant.	None required	Less than significant
Impact AQ-4. The proposed Project would not degrade service levels at study area intersections such that carbon monoxide (CO) hotspots would be created. Impacts related to CO hotspots would be less than significant.	None required	Less than significant
Impact AQ-5. The project would not expose sensitive receptors to substantial pollutant concentrations associated with construction dust or toxic air contaminants. Impacts related to these located pollutants would be less than significant.	None required	Less than significant
Impact AQ-6. The project would not create objectionable odors affecting a substantial number of people. Impacts related to odors would be less than significant.	None required	Less than significant

Impact	Mitigation Measure (s)	Residual Impact
Cultural Resources		
Impact CUL-1. Construction of the prosed project would involve ground-disturbing activities such as grading and surface excavation, which have the potential to unearth or adversely impact previously unidentified archaeological resources, paleontological resources, human remains, and/or tribal cultural resources. No known cultural or tribal cultural resources are present on the Project site. Therefore, potential impacts would be less than significant with mitigation incorporated.	**CUL-1a Unanticipated Discovery of Archaeological Resources.** Prior to start of ground-disturbing activities, a qualified archaeologist (who meets the Secretary of the Interior's Professional Qualifications Standards) shall be retained by the Project applicant to conduct cultural resources sensitivity training for all construction personnel. Construction personnel shall be informed of the types of archaeological resources that may be encountered, the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains, and safety precautions to be taken when working with archaeological monitors. The Project applicant shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance. In the event of the unanticipated discovery of archaeological materials, the Project applicant shall immediately cease all work activities in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. Construction shall not resume until the qualified archaeologist has conferred with the City on the significance of the resource. If it is determined that the discovered archaeological resource constitutes a historical resource or unique archaeological resource pursuant to CEQA, avoidance and preservation in place shall be the preferred manner of mitigation. Preservation in place maintains the important relationship between artifacts and their archaeological context and also serves to avoid conflict with traditional and religious values of groups who may ascribe meaning to the resource. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is determined to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the City that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The City shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond that which is scientifically important, are considered. **CUL-1b Unanticipated Discovery of Paleontological Resources.** A qualified paleontologist, defined as a paleontologist who meets the standards of the Society for Vertebrate Paleontology (SVP[1]), shall be retained by the Project applicant to carry out all mitigation measures related to paleontological resources. Prior to the start of construction, the Project applicant shall cause the qualified paleontologist, or his or her	Less than significant

Impact	Mitigation Measure (s)	Residual Impact
	designee to conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The Project applicant shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance. This training may be conducted concurrently with the cultural resources sensitivity training required under Mitigation Measure CUL-1a or CUL-1b. Ground disturbing construction activities (including grading, trenching, foundation work, and other excavations) in previously undisturbed sediments that exceed 10 feet in depth shall be monitored on a full-time basis during initial ground disturbance. Monitoring shall be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources and meets the minimum standards of the SVP (2010). The duration and timing of the monitoring shall be determined by the qualified paleontologist and the location and extent of proposed ground disturbance. If the qualified paleontologist determines that fulltime monitoring is no longer warranted, based on the specific geologic conditions at the surface or at depth, the qualified paleontologist may recommend that monitoring be reduced to periodic spot-checking or cease entirely. Monitoring shall not be required in artificial fill or for activities that do not reach 10 feet in depth. In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. The qualified paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the qualified paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources: 1) Salvage of Fossils. The qualified paleontologist (or paleontological monitor) shall recover significant fossils following standard field procedures for collecting paleontological resources, as described by the SVP (2010). Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case the paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. 2) Preparation and Curation of Recovered Fossils. Once salvaged, significant fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology), along with all pertinent field notes, photos, data, and maps. Fossils of	

Impact	Mitigation Measure (s)	Residual Impact
	undetermined significance at the time of collection may also warrant curation at the discretion of the qualified paleontologist. **CUL-1c Unanticipated Discovery of Human Remains.** If human remains are encountered, the Project applicant shall halt work in the vicinity (within 100 feet) of the discovery and contact the Los Angeles County Coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the County Coroner determines that the remains are Native American, the NAHC will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98 (as amended by AB 2641). The NAHC will designate a Most Likely Descendent (MLD) for the remains per PRC Section 5097.98. Until the landowner has conferred with the MLD, the contractor shall ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices, and that further activities take into account the possibility of multiple burials. **CUL-1d Unanticipated Discovery of Tribal Cultural Resources.** In the event that cultural resources of Native American origin are identified during construction, the City shall consult with a qualified archaeologist (who meets the Secretary of the Interior’s Professional Qualifications Standards) and begin or continue Native American consultation procedures. If the City, in consultation with local Native Americans, determines that the resource is a Tribal Cultural Resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. The mitigation plan may include, but would not be limited to avoidance, capping in place, excavation and removal of the resource, interpretive displays, sensitive area signage, or other mutually agreed upon measure.	
Geology and Soils		
Impact GEO-1. Seismically-induced ground shaking could cause liquefiable sediments to lose supporting strength and liquefy, resulting in loss of property or risk to human health and safety. Although the proposed Project is not located on a geologic unit or soil that is unstable, there is potential for liquefaction and liquefaction induced subsidence. Impacts would be less than significant.	None required	Less than significant

Impact	Mitigation Measure (s)	Residual Impact
Impact GEO-2. Grading, excavation, and other construction activities associated with the proposed Project could result in erosion resulting from exposed soils. However, the proposed Project shall adhere to the Burbank Municipal Code (BMC) which requires implementation of a Stormwater Pollution Prevention Plan and Best Management Practices to control erosion, sediment release, and otherwise reduce the potential for discharge of pollutants in stormwater. Upon compliance with the BMC, impacts would be less than significant.	None required	Less than significant
Greenhouse Gas Emissions		
Impact GHG-1. The Project would not conflict with the applicable plan, policy, or regulation for reducing greenhouse gas (GGRP). This impact would be less than significant.	None required	Less than significant
Hazards and Hazardous Materials		
Impact HAZ-1. The Project site has contaminated soil, soil vapor, and groundwater, and is included on a list of hazardous materials sites on a government database. In addition, an unmarked abandoned crude oil pipeline is present at the Project site, and tiles remaining on concrete pads are suspected to contain asbestos. With implementation of the proposed Response Plan and Soil Contingency and Management Plan, as well as implementation of mitigation measures, potential impacts related to contaminated soils and soil vapor and removal of the on-site oil pipeline, would be less than significant. implementation of mitigation would also be required to reduce potential impacts associated with asbestos removal to a less than significant level.	**HAZ-1a Soil and Soil Vapor.** The applicant shall incorporate all requirements in the design of the Project as set forth by the LARWQCB for issuance of building permits, which include the following measures: 1. The boundary of the vapor barrier and sub-slab ventilation shall extend beneath the entire building footprint. 2. VOC in shallow soil vapor shall be mitigated to levels that are protective of human health for the proposed residential and commercial uses. 3. Mass removal of VOCs in deep soil shall continue until influent concentrations from the proposed SVE treatment reach low and sustainable asymptotic levels that are protective of groundwater. The vapor barrier membrane shall be a material that is designed to be resistant to the specific COPCs. Engineering controls for at-grade occupied, enclosed structures will consist of aerated floors such as Cupolex®. The aerated floor system will consist of, from top to bottom, a concrete slab, aerated forms, and prepared subgrade as set forth in the RP, which will further mitigate the potential for vapor intrusion. **Haz-1b Operation Maintenance and Monitoring.** The applicant shall conduct operation, maintenance, and monitoring of the vapor barrier and sub-slab ventilation system, which will include the following measures: 1. As required by the LARWQCB, proposed engineering controls shall be revised to include implementation of soil vapor monitoring networks to address shallow soil vapor impacts across the entire site where vapor intrusion risks may be present. 2. Following the completion of construction and before	Less than significant

Impact	Mitigation Measure (s)	Residual Impact
	the buildings are occupied indoor air monitoring will be conducted. The monitoring should be limited to the COPCs and results should be compared to the DTSC-SL for PCE and EPA RSLs for TCE, or the applicable health risk-based screening levels in effect at the time of the indoor air assessment. 3. An OMM plan shall be developed for the vapor barrier system and approved by the LARWQCB. The plan shall include indoor air monitoring that would be conducted on a routine basis. **HAZ-1c Asbestos.** Prior to demolition of any onsite structure, an asbestos survey shall be conducted and all identified ACMs shall be removed from site structures in accordance with applicable regulations. In the event that any suspected ACMs are discovered during construction activities, the materials shall be sampled and analyzed for asbestos content prior to any disturbance. Prior to the issuance of the demolition permit, the applicant shall provide a letter from a qualified asbestos abatement consultant that no ACMs are present in any onsite structures. If additional ACMs are found to be present, a qualified asbestos abatement consultant shall abate ACMs in compliance with the South Coast Air Quality Management District's Rule 1403 as well as all other State and federal rules and regulations.	
Impact HAZ-2. The Project site is located within 0.25 mile of an existing school. Implementation of the RP and SCMP during Project development would reduce impacts related to the emission or handling of hazardous materials within 0.25 mile of an existing school to less than significant.	None required	Less than significant
Hydrology and Water Quality		
Impact HWQ-1. The Project would be subject to federal, state, and local requirements for protecting water quality. Compliance with applicable regulations and policies would prevent the violation of water quality standards or waste discharge requirements. Impacts would be less than significant.	None required	Less than significant
Impact HWQ-2. Under the proposed Project, peak discharge rates for the 25-year and 85th percentile storms would decrease due to the addition of landscaped areas on the Project site. In addition, the existing City-owned stormwater drainage trunk line would have sufficient capacity for stormwater discharge from the proposed Project. Impacts would be less than significant.	None required	Less than significant

Impact	Mitigation Measure (s)	Residual Impact
Land Use and Planning		
Impact LUP-1. The Project requires approval of a Specific Plan Amendment to the Burbank Center Plan to allow housing on the site, Development Review, Planned Development, Development Agreement, and a and Tentative Tract Map NO. 74896. With approval of these discretionary actions, the proposed Project would be consistent with the City's General Plan and Zoning Ordinance. Impacts related to consistency with plans, policies, and regulations would therefore be less than significant.	None required	Less than significant
Noise		
Impact N-1. Construction activities associated with buildout of the proposed Project would generate temporary noise level increases at the Project site. However, daily on-site construction-related noise would not result in an increase of 5 dBA above the ambient noise level at the nearest noise-sensitive receptors based on BMC standards. Therefore, impacts would be less than significant.	None required	Less than significant
Impact N-2. Construction vibration would be temporary and intermittent, and would not exceed applicable Federal Transit Administration (FTA) recommended thresholds of 72VdB for frequent vibration events at residences , 100 VdB for damage to fragile buildings, or 95 VdB for damage to extremely fragile historic buildings. Therefore, impacts would be less than significant.	None required	Less than significant
Impact N-3. Noise associated with operation of the Project, including noise from traffic on nearby roads, rooftop mounted mechanical equipment, and trash hauling and delivery trucks would not increase ambient noise levels above standards. Therefore, operational noise impacts associated with the Project would be less than significant.	None required	Less than significant

Impact	Mitigation Measure (s)	Residual Impact
Impact N-4. Although the effect of ambient noise on a proposed Project is not an impact under CEQA, the potential noise levels at the proposed Project are provided for public disclosure. The Project site is exposed to high traffic levels from the I-5. Therefore, the Project would be exposed to noise levels that exceed the City's exterior and interior land use compatibility standards. Impacts would be less than significant with mitigation.	**N-4a Cooling and Ventilation.** ▪ A cooling and ventilation system with an outdoor condensing unit and an interior ceiling-installed or wall-mounted fan coil unit shall be incorporated into the Project to allow tenants the option of climate control without opening windows. ▪ Sound barriers at least six feet high shall be placed around the outdoor condensing unit on the rooftop terrace. **N-4b Walls, Windows, and Balcony Doors.** The following building materials shall be incorporated into the Project: ▪ Walls: 6-inch wood stud wall with two layers of 5/8" gypsum wallboard (GWB) in the interior, ½" plywood and 5/8" GWB on exterior and 6-inch glass fiber insulation in the cavity ▪ Windows and Sliding Glass Doors: ¼"-glass – ½" airspaces – ¼" glass (STC 35); windows and sliding glass doors shall be mounted in low air infiltration rated frames. ▪ Exterior Door: solid core door with ½" glass insert with perimeter weather stripping and threshold seals. **N-4c Outside Air Vents.** The following design features shall be incorporated into the Project's exterior air vents: ▪ Ducted outside air path from rooftop or façade, to provide outside air to residential units without creating a direct entry path for ambient sound ▪ Minimum of 7 feet of ducting with 1-inch thick duct liner ▪ Minimum of 1 elbow between outside inlet and interior vent ▪ All roof and attic vents shall be boxed or provided with baffling. **N-4d Deck Level Plexiglass Barriers.** ▪ The three outdoor decks that face the I-5 to the north shall include plexiglass noise barriers to deflect freeway noise. Specifically, the two lower decks shall include 8' plexiglass barriers and the upper deck shall include a 6' plexiglass barrier to maintain outdoor air flow and views while minimizing freeway noise. Figure 4.9-2 shows a rendering of the proposed plexiglass barrier on the outdoor deck. **N-4e Acoustic-designed Public Plaza.** ▪ Acoustical shaping shall be incorporated into the design of the public plaza to deflect or absorb freeway noise thereby creating an artificially quiet community area directly adjacent to the I-5. The plaza shall be set at a lower elevation from the I-5, reducing the amount of sound that initially reaches the plaza in conjunction with Noise PDF 2. Figure 4.9-3 shows an example of an acoustic-designed open space area.	Less than significant.

Impact	Mitigation Measure (s)	Residual Impact
Population and Housing		
Impact PH-1. Development of the proposed Project may directly and indirectly increase the City's population. However, this population growth would fall within the City's Housing Element and SCAG population forecasts. Therefore, the proposed Project would not induce population growth beyond that already planned. Impacts related to inducement of substantial population growth would be less than significant.	None required	Less than significant
Public Services		
Impact PS-1. The Project site is located in an existing BFD fire service area and would not be exposed to substantial wildfire risk. However, operation of the proposed Project would result in an increase in calls for service to BFD, which would likely require additional staffing and apparatus. With incorporation of mitigation, impacts would be less than significant.	**PS-1 Fair Share Fees.** The Project applicant would pay the project's fair share of the cost of additional fire protection equipment and fire station needs required for the Project, by contributing to the City's Development Impact Fee Program (DIF) and by paying fees associated with building permit issuance and the negotiated development agreement, which collectively are intended to provide for offset of facility impacts. All associated fees shall be paid before the issuance of a building permit to construct the Project.	Less than significant
Impact PS-2. Implementation of the proposed Project would not cause a significant change in the officer to population ratio in the City, nor would it create the need for new or expanded police protection facilities. Therefore, impacts would be less than significant.	None required	Less than significant
Impact PS-3. Although the Project would add new students to the School Districts serving the Project site, the proposed Project would be subject to Government Code 65995 (b) and impacts would be less than significant.	None required	Less than significant
Transportation and Traffic		
Impact T-1. The proposed Project would generate new trips at study area intersections. the proposed Project would have significant impacts at two study intersections under Existing plus Project conditions and four study intersections under Future plus Project conditions. Implementation of mitigation would mitigate the traffic impact at Victory Boulevard and Olive Avenue to a less than significant level. However, mitigation for the traffic impact at	**T-1a I-5 Southbound Off-Ramp/N Front Street and Burbank Boulevard.** Restripe I-5 Southbound Off-Ramp/N Front Street and Burbank Boulevard at the northbound approach. Convert the existing right-turn lane on northbound Front Street to a left/right-turn lane to provide one left turn lane and one shared left-right lane. **T-1b Victory Boulevard and Olive Avenue and Victory Boulevard and Magnolia Avenue.** Optimize Burbank's Citywide Signal Control System (CSCS) along the Victory Boulevard corridor between Burbank Boulevard and Alameda Avenue before the Project opening date. The City's traffic signal control hardware shall be programmed to upgrade eight traffic signals in the corridor to adaptive	Significant and unavoidable

Impact	Mitigation Measure (s)	Residual Impact
Burbank Boulevard and I-5 Southbound off-ramps/Front Street would not reduce the impact to a less than significant level. This impact would be significant and unavoidable.	control, and additional traffic loops and traffic monitoring hardware shall be installed.	
Impact T-2. The proposed project would not add enough new traffic to exceed the arterial or freeway analysis criteria established in the Los Angeles County CMP. Impacts would be less than significant.	None required	Less than significant
Impact T-3. Project driveways would provide adequate site access and would not create hazardous traffic conditions. Therefore, impacts associated with the proposed Project would be less than significant.	None required	Less than significant
Impact T-4. The proposed Project does not include design features that would impede emergency vehicle access. Impacts associated with the proposed project would be Less than Significant.	None required	Less than significant
Impact T-5. The Project would not conflict with applicable policies associated with public transit; however, the proposed Project would result in disruptions to the local active transportation system including bicycle and pedestrian routes. Implementation of mitigation would reduce impacts related to bicycle and pedestrian systems to a less than significant level.	**T-5a Bicycle and Pedestrian Access.** A Class IV cycle track shall be installed on the eastern side of Front Street along with an 11 foot pedestrian path of travel from the Project site to the Downtown Burbank Metrolink Station's northernmost driveway. The Project shall install ADA curb ramps, crosswalks, and RRFBs at the northernmost driveway of the Downtown Burbank Metrolink Station in order to provide access to the station for pedestrians and bicyclists. **T-5b ADA Access.** A pedestrian crosswalk shall be installed at Front Street at the northernmost driveway of the Downtown Burbank Metrolink Station directly south of the Magnolia Boulevard overcrossing. The crosswalk shall include appropriate signage and a rectangular rapid flashing beacon (RRFB). The widened sidewalk along the eastern edge of Front Street shall be extended south of the Project site to the Downtown Burbank Metrolink Station.	Less than significant
Impact T-6. Construction activities for the proposed Project would result in traffic impacts due to lane closures along Front Street, haul truck traffic, equipment and material deliveries, worker traffic, and worker parking. Impacts associated with construction of the proposed project would be less than significant with mitigation incorporated.	**T-6 Construction Management Plan.** Prior to issuance of any grading and/or demolition permits, whichever occurs first, a Construction Management Plan (CMP) shall be submitted for review and approval by the City Traffic Engineer and Building Official. The requirement for a Construction Management Plan shall be incorporated into the Project specifications and subject to verification by the City Traffic Engineer and Building Official prior to final plan approval. The Construction Management Plan shall, at a minimum, address the following: ▪ Traffic control for any street closure, detour, or other disruption to traffic circulation. ▪ Identify the routes that construction vehicles shall	Less than significant

Impact	Mitigation Measure (s)	Residual Impact
	utilize for the delivery of construction materials (i.e., lumber, tiles, piping, windows, etc.), to access the site, traffic controls and detours, and proposed construction phasing plan for the Project. ▪ Require the Project Applicant to keep all haul routes clean and free of debris, including but not limited to gravel and dirt as a result of its operations. The Project Applicant shall clean adjacent streets, as directed by the City Traffic Engineer (or representative of the City Traffic Engineer), of any material which may have been spilled, tracked, or blown onto adjacent streets or areas. ▪ Hauling or transport of oversize loads shall be allowed between the hours of 9:00 a.m. and 3:00 p.m. only, Monday through Friday, unless approved otherwise by the City Traffic Engineer. No hauling or transport shall be allowed during nighttime hours, weekends, or Federal holidays. ▪ Use of local streets shall be prohibited unless otherwise provided for in the CMP. ▪ Haul trucks entering or exiting public streets shall at all times yield to public traffic. ▪ If hauling operations cause any damage to existing pavement, streets, curbs, and/or gutters along the haul route, the Project Applicant shall be fully responsible for repairs. The repairs shall be completed to the satisfaction of the City Traffic Engineer. ▪ All construction-related parking and staging of vehicles shall be kept out of the adjacent public roadways and shall occur on-site or at a nearby site approved by the City Traffic Engineer as part of the CMP. ▪ The Construction Management Plan shall meet standards established in the current California Manual on Uniform Traffic Control Device as well as City of Burbank requirements.	
Utilities and Service Systems		
Impact U-1. The proposed Project would generate up to 370,861 gpd of wastewater, which is approximately 10.6 percent of the BWRP's available capacity of 3.5 mgd. Therefore, The BWRP would be able to adequately treat project-generated sewage and the treatment requirements of the RWQCB would not be exceeded. Impacts would be less than significant.	None required	Less than significant

Impact	Mitigation Measure (s)	Residual Impact
Impact U-2. The proposed Project would require approximately 498.5 acre-feet per year (AFY) of potable water and 130.4 AFY of non-potable water, which would respectively represent 2.8 percent and 1.3 percent of the total water supplies available to the City of Burbank in 2040. Based on the water demand projections, water supplies are sufficient to meet the projected water demand of the proposed Project. Impacts would be less than significant.	None required	Less than significant
Impact U-3. The proposed Project would generate an estimated 1.3 tons of solid waste per day, which would represent approximately one percent of the remaining daily capacity at the Burbank Landfill. Therefore, solid waste generated by the proposed Project would be served by a landfill with sufficient capacity. Although adequate capacity is available, to help ensure that the Project would meet the 75 percent diversion required by AB 341 by year 2020, mitigation is required to ensure the Project provides recycling measures and facilities during operation. Impacts would be less than significant with implementation of mitigation.	**U-3 Recycling Facilities, Measures, and Guidelines.** As part of their lease or sales agreement, all Project tenants and owners (both residential and commercial) shall be required to recycle all qualifying items in accordance with the Burbank Recycling Center's guidelines, including their handbook titled "Materials Accepted in Your Recycling Bin or at the Recycling Center." The Project Applicant shall provide enclosed areas for recycling receptacles for the proposed development. The Project Applicant shall also provide recycling receptacles for the proposed development, and copies of the Burbank Recycling Center handbook to all Project tenants and owners (both residential and commercial).	Less than significant
Project Design Feature (s)		

Aesthetics PDF 1 – Photometric Lighting Plan

The applicant will submit a photometric lighting plan at the time of Plan Check review (prior to building permit issuance for each phase) that identifies all: exterior structure lighting; landscape and perimeter lighting; or rooftop lighting. The photometric plan will ensure that there will be no spillover lighting or glare on adjacent streets or properties, to the satisfaction of the CDD Director.

All building-mounted lighting that will be directed onto the Project site shall be shielded so as not to illuminate adjacent public rights-of-way and/or freeway.

All projects shall comply with Title 9, Chapter 1, of the BMC, and the 2016 and latest edition of the California Building Code (CBC), California Residential Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Green Building Standards and Building Energy Efficiency Standards. Beginning January 1, 2019 the new 2018 CBCs go into effect.

Air Quality PDF 1 – CAL Green Building Standards Code

The Project shall incorporate the requirements of the CAL Green Building Standards Code. The Project shall be provided with minimum Tier 1 or LEED Gold certification. The Green Building Plan shall be submitted to the Chief Building Official for review.

Air Quality PDF 2 – Energy Star Appliances

Developer shall install Energy Star or equivalent appliances or equivalent energy-efficient appliance models in new residential units, which shall include a standard-size refrigerator in each unit. Installation of Energy Star or equivalent appliances shall be demonstrated to the satisfaction of the CDD Director prior to issuance of certificate of occupancy.

Air Quality PDF 3 – Air Quality Control Measures

1. Prior to issuance of any building permits for any phase, the Developer shall incorporate the following as project

Impact	Mitigation Measure (s)	Residual Impact

design features in each phase of the project:

a. Prior to any building permit (for each phase), the Developer shall install, operate, and maintain an HVAC system that utilizes high-efficiency filters with Minimum Efficiency Reporting Value (MERV) 15 minimum or higher for the residential units.

i. Developer may prepare and submit an air quality engineering study (for a unit-by-unit analysis) related to the MERV filtration system(s) that must be incorporated into the Project. Individual units may be provided a MERV 13, MERV 14 or MERV 15 (but not less than MERV 13) filtration system depending on the recommendations of the air quality study (i.e., depending on proximity to freeway and exposure levels); developer shall pay for 3rd party air quality expert to review submitted air quality engineering study

ii. If the Developer elects to not prepare and submit an air quality engineering study (for a unit-by-unit analysis), then a minimum of MERV 15 shall be required for every residential unit in each building/phase.

iii. HVAC systems with the specified MERV filter ratings are required elements of the Project design, and must be incorporated at the time of original construction.

b. Locate the air intakes for the residential units as far from the freeway as practicable. Precise location will be ascertained and reviewed during Plan Check prior to issuance of any building permit for each phase.

c. Provide a written notice to all new residents and tenants that disclose the potential risk from living in close proximity to a freeway, and that opening unit windows may reduce the effectiveness of the air filtration system and increases their individual exposure.

d. Plant vegetation between residential receptors and the freeway (e.g., rear yard setback areas for each phase).

2. Prior to the issuance of any Grading Permit, the City Engineer and the Chief Building Official shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce the short-term fugitive dust impacts on nearby sensitive receptors.

a. Prohibit truck idling in excess of five minutes, on-site and off-site;

b. All active portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the Project site to prevent excessive amounts of dust;

c. Pave or apply water every three hours during daily construction activities or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering shall occur if dust is observed migrating from the site during site disturbance;

d. Any on-site stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied;

e. All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour;

f. Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area;

g. Gravel bed trackout aprons (3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) shall be installed to reduce mud/dirt trackout from unpaved truck exit routes;

h. On-site and unpaved-road vehicle speed shall be limited to 15 miles per hour;

i. All on-site roads shall be paved as soon as feasible, watered twice daily, or chemically stabilized;

j. Visible dust beyond the property line which emanates from the Project shall be prevented to the maximum extent feasible;

k. All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site;

l. Reroute construction trucks away from congested streets or sensitive receptor areas;

m. Track-out devices shall be used at all construction site access points;

n. All delivery truck tires shall be watered down and/or scraped down prior to departing the job site;

o. Sweep streets at the end of the day with SCAQMD Rule 1186 and 1186.1 compliant sweepers if visible soil is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water);

p. Re-route construction trucks away from congested streets or sensitive receptor areas;

q. The Project proponent shall survey and document the proposed Project's construction areas and identify all

Impact	Mitigation Measure (s)	Residual Impact

construction areas that are served by electricity. Onsite electricity, rather than temporary power generators, shall be used in all construction areas that are demonstrated to be served by electricity.

Biological Resources PDF 1 – Nesting Bird Survey

While common bird species are not designated special-status species, destruction of their eggs, nests, or nestlings is prohibited by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (CFGC) (Sections 3503, 3503.5, 3511, and 3513). Potentially suitable habitat for nesting birds exists on-site. If site preparation and construction activities are initiated during the nesting bird season (typically February 1 and August 31, and as early as January 1 for raptors), a preconstruction nesting bird survey must be conducted within seven days prior to initial grading or vegetation removal to determine the presence/absence, location, and status of any active nests onsite or within 100 feet of the site for nesting birds, or within 500 feet of the site for nesting raptors to comply with State CFGC and Federal MBTA regulations. If results of the nesting bird survey identify active nests that could be impacted by Project construction activities, the following measures should be applied:

- If active nests are discovered on the Project site, a qualified biologist will establish an appropriate buffer around each nest(s). Typical buffers range from 100 feet for nesting birds and up to 500 feet for raptor nests, depending on the species.
- No construction within the buffer should occur until a qualified biologist has determined the nest(s) are no longer active. Encroachment into the buffer may occur at the discretion of a qualified biologist in coordination with the City of Burbank.

Geology PDF 1 – Geotechnical Design Considerations

Excavations for the subterranean portion of the proposed multi-family residential structures are anticipated to penetrate through a majority of the existing artificial fill, if not all. Based on these considerations, the proposed multi-family residential structures shall be supported on a conventional spread foundation system deriving support in the undisturbed alluvial soils found at and below a depth of 14 feet below the existing ground surface.

The following foundation design considerations related to soil engineering must be incorporated into the Project grading and building plans, revised as needed for compliance with current California Building Code (see Section 7.7 of the geotechnical report). Design and construction of the building shall be engineered to withstand the expected ground acceleration and potential liquefaction that may occur at the Project site. These include, but are not limited to:

- Continuous footings shall be designed for an allowable bearing capacity of 2,500 pounds per square foot (psf), and a minimum of 12 inches in width, 18 inches in depth below the lowest adjacent grade, and 12 inches into the recommended bearing material.
- Isolated spread foundations shall be designed for an allowable bearing capacity of 3,000 psf, and a minimum of 24 inches in width, 18 inches in depth below the lowest adjacent grade, and 12 inches into the recommended bearing material.
- The allowable soil bearing pressure above shall be increased by 300 psf and 500 psf for each additional foot of foundation width and depth, respectively, up to a maximum bearing pressure of 5,000 psf.
- The allowable bearing pressures shall be increased by one-third for transient loads due to wind or seismic forces.
- Continuous footings shall be reinforced with a minimum of four No. 4 steel reinforcing bars, two placed near the top of the footing and two near the bottom. The reinforcement for isolated spread footings shall be designed by the Project structural engineer.
- For preliminary design purposes 24-, 30-, and 36-inch diameter drilled cast-in-place friction piles have been evaluated. Piles shall be embedded a minimum of 20 feet into the competent alluvium found at and below a depth of 14 feet and derive axial and lateral support exclusively in the undisturbed alluvial soils.
- Casing may be required if caving occurs in the granular soil layers during deep drilled excavation. The contractor shall have casing available and be prepared to use it. If casing is used, extreme care shall be employed so the pile is not pulled apart as the casing is withdrawn. At no time should the distance between the surface of the concrete and the bottom of the casing be less than five feet.

Once the design and foundation loading configurations for the proposed structures proceeds to a more finalized plan, the estimated settlements presented in the geotechnical report shall be reviewed and revised, if necessary, as part of the structural plan check and building permit process and the LID submittals to the City. If the final foundation loading configurations are greater than the assumed loading conditions, the potential for settlement shall be reevaluated. The foundation design shall comply with the applicable California Building Standards Code at the time of a building permit application and shall be to the satisfaction of the City's Building Official.

Geology PDF 2 – Geotechnical Project Design Features for Foundation Construction

Impact	Mitigation Measure (s)	Residual Impact

The recommendations for foundation construction contained in the 2016 geotechnical report would be implemented as Project Design Features that include, but are not limited to, the following:

Shoring Design

Unless otherwise modified by the City's Building Official or his/her designee, all recommendations presented in the geotechnical report pertaining to the shoring design considerations shall be followed. Soldier piles, lagging, and tie backs shall be designed to withstand the earth pressure resulting from adjacent soils, traffic loading, and temporary equipment used to excavate the slopes and drive the shoring. For soldier piles driven below the groundwater table, special provisions shall be followed to ensure that caving is minimized. The shoring contractor shall provide its design to the City's Building Official or his/her designee for review and approval prior to commencement of shoring. Lagging deflection and tie back resistance strength shall be measured in the field to ensure that these features are able to withstand the earth pressures that they will undergo.

Foundation Observations

All foundation excavations shall be observed by a City-approved geotechnical engineer to verify penetration into the recommended bearing materials. The observation shall be performed prior to the placement of reinforcement. All foundation pile excavations shall be performed under the continuous observation by City-approved geotechnical engineer to verify penetration into firm undisturbed natural soils. Foundations shall be deepened if necessary to extend into satisfactory soils, or proper compaction shall be performed to ensure that the foundation slab is built upon dense compact material. Foundation excavations shall be cleaned of all loose soils prior to placing steel and concrete. Any required foundation backfill shall be mechanically compacted, flooding is not permitted.

Construction Monitoring

Compliance with the design concepts, specifications or recommendations during construction requires review by a California licensed geotechnical engineer. All foundations shall be observed by a California licensed geotechnical engineer prior to placing concrete or steel. Any fill which is placed shall be observed, tested, and verified if used for engineering purposes. It is the responsibility of the contractor to ensure that all excavations and trenches are properly sloped or shored. All temporary excavations shall be cut and maintained in accordance with applicable OSHA rules and regulations.

Geology PDF 3 Geotechnical Project Design Features if Groundwater is Encountered

Groundwater was not encountered during site exploration, and the groundwater table is sufficient deep that it will not be encountered during pile installation. However, local seepage may be encountered during excavations for the proposed soldier piles, especially if conducted during the rainy season. The recommendations contained in the 2016 geotechnical report in regards to groundwater would be implemented as Project Design Features that include, but are not limited to, the following:

Tremie Use

If more than six inches of water is present in the bottom of the excavation, a tremie is required to place the concrete into the bottom of the hole. A tremie shall consist of a rigid, water-tight tube having a diameter of not less than six inches with a hopper at the top. The tube shall be equipped with a device that will close the discharge end and prevent water from entering the tube while it is being charged with concrete. The tremie shall be supported so as to permit free movement of the discharge end over the entire top surface of the work and to permit rapid lowering when necessary to retard or stop the flow of concrete. The discharge end shall be closed at the start of the work to prevent water entering the tube and shall be entirely sealed at all times, except when the concrete is being placed. The tremie tube shall be kept full of concrete. The flow shall be continuous until the work is completed and the resulting concrete seal shall be monolithic and homogeneous. The tip of the tremie tube shall always be kept about five feet below the surface of the concrete and definite steps and safeguards shall be taken to ensure that the tip of the tremie tube is never raised above the surface of the concrete.

Concrete Mix

A special concrete mix shall be used for concrete to be placed below water. The design shall provide for concrete with a strength of 1,000 per square inch over the initial job specification. An admixture that reduces the problem of segregation of paste/aggregates and dilution of paste shall be included. The slump shall be commensurate to any research report for the admixture, provided that it shall also be the minimum for a reasonable consistency for placing when water is present. Extreme care shall be employed so that the pile is not pulled apart as the casing is withdrawn. At no time shall the distance between the surface of the concrete and the bottom of the casing be less than five feet. Continuous observation of the drilling and pouring of the piles shall be inspected by a Certified Special Inspector certified in concrete inspections.

Impact	Mitigation Measure (s)	Residual Impact

Hazards PDF 1 – Shallow Soil Remediation

To remediate elevated metals and VOCs, shallow soil will be excavated and properly disposed offsite. The SCMP developed by Leighton (2019) will be implemented to address known and previously unidentified shallow soils impacted by the COPCs referenced in the RP.

The proposed redevelopment will include excavations for one or two-level podium style parking. Excavations will extend up to varying depths across the Project site. Leighton has estimated that approximately 31,852 cubic yards of metal-impacted soil located beneath existing pavement/building slabs in the northwestern central portion of the Project site will require excavation and offsite disposal at a permitted landfill. Excavation of any contaminant-impacted soils in these areas will further reduce threats to groundwater and potential risk to human health. Notably, Cr(VI) contamination in soil identified at specific locations in the HHRA will be removed during excavation activities.

US EPA Residential RSLs have been approved by the LARWQCB for use as cleanup goals for COPCs onsite, with the exception of arsenic. The cleanup goal for arsenic in soil will be 12 mg/kg, established by the DTSC in *Determination of a Southern California Regional Background Arsenic Concentration in Soil* (2008). If concentrations of COPCs exceed US EPA RSLs and/or hazardous waste criteria, the remedial excavation may be extended.

The profiling of metal-impacted excavated soil will determine whether the soil requires disposal as a non-hazardous waste or a California hazardous waste. Soil excavated from areas of known impacts will be stockpiled and profiled in accordance with the requirements of the selected disposal facility. Leighton indicated that chlorinated VOCs (primarily PCE and TCE) present in shallow soils in this area are considered relatively low and would not prevent soil disposal as a non-hazardous waste.

Prior to the start of excavation, SJ4 will obtain a permit from SCAQMD under Rule 1166. Monitoring using a photoionization detector (PID) or organic vapor analyzer (OVA) will occur every 15 minutes and results recorded during all earth-moving activities. If VOCs are detected at concentrations greater than 50 parts per million by volume (ppmv), soil will be sprayed with water or vapor suppressant and stockpiles shall be covered with plastic sheeting. If PID readings exceed 1,000 ppmv the excavation must stop, the affected area must be sprayed, and the SCAQMD must be immediately notified. Excavated soil containing VOCs at concentrations greater than 1,000 ppmv must be immediately placed in an AQMD-approved sealed container or direct-loaded into trucks. The requirements of the Rule 1166 permit will be adhered to for the duration of the excavation activities.

Under SCAQMD Rule 1466 PM_{10} monitoring will be implemented during all earth moving activities to minimize fugitive dust emissions potentially containing toxic air contaminants. Monitoring will consist of taking continuous direct-reading measurements of particulate matter less than 10 micrometers in diameter. Monitoring equipment will be placed on the upwind and downwind sides of the Project site and will be set to record particulate readings every 10 minutes. If the PM_{10} concentration averaged over two hours exceeds 25 micrograms per cubic meter, the SJ4 contractor shall cease earth-moving activities, apply dust suppressant, or implement other dust control measures until the PM10 concentration is equal to or less than 25 micrograms per cubic meter averaged over 30 minutes.

Observations will be conducted to identify any previously unknown contamination. Soil will be visually monitored during concrete removal and excavation activities by Leighton for the presence of staining and for elevated VOCs using a PID. Soil samples will be collected if evidence of potential contamination is observed. Excavated soil will be profiled for waste disposal.

Confirmation samples will be collected from the sidewalls and floors of the excavations. The sampling frequency will depend on the size of the excavation. In general, samples will be collected from the mid-point of each of the walls and floor, or every 25 linear feet of exposed sidewall at 5-foot depth increments. The floors of each excavation will be sampled at a rate of approximately one sample per 625 square feet. Samples will be analyzed for COPCs and results will be compared to US EPA Residential RSLs. If additional excavation is required beyond the base of the grading plan to achieve the RSLs, the excavated areas will be backfilled with imported clean soil.

US EPA Residential RSLs (US EPA, 2018) have been approved by the LARWQCB for use as cleanup goals for COPCs onsite, with the exception of arsenic. The cleanup goal for arsenic in soil will be 12 mg/kg, established by the DTSC in *Determination of a Southern California Regional Background Arsenic Concentration in Soil* (2008). If concentrations of COPCs exceed US EPA RSLs and/or hazardous waste criteria, the remedial excavation may be extended.

Excavation and characterization of identified and previously unidentified potentially contaminated soil will be conducted under the direction of LARWQCB. If previously unidentified contamination is encountered with a volume greater than a 55-gallon drum, the LARWQCB project manager will be contacted and consulted for proper delineation and removal. A summary report will be prepared following the completion of excavation activities.

If any historical underground features are encountered, including clarifiers, underground storage tanks (USTs), and associated piping, they will be removed under permit and oversight of the appropriate regulatory agency.

Impact	Mitigation Measure (s)	Residual Impact

If stained soil is observed in the locations of the former transformers soil samples will be collected and analyzed for PCBs. If PCBs are detected, proper management and disposal of the PCB-affected soil will be performed. If any oil-stained concrete remains, the concrete will be resampled for the presence of PCBs and if necessary, segregated, profiled, and properly disposed.

Impacts associated with shallow contaminated soil and associated air quality or fugitive dust emissions during excavation, grading, stockpiling or transport of soils will be reduced to less than significant if the SCMP is adhered to and excavation, characterization, and disposal of contaminated soil are conducted under the oversight of the LARWQCB and in accordance with applicable local, State, and Federal regulations, including SCAQMD Rules 402, 403, 1166 and 1466. Furthermore, implementation of these measures is anticipated to mitigate the potential for exposure to offsite commercial or residential receptors, including during transport of excavated soil to disposal facilities.

Hazards PDF 2 – Shallow Soil Vapor

Engineering controls will be installed beneath the building foundations to prevent the migration of VOCs in shallow soil vapor into the proposed buildings. Engineering controls proposed in Geosyntec's Response Plan include the following:

Vapor Barrier and Venting System – Vapor barriers and venting systems will be installed as engineering controls beneath foundations of at-grade parking structures located beneath residences and beneath and around below-grade structures. The locations of the vapor barrier systems are illustrated on Drawings 2 through 4 of the RP. The vapor barrier systems beneath foundations will consist of, from top to bottom, a concrete slab underlain by a minimum 30-mil vapor barrier, followed by a cushion geotextile and/or 2 inches of sand to prevent puncture, followed by a vapor collection layer consisting of a minimum of 4-inch aggregate or geocomposite. Perforated venting pipes will be installed within the aggregate, or a strip composite venting layer will be placed immediately above the subgrade. The horizontal pipes will be connected to vertical solid vent pipes which will extend through the building to a minimum of 10 feet above grade and a minimum of 10 feet from any air inlet or operable door or window. A monitoring point will be installed within each vent riser.

The system will initially operate passively, and wind-driven turbines will be added to select vent risers to enhance venting. The venting system shall be equipped with blowers, and could therefore become an active system, if the indoor air or sub-slab VOC concentrations increase and additional engineering controls are deemed necessary or required by the LARWQCB.

The walls of below-grade structures will have a minimum 30-mil vapor barrier resistant to COPCs between the concrete walls and the subgrade soil. Cushion geotextiles and/or 2-inches of sand will be placed between the vapor barrier and surrounding soil to prevent puncture.

At-grade occupied, enclosed structures may consist of lobbies, elevators, or commercial space. Engineering controls for at-grade occupied, enclosed structures will include aerated floors such as Cupolex®. The aerated floor system will consist of, from top to bottom, a concrete slab, aerated forms, and prepared subgrade. The void space beneath the structures will be connected to vent pipes. Vent pipes will ventilate a minimum of 10 feet above grade and a minimum of 10 feet from any air inlet and/or operable door or window. A minimum of 2 ventilation pipes will be provided per enclosed continuous structure. A monitoring point will be installed within each vent riser.

At-grade, open parking garages will be constructed with a podium-style design incorporating natural ventilation meeting the requirements of 24 CCR Chapter 4 Section 406.5.2. The exterior side of the structure will have uniformly distributed openings on two or more sides that will not be less than 20 percent of the total perimeter wall area of the ground-level tier. The total length of the openings will not be less than 40 percent of the ground-level tier. Interior walls will have uniformly-spaced openings which will be a minimum 20 percent open, however size of openings may be modified if HVAC controls are implemented in the structure to provide enhanced ventilation.

Operation, Maintenance, and Monitoring

An Operation, Maintenance, and Monitoring (OMM) plan will be developed and submitted to the LARWQCB concurrently with the final Design Report detailing elements of the remedial design. The OMM plan will detail the methods for monitoring the vapor barrier and venting system and will provide monitoring frequencies and maintenance procedures for the system components. Furthermore, the OMM plan will include details of post construction indoor air monitoring for COPCs addressed in the RP in a manner that will comply with LARWQCB requirements and applicable State laws and guidance for the evaluation and mitigation of subsurface vapor intrusion to indoor air.

Further details regarding the vapor barrier and venting system details are provided in Section 7 of the RP prepared by Geosyntec. The engineering controls will be recorded as part of an administrative deed restriction for the Project site. The deed restriction will be provided to the LARWQCB when finalized.

According to the DTSC's *Vapor Intrusion Mitigation Advisory*, 2011, subslab venting is one of the most commonly accepted mitigation techniques and has a successful track record of performance. Utilization of a subslab liner aids in

Impact	Mitigation Measure (s)	Residual Impact

venting the sub-slab soil gas via collecting pipes rather than upward into the building and provides protection in the event that the blower fails on a depressurization system. The advisory further states that the risk from vapor intrusion may be greatly reduced through the use of podium-style buildings. Impacts associated with residual VOCs in shallow soil vapor will be reduced to less than significant provided that the following is implemented:

- The Response Plan is approved by and implemented under the direction of the LARWQCB.
- A vapor barrier and venting system, along with aerated flooring beneath certain at-grade occupied areas are implemented in accordance with the RP.
- The OMM plan is followed, including post-construction indoor air monitoring.

Hazards PDF 3 – Deep Soil and Soil Vapor Remediation

An SVE system will be operated to remove VOCs in deep soil and soil vapor to the extent feasible and practicable. SVE will be implemented for the remediation of deep soil and soil vapor to remove mass and reduce the potential for migration of VOCs to underlying groundwater to protect current and potential beneficial uses. It should be noted, however, that offsite sources of contamination continue to affect groundwater in the vicinity of the Project site. Therefore, impacts to groundwater will be reduced to the extent feasible and practicable and may not be quantifiable, given the potential continued contamination of the aquifer from offsite sources.

Components of the SVE system will be installed following excavation and rough grading at the Project site. The system will consist of 16 new SVE wells connected to a skid-mounted SVE package system equipped with granular activated carbon vessels. The SVE system will be installed on the upper level of the parking structure. Soil vapor probes will be installed in the vadose zone at various locations throughout the Project site, and subslab probes will be installed in the parking structure. Eight previously installed deep nested soil vapor probes may also be incorporated into the monitoring network.

Further details regarding location, installation, operation, and monitoring of the SVE system are provided in Section 6.3 of the RP. Detailed design plans for the remediation system were not provided in the RP. Once design plans are finalized they will be submitted to the LARWQCB for review and approval.

According to the DTSC's *Proven Technologies and Remedies Guidance – Remediation of Chlorinated VOCs in Vadose Zone Soil* (2010), SVE is the most frequently selected remedial alternative for chlorinated VOCs, such as PCE and TCE, in vadose zone soil. The effectiveness of SVE was determined by DTSC based on engineering and scientific analysis of performance data from past State and Federal cleanups and review of the administrative records and procedures used to implement the technologies.

Impacts associated with potential vapor migration to indoor air by residual VOCs in deep soil and soil vapor will be reduced to less than significant, provided that the following occurs:

- SVE is implemented under the direction of the LARWQCB and is conducted in conjunction with engineering controls for shallow soil vapor.

Hazards PDF 4 – Abandoned Oil Pipeline

The abandoned oil pipeline is reportedly owned by ExxonMobil and traverses the southeastern portion of the property. According to the SCMP, ExxonMobil will prepare a workplan and will be responsible for the proper removal of the pipeline. The pipeline will be removed under the oversight of SJ4's environmental consultant in accordance with the workplan, as approved by the LARWQCB.

Impacts associated with the abandoned ExxonMobil pipeline will be reduced to less than significant provided that the following is implemented:

The abandoned oil pipeline is properly removed in accordance with all applicable local, State, and Federal regulations, in accordance with a workplan approved by the LARWQCB, and under the oversight of SJ4's environmental consultant; and

Any previously unidentified releases from the abandoned pipeline will be handled in accordance with the SCMP and/or an LARWQCB-approved workplan for the pipeline removal.

Although the Project site also lies within the boundaries of the San Fernando Area 2 (Crystal Springs) Superfund Site, remediation and engineering controls described above for soil vapor would reduce impacts to the future development to a less than significant level by reducing concentrations of COPCs to levels that no longer represent a health risk for the intended land use and/or preventing migration of VOCs into indoor air at concentrations exceeding acceptable health risk criteria.

On February 13, 2019, the LARWQCB issued a comment letter on the draft RP. The LARWQCB comment letter indicated that additional information was needed before the LARWQCB could issue a determination that proper completion of the Response Plan will constitute "appropriate care" for the purposes of HSC Section 25395.67 (a). The following revisions have been requested by LARWQCB, which will need to be incorporated into an updated Response Plan:

Impact	Mitigation Measure (s)	Residual Impact

1. Any revisions to the RP identified in the LARWQCB comment letter dated February 13, 2019, shall incorporate and include provisions for oversight and approval of the completed response actions, if necessary, to satisfy the requirements set forth in HSC Section 25395.67(a)(3).
2. The vertical extent of the shallow soil profile must be clearly defined in Section 4.1-Remedial Action Objectives of the RP and in the SCMP. If the redevelopment plan proposes multiple parcels or subdivided areas for the Site, dimensions need to be specified and the depth of shallow soil within each parcel or subdivided area must be indicated. Drawings illustrating the dimensions and boundary of the assigned parcels or subdivided areas shall also be prepared and submitted to the LARWQCB for review.
3. Cross sections showing stratigraphy and contaminant distribution in the shallow and deep vadose zones shall be included in the RP. The cross sections shall illustrate the vertical extent of predefined shallow and deep soil profiles and the boundary of the proposed excavation lines (i.e. excavation depths) in shallow soils.
4. For the protection of future residents, the boundary of the vapor barrier and sub-slab ventilation illustrated on the engineering controls drawings shall not be limited to below-grade structures but extended to provide coverage for apartment units and parking structures located in the most impacted areas where SVE wells are proposed to be installed. Section 7 of the Plan describing the implementation of the proposed engineering controls and associated engineering control drawings shall be revised accordingly.
5. VOCs in shallow soil vapor shall be mitigated to levels that are protective of human health for the proposed residential and commercial uses. The proposed engineering controls for soil vapor monitoring described in Section 7.3.4 (of the RP) shall be revised to include the implementation of soil vapor monitoring networks to address shallow soil vapor impacts across the entire site that may pose potential vapor intrusion risks.
6. Remediation of VOCs in deep soils and soil vapors are subject to performance-based remediation goals. However, the mass removal of VOCs in deep soils shall continue until influent concentrations from the proposed SVE treatment reach low and sustainable asymptotic levels that are protective of groundwater.

Hydrology PDF 1 – Low Impact Development Plan

Per the requirements of the MS4 Permit, a Low Impact Development (LID) Plan has been developed by the Project applicant and will be submitted to the City of Burbank Community Development Director or his/her designee for approval. The LID Plan is required because the Project would result in an alteration to 50 percent or more of the impervious surfaces of a previously existing development that was not subject to post-construction stormwater quality control requirements. Therefore, the Project is classified as a "Planning Priority Project" per the Burbank Municipal Code (BMC) and must comply with requirements of BMC Section 9-3-413, which states all stormwater runoff generated at the Project site must be treated. The LID Plan is designed to control pollutants, pollutant loads, and runoff volumes to the maximum extent feasible by minimizing impervious surface areas and controlling runoff from impervious surfaces through infiltration, evapotranspiration, bioretention and/or rainfall harvest and use. Since infiltration of stormwater runoff onsite was determined to be infeasible due to groundwater contamination, the LID plan details how the Project will include Filterra systems sized to treat 1.5 times the 85th percentile, 24-hour rain event. In addition to treating stormwater runoff the LID Plan details source control BMPs that will be implemented onsite to reduce the potential for water quality degradation. These include storm drain messages and signing, locating trash away from roof drainage, minimization of run-on to the loading docks, and installation of irrigation that minimizes dry weather urban runoff. The Project must also protect slopes and channels and provide proof of ongoing BMP maintenance.

Hydrology PDF 2 – Soil Management Plan

The Project site was investigated for potential groundwater and soil contamination under the Well Investigation Program as part of the San Fernando Valley Groundwater Basin Superfund Site. The Project site lies within the Burbank Operable Unit. As a result of these past uses, there is a potential that construction activities could uncover previously contaminated soils. Thus, the project applicant has developed a Soil Management Plan (SMP) that outlines the framework for soils assessment, remediation, and removal actions to be undertaken if contaminated soils are encountered during construction activities. This plan will be provided to the City as part of the documents prior to issuance of building permits. As grading, excavation and trenching are performed, exposed soil would be monitored for stained or discolored soil, wet or saturated soils, or odors. If impacted soil is encountered, the soil would be analyzed to identify and characterize the impact and determine if soil remediation is required. Based on visual monitoring, "grab" soil samples would be collected at selected locations for headspace screening for volatile organic compounds using a calibrated Photoionization Detector (PID). Headspace PID readings that are elevated above those of non-impacted grab soil samples would be considered potentially contaminated.

Soil impacted by highly elevated concentrations of hexavalent chromium and/or total chromium may appear to be stained a yellow color, dissimilar to surrounding non-impacted soil. At a minimum, at least one soil sample would be

Impact	Mitigation Measure (s)	Residual Impact

collected for chemical analysis at or near the center of the suspected impact, ideally representative of the “worst case” condition. Soil samples would be analyzed by an appropriate State-certified laboratory using appropriate methods based on the parameters to be analyzed. The extent of lateral and vertical effects will be characterized where applicable. Likely excavation of impacted soil would be followed by segregated stockpiling or direct-loading, waste profiling, and off-site disposal or recycling which would be performed in accordance with applicable Federal, State, and local regulations.

Land Use PDF 1 – Master Sign Program

Prior to issuance of any building permit for Phase 1, the Developer shall submit a master sign program to the CDD at the time of Plan Check review. The master sign program shall indicate maximum allowable signage permitted per street frontage, signage type(s) and locations proposed, and identify any special characteristics associated with proposed signs. The comprehensive sign program is subject to approval by the CDD Director or his/her designee.

1. As part of the master sign program, the Developer shall provide a sign plan for the residential and commercial portions of the parking garages. The plan shall indicate all wayfinding signs, including colors of paint used to indicate presence of parking stalls and elevator vestibules.
2. Revisions to the comprehensive sign program may be approved by the CDD Director or his/her designee with a standard sign permit if the intent of the original approval is not affected. Revisions that would substantially deviate from the original approval shall require the approval of a new comprehensive sign program by the CDD Director.
3. Each primary building entry for the residential portions of the project shall have no more than one major sign, and the sign shall be designed to be compatible with the structure’s architectural design theme.
4. Other than permanent signs, advertising shall cover no more than 25 percent of the windows of the commercial spaces facing all public streets, or otherwise placed on the interior or exterior of the business with the intent of being visible from a public street. No additional window advertising will be permitted unless approved as a part of the master sign program.

Noise PDF 1 – Operation and Maintenance

- Hours of operation for the commercial tenant spaces shall be limited to between 6:00 a.m. and 12:00 a.m. (midnight). Late night businesses and/or operations (including deliveries) shall be prohibited, unless otherwise approved in accordance with the BMC. The owner/operator of the Project shall be responsible for providing a written notice to all residents that they are located in a mixed-use development adjacent to retail and commercial land uses, and the residents could be affected by noise from adjacent uses.
- No exterior maintenance of the premises, including but not limited to lot sweeping and cleaning, landscaping and gardening, or washing of sidewalks shall be conducted on the premises before 7:00 a.m. or after 10:00 p.m. Monday through Saturday or before 9:00 a.m. or after 8:00 p.m. on Sunday.
- Any noise resulting from the operation of the business or conduct of the patrons, including the playing of musical instruments, whether live or mechanical, singing or other vocal sounds shall be kept at a level so as not to cause any disturbances or nuisances that would be detrimental to other properties in the area or to the welfare of the occupants thereof.

Noise PDF 2 – Sound Wall

The developer shall construct a Sound Wall located on either California Department of Transportation (Caltrans) right-of-way or on the Project site and City right-of-way adjacent to southbound Interstate 5. The northern limits of the Sound Wall shall be a point where the on-ramp to the southbound Interstate 5 is ten (10) feet above the finished grade of the mainline of Interstate 5, and the southern limit shall be a point where the Magnolia Boulevard Bridge intersects with the Caltrans right-of-way boundary.

Unless otherwise required by Caltrans, the Sound Wall shall be built consistent with the California Department of Transportation’s “Sound Wall 1584” specifications and shall be a minimum of overall height of not less than ten (10) feet. The final design and construction of the Sound Wall is subject to review and approval by Caltrans (if located on State right right-of-way). If Caltrans does not approve the proposed Sound Wall to be placed on State right-of-way, then the developer shall construct the sound wall on private property and the adjacent City owned property with the final design of the Sound Wall being reviewed and approved by Community Development Director or his/her designee.

[1] Society for Vertebrate Paleontology. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology, Impact Mitigation Guideline Revision Committee. Available online at http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx. Accessed September 29, 2017.

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1 Introduction

This document is an Environmental Impact Report (EIR) for a proposed mixed-use development located at 777 North Front Street, Burbank, California. The proposed 777 North Front Street Project (hereafter referred to as the "proposed Project" or "Project") would be constructed on a vacant site currently containing mounds of soil and construction materials. The Project would involve clearing and excavation, and construction of residential units, hotel rooms, and retail/restaurant spaces among three separate buildings; one seven-story residential building, an eight-story residential building, and a seven-story hotel building. Other components of the Project include one subterranean level for parking, one to two levels of aboveground parking, a seven-story parking structure, and a five-story parking structure, rooftop terraces, and bike storage and upgrades to the adjacent public right-of-way that include amongst other things, bike and pedestrian amenities.

This section discusses (1) the Project and EIR background; (2) the legal basis for preparing an EIR; (3) the scope and content of the EIR; (4) issue areas found not to be significant by the Initial Study; (5) the lead, responsible, and trustee agencies; and (6) the environmental review process required under the California Environmental Quality Act (CEQA). The proposed Project is described in detail in Section 2, *Project Description*.

1.1 Environmental Impact Report Background

The City of Burbank distributed a Notice of Preparation (NOP) of the EIR for a 30-day agency and public review period starting on April 3, 2018 and ending on May 2, 2018. In addition, the City held an EIR Scoping Meeting on April 10, 2018. The meeting, held from 6:00 PM to 8:00 PM, was aimed at providing information about the proposed Project to members of public agencies, interested stakeholders and residents/community members. The meeting was held at the City of Burbank's Community Services Building at 150 North Third Street, Room 104. No comments were received at the scoping meeting. The City received letters from eight agencies in response to the NOP during the public review period. The NOP is presented in Appendix A of this EIR, along with the Initial Study that was prepared for the Project and the NOP responses received. Table 1-1 on the following page summarizes the content of the letters and verbal comments and where the issues raised are addressed in the EIR.

1.2 Purpose and Legal Authority

The proposed Project requires the discretionary approval of the City of Burbank's Planning Commission; therefore, the Project is subject to the environmental review requirements of CEQA. In accordance with Section 15121 of the *CEQA Guidelines* (California Code of Regulations, Title 14), the purpose of this EIR is to serve as an informational document that:

> "...will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project."

This EIR has been prepared as a project EIR pursuant to Section 15161 of the *CEQA Guidelines*. A project EIR is appropriate for a specific development project. As stated in the *CEQA Guidelines*:

> "This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation."

This EIR is to serve as an informational document for the public and City of Burbank decision makers. The process will include public hearings before the Planning Commission to consider certification of a Final EIR and approval of the proposed Project.

Table 1-1 NOP Comments and EIR Response

Commenter	Comment/Request	How and Where it was Addressed
Agency Comments		
California Department of Transportation (Caltrans)	Future development should incorporate transportation elements that promote alternatives to car use.	Comments are addressed in Section 4.12, *Transportation and Traffic*.
	Encourages integration of transportation and land use in a way that reduces VMT and GHG emissions. Encourages evaluation of Transportation Demand Management strategies and Intelligent Transportation System applications.	Comments are addressed in Section 4.12, *Transportation and Traffic and* Section 4.8, *Land Use and Planning, Table 4.8 -2, Project Consistency with Applicable General Plan Goals and Policies.*
	Provide trip generation, trip distribution, and trip assignment estimates with regards to the local and regional road system. Analyze adequacy of the operations of freeway segments in the Project vicinity.	A Traffic Impact Study was prepared for the Project by Fehr & Peers and is provided as Appendix J.
	A transportation permit from Caltrans is required for transportation of heavy construction equipment and/or materials that require oversized-transport vehicles. Recommend large trucks be limited to off-peak commute periods.	The Project applicant will apply for a transportation permit for heavy construction equipment after the entitlement process.
Los Angeles County Metropolitan Transportation Authority (Metro)	Concerns about the project's proximity to the Metro-owned railroad right-of-way including: operations of the rail service in both directions 24 hours a day, seven days a week near the proposed Project; noise and vibration from the railroad; Metro and/or SCRRA staff required monitoring of construction of proposed Project; and safety of the Project users.	Comments are addressed in Section 4.12, *Transportation and Traffic*.
	States that a recorded Noise Easement Deed in favor of Metro is required.	Comments are addressed in Section 4.9, *Noise.*
	Supports development of commercial and residential development near transit stations. Encourages incorporation of transit-oriented, pedestrian-oriented parking provision strategies.	Section 4.8, *Land Use and Planning, Table 4.8 -2, Project Consistency with Applicable General Plan Goals and Policies.*
	Suggests the City to request the installation of wide sidewalks, pedestrian lighting, enhanced crosswalks, and other amenities as part of development of the site.	Section 4.8, *Land Use and Planning, Table 4.8 -2, Project Consistency with Applicable General Plan Goals and Policies.*

Commenter	Comment/Request	How and Where it was Addressed
	Promote bicycle use through different types of bike parking and participation in Metro Bike Share program.	Comments are addressed in Section 4.12, *Transportation and Traffic*.
	Encourages impact analysis of non-motorized transportation modes and improved non-motorized access to the station.	Comments are addressed in Section 4.12, *Transportation and Traffic*.
	Informs the sponsor of Metro's employer transit pass programs.	Comments are addressed in Section 4.12, *Transportation and Traffic*.
	States that a Transportation Impact Analysis (TIA) is required.	A Transportation Impact Analysis was prepared for the proposed Project by Fehr & Peers on March 2019and is provided as Appendix J.
Los Angeles County Department of Public Health, Environmental Health, Toxicology & Environmental Assessment (LACO DPH-TEA)	Evaluate the potential noise and vibration impacts (temporary & permanent) associated with the project. Concerned with the existing land-use surrounding the Project such as Interstate 5, trucking and other commercial/industrial industries (i.e. power-plant, water treatment facility, etc.) and railroad and transportation affecting occupants of proposed residential or sensitive land use. Short-term or temporary noise & vibration impacts due to construction may potentially significantly impact surrounding land uses. Evaluate the potential noise impacts the nearby Bob-airport flight path may have on proposed residential land use. Evaluate the potential noise impacts associated with raising overall noise ambient levels in the area and the impacts on nearby existing sensitive receptors.	A Noise Study was prepared for the Project by Rincon Consultants on September 2018. Comments are addressed in Section 4.9, *Noise*.
	Dust emissions during grading and/or excavations may also expose workers and the public to soil fungal spores which can cause Valley Fever. The EIR should evaluate the impacts associated with fugitive dust emissions and include a discussion on Valley Fever.	Comments are addressed in Section 4.2, *Air Quality*.
	Evaluate if a Health Risk Assessment is needed. Concerned with the air quality impacts from surrounding land uses on the Project itself affecting future occupants or residential receptors. The power plant nearby should be evaluated for potential air quality impacts on the project. Consider the following: cooling towers as a potential source of bioaerosols and potential impacts on the project; safeguards implemented by the plan to minimize health risks affecting occupants and residents; potential odor problems from the water treatment plant nearby. There may be other industrial sources of pollutants which may have an impact, evaluate further.	A Health Risk Assessment was prepared for the Project by Air Quality Dynamics in June 2017 and subsequently amended in March 2019 is provided as amended in Appendix C. Comments are address in Section 4.2, *Air Quality.*

Commenter	Comment/Request	How and Where it was Addressed
	Concurs that the EIR should further evaluate the impacts associated with the remediation of the hazardous materials found on site. In addition, EIR should evaluate potential impacts on future residents and occupants on site. Evaluate if a health risk assessment is needed.	Comments related to remediation of hazardous materials are addressed through mitigation measures in Section 4.6, *Hazards and Hazardous Materials*. A Health Risk Assessment was prepared for the Project by Air Quality Dynamics in June 2017 and is provided as Appendix C.
	Determine the presence of active and abandoned oil wells and oil facilities within 500 feet of the Project. Evaluate potential impacts.	Comments are addressed in Section 4.6, Hazards and Hazardous Materials. Refer also to the Phase I Environmental Site Assessment (ESA) conducted by Blackstone Consulting, LLC (March 2016) provided in Appendix G.
	Recommends a buffer of at least 500 feet between the development of new schools, housing, or other sensitive land uses and freeways. Considerations should be given to extending this minimum buffer zone based on site-specific conditions. Exceptions should be made only upon a finding by the decision-making body that the benefits of such development outweigh the public health risks. Recommends that new schools, housing, or other sensitive land uses built within 1500 feet of a freeway should adhere to current best-practice mitigation measures to reduce exposure to air pollution. Recommends new parks with athletic fields, courts, and other outdoor facilities designed for moderate to vigorous physical activity should be sited at least 500 feet from a freeway. Considerations should be given to extending this minimum buffer zone based on site-specific conditions. Exceptions should be made only upon a finding by the decision-making body that the benefits of such development outweigh the public health risks. New parks built within 1500 feet of a freeway should adhere to best-practice mitigation measures that minimize exposure to air pollution.	Comments are addressed in Section 4.2, *Air Quality.*
Native American Heritage Commission (NAHC)	Recommends lead agencies consult with all California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed Project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. States that the Project may be subject to the requirements and provisions Assembly Bill (AB 52), Senate Bill (SB 18), and Section 106 of the National Historic Preservation Act of 1966.	Consultation required by AB 52 was carried out by the City of Burbank. Subsequent issues are discussed in Section 4.3, *Cultural Resources*, of this EIR and a Cultural Resources Assessment is provided as Appendix E.

Commenter	Comment/Request	How and Where it was Addressed
Southern California Regional Rail Authority (SCRRA)	States the following: the Project is in close proximity to the rail and trains run 24 hours a day, seven days a week, and trains generate noise, vibrations, and visual impacts. Consider ensuring that adequate block walls or fencing is installed at the edge of the railroad right-of-way to ensure safety. Consider more improved pedestrian and bicycle access between Metrolink and development along Front Street.	Comments are addressed in Section 4.12, *Transportation and Traffic*.
South Coast Air Quality Management District (SCAQMD)	Recommends use of CEQA Air Quality Handbook for guidance in preparing air quality analysis and use CalEEMod for analysis. Requests construction-related and operation-related air quality analysis, including impacts from indirect sources. Requests calculation of regional and localized air quality impacts and comparison to SCAQMD thresholds. Requests consideration of impacts of air pollutants on people who will live on the Project site and include strategies to reduce the health impacts, where necessary.	Comments are addressed in Section 4.2, *Air Quality*.
	Recommends conducting a health risk assessment to disclose the potential health risks to the residents from vehicle emissions coming from the I-5 freeway. Recommends use of 2005 Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. Requests mitigation measures to minimize or eliminate significant adverse impacts to air quality.	A Health Risk Assessment was prepared for the Project by Air Quality Dynamics in June 2017 and is provided as Appendix C. Comments are address in Section 4.2, *Air Quality*.
State of California Public Utilities Commission	Development adjacent to or near the railroad right-of-way should be planned with the safety of the rail corridor in mind. Traffic studies should address rail crossing safety analysis and associated proposed mitigation measures. States that modification to existing public crossings require authorization from the Commission.	Comments are addressed in Section 4.12, *Transportation and Traffic*. A Traffic Impact Study was prepared for the Project by Fehr & Peers on March 2019.
Warner Bros. Entertainment Inc.	States their support for the proposed Project. States that the Project adds housing on underutilized property next to a mass transit station.	This comment is noted.

1.3 Scope and Content

This EIR addresses impacts identified by the Initial Study to be potentially significant. The following issues were found to include potentially significant impacts and have been studied in the EIR:

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

In preparing the EIR, use was made of pertinent City policies and guidelines, certified EIRs and adopted CEQA documents, and other background documents. A full reference list is contained in Section 7, *References and Preparers*.

The alternatives section of the EIR (Section 6) was prepared in accordance with Section 15126.6 of the *CEQA Guidelines* and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the Project while feasibly attaining most of the basic Project objectives. In addition, the alternatives section identifies the "environmentally superior" alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required "No Project" alternative and three alternative development scenarios for the Project site.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. Section 15151 of the *CEQA Guidelines* provides the standard of adequacy on which this document is based. The *Guidelines* state:

> "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 the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in 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."

1.4 Issues Not Studied in Detail in the EIR

Table 1-2 summarizes issues from the environmental checklist that were addressed in the Initial Study (Appendix A). As indicated in the Initial Study, there is no substantial evidence that significant impacts would occur in any of these issue areas.

Table 1-2 Issues Not Studied in the EIR

Issue Area	Initial Study Findings
Agricultural Resources	The Project site is within an urbanized area of Burbank that lacks agricultural lands or forests. No impact to these resources would occur.
Biological Resources	The Project site is within an urbanized area and no threatened, endangered or rare species or their habitats; locally designated species; locally designated natural communities; wetland habitats; or wildlife corridors are known to exist on the site. The Project site is within a highly developed urban area and surrounded by urbanized uses; however, there are trees located on-site. The City of Burbank Municipal Code (BMC) Section 7-4-108 provides for the protection of landmark trees, trees of outstanding size and beauty, and dedicated trees. No such trees were observed in the Project site during survey. If final plans for the Project include the removal of trees on City property, then the plans will be reviewed through the City's Plan Check process to ensure they comply with the Municipal Landscape Ordinance and BMC Section 7-4-11. Impacts would be less than significant. In addition, an applicant-proposed Project design feature addressing nesting birds is described in Section 2, *Project Description*, of this EIR.
Mineral Resources	The Project is located in an area classified as Mineral Resource Zone-2 (MRZ-2). However, the Project is in an urbanized area of Burbank that precludes mining activities. Although there is a possibility that significant mineral resources could be located within the MRZ-2 area, mining would not be feasible. The Project does not involve exploration or harvesting of mineral deposits and would not result in the loss of availability of known mineral resources. No impact would occur.
Recreation	The Project would not increase the use of off-site recreational facilities or other facilities such that physical deterioration of the facilities would occur or be accelerated due to the distance of the parks from the Project site. In addition, the Project would be required to pay the City's Community Facilities development impact fees. Impacts would be less than significant. The Project site is currently vacant and unimproved. The Project would include a publicly accessible, privately maintained plaza, and pedestrian bridge that connects the plaza to downtown Burbank on City-owned land. The Project would expand recreational facilities and opportunities in the community in comparison to the existing conditions. Impacts would be less than significant.

1.5 Lead, Responsible, and Trustee Agencies

The *CEQA Guidelines* define lead, responsible and trustee agencies. The City of Burbank is the lead agency for the Project because it holds principal responsibility for approving the Project.

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the Project. Responsible agencies include the LARWQCB, which regulates water quality in the region, and the SCAQMD, which regulates air quality in the region. The SCAQMD submitted comments on the Initial Study, which is provided in Appendix A. The EIR will also be submitted to these agencies for review and comment.

A trustee agency refers to a State agency having jurisdiction by law over natural resources affected by a project. There are no trustee agencies for the Project.

1.6 Environmental Review Process

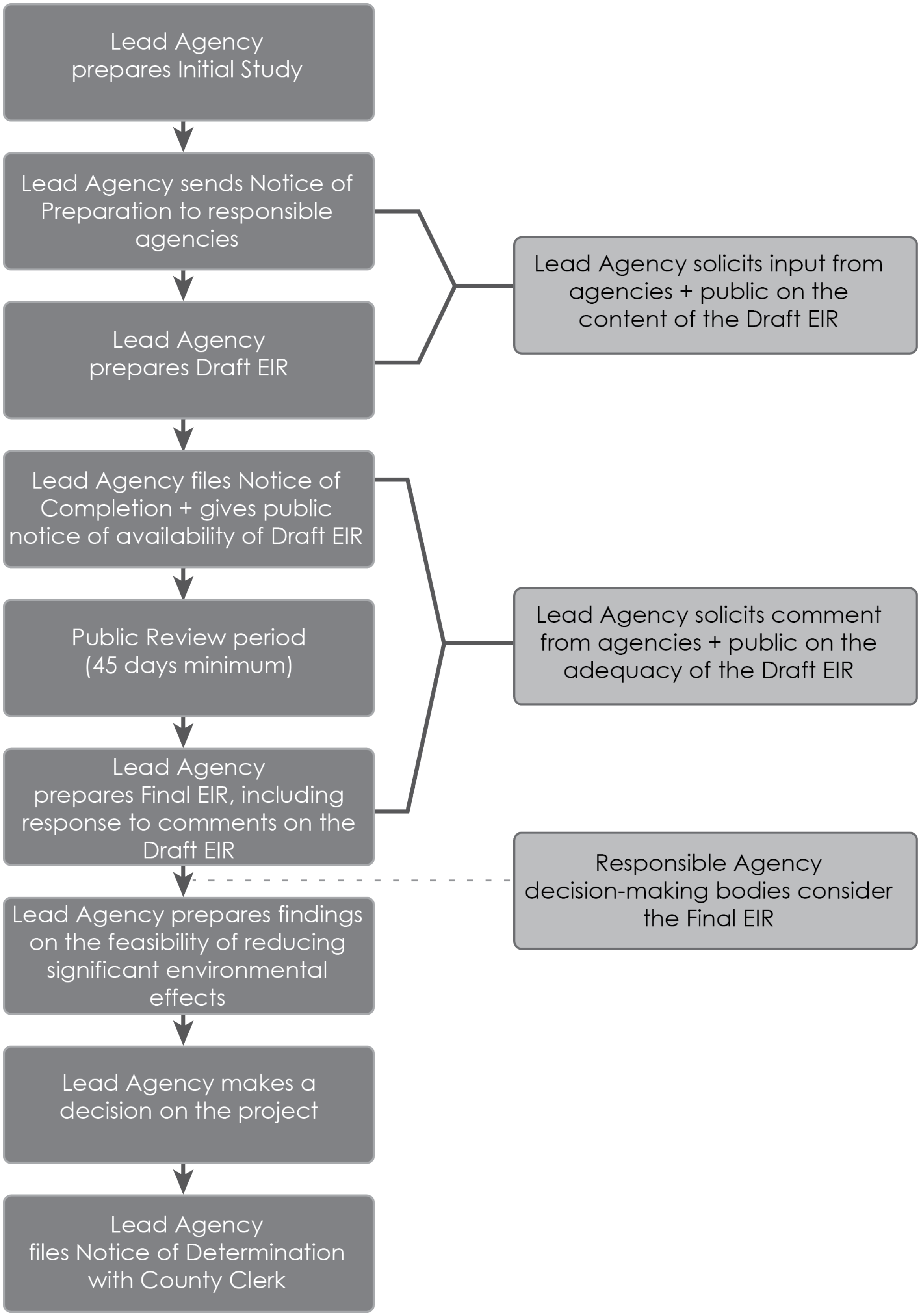
The environmental impact review process, as required under CEQA, is summarized below and illustrated in Figure 1-1. The steps are presented in sequential order.

1. **Notice of Preparation (NOP) and Initial Study**. After deciding that an EIR is required, the lead agency (City of Burbank) must file a NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. The NOP may be accompanied by an Initial Study that identifies the issue areas for which the project could create significant environmental impacts.
2. **Draft EIR Prepared.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and h) discussion of irreversible changes.
3. **Notice of Completion (NOC).** The lead agency must file a NOC with the State Clearinghouse when it completes a Draft EIR and prepare a Public Notice of Availability of a Draft EIR. The lead agency must place the NOC in the County Clerk's office for 30 days (Public Resources Code Section 21092) and send a copy of the NOC to anyone requesting it (*CEQA Guidelines* Section 15087). Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must solicit input from other agencies and the public, and respond in writing to all comments received (Public Resources Code Sections 21104 and 21253). The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the State Clearinghouse approves a shorter period (Public Resources Code 21091).
4. **Final EIR.** A Final EIR must include: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments.
5. **Certification of Final EIR.** Prior to making a decision on a proposed project, the lead agency must certify that: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; and c) the decision making body reviewed and considered the information in the Final EIR prior to approving a project (*CEQA Guidelines* Section 15090).
6. **Lead Agency Project Decision.** The lead agency may a) disapprove the project because of its significant environmental effects; b) require changes to the project to reduce or avoid significant environmental effects; or c) approve the project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043).
7. **Findings/Statement of Overriding Considerations**. For each significant impact of the project identified in the EIR, the lead agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written

Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.

8. **Mitigation Monitoring Reporting Program (MMRP).** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
9. **Notice of Determination (NOD).** The lead agency must file a NOD after deciding to approve a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the NOD with the County Clerk. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30 day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).

Figure 1-1 Environmental Review Process



2 Project Description

This section describes the proposed Project, including the Project applicant, the Project site and surrounding land uses, major Project characteristics, Project objectives, and discretionary actions needed for approval.

2.1 Project Applicant

SJ4 Burbank LLC c/o La Terra Development
777 South Highway 101, Suite 107
Solana Beach, California 92075

2.2 Lead Agency Contact Person

Leonard Bechet, Senior Planner
City of Burbank
Community Development Department
150 North Third Street
Burbank, California 91510
(818) 238-5250

2.3 Project Location

The Project site is located at 777 North Front Street in the City of Burbank, California. The Project site is a generally flat, irregularly-shaped parcel with an area of 352,297 square feet (8.09 acres). It is bounded by North Front Street to the west, Burbank Boulevard to the north, the Golden State Freeway (Interstate 5 or I-5) to the east, and West Magnolia Boulevard to the southeast. The Project site currently contains mounds of soil and construction materials throughout the Project site as a result of its current use as a construction material storage site for the California Department of Transportation (Caltrans) during the I-5 Freeway project. The Project site is partially fenced along Front Street. The Project site is regionally accessible from I-5, and locally accessible from West Burbank Boulevard and North Front Street. Figure 2-1 shows the regional location of the Project site and Figure 2-2 shows the location of the Project site in its neighborhood context. As shown in Figure 2-2, the privately-owned parcel makes up approximately 6.77 acres of the Project site and the City-owned property makes up approximately 1.22 acres. The Project site is in an industrial and commercial area, has been previously graded and is mostly paved, and is surrounded by transportation corridors and urban structures (commercial, office, and industrial buildings/facilities).

Figure 2-1 Regional Location

Imagery provided by Esri and its licensors © 2018.

Figure 2-2 Project Site Location

Imagery provided by Microsoft Bing and its licensors © 2018.

2.4 Existing Site Characteristics

The Project site, which includes private property and City-owned public property, is the former location of the General Water Heater Company (GWHC) that operated at the site from the 1930s until 1961. The Zero Corporation (Zero) subsequently manufactured metal cases and other products at the site from approximately 1961 to 1991 in a facility comprised of six buildings. In 1998, the Ford Leasing Development Company (FLDC) purchased the site with the intent to redevelop the property as a car dealership, which did not occur. The Project site has been dormant since 1991, aside from occasional use for storage, recreational entertainment (e.g., circus, equestrian shows, and etc.) and as a filming location for the entertainment industry. The former Zero buildings were demolished with the building slabs left intact in 2004. The Project site currently contains mounds of soil and construction materials throughout the Project site as a result of its current use as a construction material storage site for the Caltrans during the I-5 Freeway project. The Project site is partially fenced along Front Street.

2.5 Current Land Use Designation and Zoning

The Project site has a General Plan land use designation of Downtown Commercial and is designated as Mixed Commercial/Office/ Industrial in the Burbank Center Plan (Specific Plan). The current zoning classification for the Project site is Auto Dealership (AD).

2.6 Surrounding Land Uses

The Project site is bordered by commercial and industrial businesses across North Front Street to the west and south, Burbank Boulevard and I-5 to the north, I-5 to the east, and commercial businesses including a three-story shopping mall along with residential buildings across I-5 to the east. The Downtown Burbank Metrolink Station and a major bus hub are located southeast of the Project site. The Metrolink tracks run alongside North Front Street across from the Project site.

2.7 Project Characteristics

The Project site is comprised of approximately eight acres located on the east side of North Front Street. The proposed Project would involve clearing and excavation of the Project site and construction of three multistory buildings: two residential buildings and one building for a hotel. A total of 1,454 on-site parking spaces would also be developed as part of the Project.

The residential component of the Project would include construction of one 279,162 square-foot, seven-story building containing 252 units and one 346,644 square-foot, eight-story building containing 321 units for a total of 573 residential units. In addition, a total of 1,206 parking spaces would be provided for tenants of both residential buildings (including 63 tandem parking spaces). The proposed Project would also include 106,400 square feet of open space, including courtyards, a pool deck, publicly accessible ground floor plaza, and private balconies. Approximately 87,050 square feet would be common open space, a minimum of approximately 15 percent of which would be landscaped. Associated residential common areas and amenities constructed may include, but would not limited to a rooftop terrace, business center/internet café, coffee bar, demonstration kitchen, billiards room, resident lounge, fitness center with indoor exercise studio, resort-style pools with cabanas, Jacuzzis, public plaza and bike trail access, pet grooming station, pet park, concierge services, and bike storage. Residential courtyards and balconies would be located within the interior sides of the buildings.

The hotel component of the Project would include construction of one 212,250 square-foot, seven-story building at the southeastern end of the Project site containing 307 hotel rooms and ancillary uses and 327 associated parking spaces (including 20 tandem parking spaces). Associated hotel amenities may include but would not be limited to 1,800 square feet of restaurant space, café, bar, pool terrace, fitness center, meeting rooms, and lounge. The hotel's ancillary commercial uses would include accessory retail and restaurant uses on the ground floor. In addition, a 1,067-square foot retail gallery would be provided on Front Street near the intersection of Burbank Boulevard that would have 4 total parking spaces. Additional ancillary uses would include public and private recreational spaces consisting of courtyards, residential balconies, and sky terraces at both parking structure roof levels. The proposed Project would include a publicly accessible plaza area on the adjacent City-owned property located to the south of the project site. The plaza would be approximately 27,800 square feet and comprises four main zones: 1) the western portion of the plaza will include an open (synthetic) lawn area with informal terrace seating for multi-purpose activities; 2) a hardscape courtyard with benches and shade trees will be located in the central zone where the access stair to the Magnolia Boulevard Bridge is located; 3) at the east of the plaza, there will be a zone for fitness and general public use; and 4) along the northern perimeter (where the Project site adjoins the Interstate 5 Freeway), there will be earth mounds to provide a sound buffer and screening with clusters of tall evergreen trees.

The residential component of the Project would be developed at a density of approximately 71 units per acre, while the retail/hotel portion of the Project would be developed with a FAR of 0.58. The overall Project site would have a building coverage of 81 percent.

The Project would obtain necessary power via a connection to the Burbank Water and Power (BWP) main power plant located approximately 700 feet to the south of the Project site.

2.7.1 Proposed Site Plan

Figure 2-3 shows the proposed Project site plan. Figure 2-4 through Figure 2-7 show renderings of the proposed Project and Figure 2-8a through Figure 2-8d shows existing conditions of the Project site. Table 2-1 shows the characteristics of the proposed Project.

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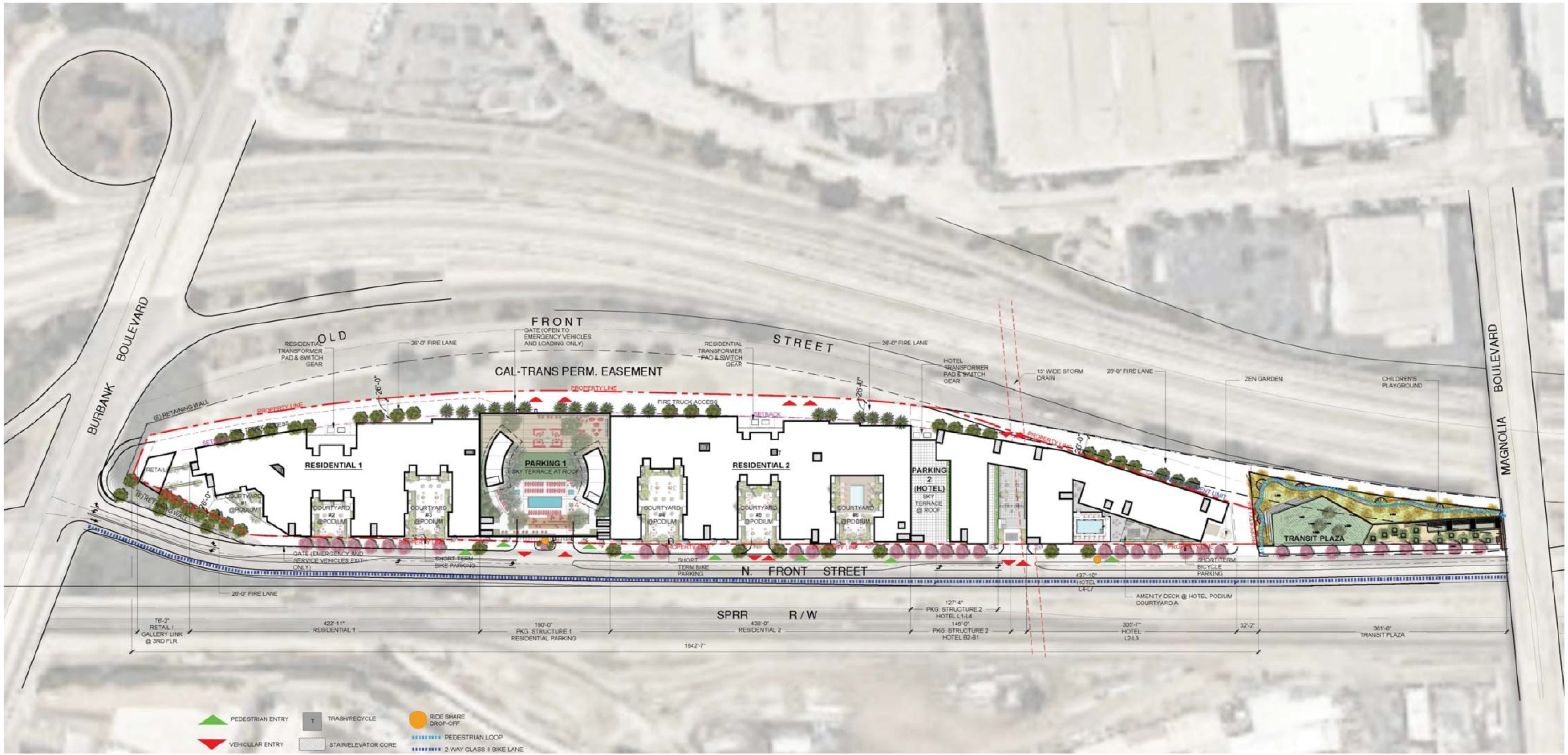
Figure 2-3 Project Site Plan



Source: LaTerra SELECT BURBANK, May 2018

0 70 140 Feet

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Figure 2-4 Conceptual Site Rendering – Aerial View of West Elevation

Source: LaTerra SELECT BURBANK, May 2018

Figure 2-5 Conceptual Site Rendering – Aeirel View of North Elevation

Source: LaTerra SELECT BURBANK, May 2018

Figure 2-6 Conceptual Site Rendering – East Elevation

Source: LaTerra SELECT BURBANK, May 2018

Figure 2-7 Conceptual Site Rendering – North Elevation

Source: LaTerra SELECT BURBANK, May 2018

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Figure 2-8a Project Site Photograph

View of the Project site looking northeast from the western boundary (at the northern end of the Project site)

Figure 2-8b Project Site Photograph

View of the Project site looking northeast near the northwestern corner of the Project site.

Figure 2-8c Project Site Photograph

View of the Project site looking southeast from northwestern boundary of the Projectsite

Figure 2-8d Project Site Photograph

View of the vacant lot and former building pads

Table 2-1 Project Characteristics

Component	Floor Area (SF)	Height	Units/Rooms
Residential[1]	645,806	–	–
Building 1	279,162	7-story, 80'-4"	252
Building 2	346,644	8-story, 82'-6"	321
Retail Gallery	1,067	1-story	–
Hotel[2]	212,350	7-story	307
Total	**859,223**	–	–
Open Space Area			
Courtyards	26,950		
Pool Deck	32,300		
Publicly Accessible Plaza	27,800		
Private Balconies	19,350		
Total Area	**106,400**		
Parking Stalls			
Type	**Residential**	**Hotel**	**Retail**
Standard	1,121	296	4
ADA Accessible	22	11	–
Tandem	63	20	–
Total			**1,537**
Bicycle Stalls			
Type	**Residential**	**Hotel**	**Retail**
Short-term	14	4	–
Long-term	43	12	–
Total			73

[1] Residential area includes 20,000 square-foot buffer to the proposal residential area as well as the residential space in both Buildings 1 and 2.

[2] Hotel area includes square footage of 307 hotel rooms, 1,800 sf of restaurant space, a lounge, a bar, a meeting room, and a fitness club.

sf = square feet

The total building area of the proposed project, consisting of the residential, retail, hotel, and basement space, would be 839,223 SF. The 212,305 SF hotel would include the square footage of 307 hotel rooms, a lounge, a bar, a meeting room, a fitness club, and 1,800 SF of ancillary restaurant space and retail areas. The courtyards and balconies associated with the residential uses would face towards the interior sides of the buildings, or Front Street, away from the freeway. As discussed above, the Project would include a publicly accessible, privately maintained 27,800 SF publicly accessible Transit Plaza on the City-owned property located to the south of the Project site that would include a pedestrian bridge that connects the plaza to Magnolia Boulevard and downtown Burbank. Along the north/northeast perimeter where the Project site is adjacent to the I-5 Freeway, there would be earthen mounds and wall along the eastern edge of the plaza to provide a sound buffer and landscape screening.

2.7.2 Parking and Site Access

The Project would include 1,143 parking spaces for the residential uses, four parking spaces for the retail gallery, and 307 parking spaces for the hotel. Total parking would be 1,537 spaces, which exceeds the required parking by 84 spaces. The Project would include one subterranean level for parking at the southern half of the project site beneath a portion of the southern residential building and also beneath the hotel. One to two levels of parking would be between grade and the residential units in both residential buildings, as well as a seven-story parking structure between the residential buildings. There would also be a five-story parking structure adjacent to the hotel for hotel parking.

The Project would include bicycle parking spaces for both the residential, retail gallery and the hotel uses. The residential portion would provide 14 short term bicycle parking spaces near the main entrance and 43 long term spaces in the garage. The hotel and retail gallery portion would provide four short term bicycle parking spaces near the main entrance and 12 long term spaces in the garage. The total bicycle parking for the proposed Project would include 73 spaces.

The primary entries for the hotel, retail gallery, and apartments would be provided along Front Street. Loading for the residential units would be provided at two loading areas along the Project site's Front Street frontage lane and loading for the hotel would be provided via a loading dock located at the northwest corner of the building with access along the fire truck access lane. The Project would include widening Front Street to include a turn lane and a bike lane.

2.7.3 Drainage

The Project would include installation of two storm drains along the easterly boundary of the Project site. Installation of a storm drain connector to route on-site sheet flow to the regional City-owned stormwater drainage system would be included in the southeastern portion of the site.

2.7.4 Utilities

The City of Burbank Public Works Department provides the following utility services to the Project site: solid waste, wastewater, and stormwater. Burbank Water and Power (BWP) supplies electricity and water and the Southern California Gas Company provides gas to the Project site.

To comply with the City's Low Impact Development (LID) standards, the Project would implement an LID Plan and 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 evapotranspiration, bioretention, and/or rainfall harvest and use.

2.7.5 Construction and Grading

Construction of the Project is expected to be completed in three phases over a period of approximately five years, with construction beginning in September 2019 and ending in September 2025. The anticipated schedule for construction as follows:

- **Phase 1: Residential Building 1 and Earthwork**
  - Site Preparation: September – December 2019
  - Grading: January – March 2020
  - Building Construction: April 2020 – July 2022

- **Phase 2: Residential Building 2**
  - Building Construction: April 2020 – September 2025
- **Phase 3: Hotel**
  - Building Construction: April 2020 – September 2025

The entire Project site would be graded and approximately 90,000 cubic yards of cut soil would be exported from the Project site. Given an estimated haul truck capacity of 24 cubic yards (using tandem trailers), approximately 3,750 outbound haul trucks (equivalent to 7,500 truck trips) would be required for soil export. In conformance with SCAGMD Rule 403 regulations regarding control of fugitive dust, the Project site would be watered daily as needed to control dust from grading and construction activities.

Building construction would involve widening of Front Street to include a bike lane adjacent to the Project site that would require approximately 15,000 square feet of additional excavation and paving. Excavated soil and material would be utilized on-site. Total areas paved both within the Project site and on Front Street would be approximately 1.1 acres.

2.7.6 Subsurface Assessment and Remediation

Extensive environmental assessment has been conducted since the early 1990s at the Project site, and remediation was conducted from 1998 through 2001. Based on a review of documents provided by the Applicant, as well as review of pertinent documents available on the State Water Resources Control Board (SWRCB) GeoTracker database, identified contaminants of potential concern (COPCs) have been detected in the subsurface at the Project site. COPCs include metals and volatile organic compounds (VOCs). Specifically, tetrachloroethylene (PCE), copper, lead, and hexavalent chromium (CrVI), have been identified as COPCs detected in shallow soils (up to 12 feet below ground surface (bgs)) and PCE and trichloroethylene (TCE) have been identified as COPCs detected in soil vapor at depths of up to 90 feet bgs. The Project site is currently under the oversight of the Los Angeles Regional Water Quality Control Board (LARWQCB). Section 4.6, *Hazards and Hazardous Materials*, includes a detailed summary of environmental assessments previously conducted, as well as remediation and engineering controls currently planned for the site.

Soil vapor assessment conducted following the 1998-2001 remedial activities indicated that PCE and TCE remained in soil vapor at concentrations exceeding the worst-case human health risk assessment risk-based concentrations (RBCs). In December 2018, the Applicant submitted to LARWQCB a revised draft Response Plan (RP) in accordance with the provisions of the California Land Reuse and Revitalization Act (CLRRA) of 2004. The RP was prepared by Geosyntec and will address identified subsurface contamination resulting from historical operations at the Project site. A Soil Contingency and Management Plan (SCMP) prepared by Leighton is included as an appendix to the RP (included as Appendix G of this DEIR).

Geosyntec's RP will address elevated VOCs in soil and soil vapor, and the SCMP will address elevated metals present in shallow soil. PCE, copper, lead, and Cr(VI) have been detected in soil above their respective US EPA Regional Screening Levels (RSLs).

Remedial measures and engineering controls are intended to protect human health by limiting exposures to COPCs in soil and soil vapor via dermal contact, ingestion, and/or inhalation of particulates/vapors present in the indoor/ambient air; reduce the potential for migration of COPCs to underlying groundwater and protect beneficial uses of groundwater to the extent feasible and practicable; and allow for redevelopment. The proposed remediation goals and remedial and mitigation alternatives are summarized below.

Shallow Soil – To remediate metals and VOCs in shallow soil at concentrations exceeding cleanup goals, Geosyntec proposes excavation and offsite disposal. The proposed development will require excavations to varying depths across the Project site, which are expected to generate approximately 31,852 cubic yards of metal impacted soil. Confirmation samples will be collected from sidewalls and bottoms of excavations and will be analyzed for COPCs. Analytical results for COPCs will be compared to US EPA Residential RSLs. If additional excavation is required beyond the base of the grading plan to achieve the RSLs, the excavated areas will be backfilled with imported clean soil.

An SCMP prepared by Leighton was issued as an appendix to the RP. The SCMP was prepared to facilitate proper characterization and handling of known and suspect contaminated soil, as well as the handling of historical improvements that may be encountered during demolition, grading, and construction activities.

The SCMP provides sampling and analysis protocols for handling and disposing of known contaminated soil, Rule 1166 monitoring for VOC-contaminated soil, and sampling previously unidentified contaminated soil. Environmental monitoring will take place during excavation activities and will include visual observation and screening for VOCs using a photoionization detector (PID). The environmental consultant will be responsible for directing segregation and stockpiling of soils, collecting confirmation soil samples and samples for waste profiling, and conducting air monitoring during excavation activities.

The SCMP further provides screening levels and hazardous waste thresholds for soil and lists disposal facilities that will accept the various types of waste that will potentially be generated at the Project site. Soil deemed non-hazardous will be transported to the Simi Valley Landfill, and several options are provided for California-hazardous and RCRA-hazardous waste, if encountered.

Additional information pertaining to the remedial excavation of shallow soils is provided in Section 4.6, *Hazards and Hazardous Materials*.

Shallow Soil Vapor Impacts

Engineering controls are proposed to prevent VOC migration into indoor air. Remediation goals are not applicable to this mitigation measure. Proposed engineering controls are described in the Project Design Features section below.

Deep Soils and Soil Vapor

COPCs in deep soil, from the base of final grade to approximately 90 feet bgs, as wells as in soil vapor, will be remediated to the extent feasible and practicable via SVE. Because offsite sources of groundwater contamination may continue to impact deep soil and soil vapor, numerical cleanup goals may not be achievable and it may be necessary for goals to be performance-based, whereby asymptotic influent concentrations will serve as evidence that VOCs have been removed to the extent feasible and practicable.

Groundwater

Groundwater remediation is not proposed at this time, as offsite sources continue to impact groundwater. SVE will be implemented in deep soil in an effort to reduce further migration of VOCs to groundwater. If any perched groundwater is encountered it will be managed in accordance with the SCMP and the development of a dewatering plan may be required, which would be overseen by the LARWQCB.

2.7.7 Green Building Features

The Project would be designed to be the equivalent of the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) Gold Certified. The Project site would also be designed to obtain the WELL Certified under the USGBC[1]. The Project is oriented and designed to maximize pedestrian-oriented landscaped open space. Project materials include sustainable products and locally sourced materials that would include an energy efficient HVAC system and MERV filters, cool roofs, roof top solar, LED lighting, and high performance glazing. Water efficient appliances and fixtures, drip irrigation, and drought tolerant landscaping and use of recycled water would be included. Indoor environmental quality favors formaldehyde-free finishes, low-allergen materials, and use of products with minimum off-gassing or low volatile organic compounds (VOC's). Development under the proposed Project would also comply with all Tier 1 applicable provisions of the 2016 California Green Building Standards Code (CALGreen Code).

2.7.8 Applicant-Proposed Project Design Features (PDFs)

The following are Project Design Features (PDFs) proposed by the applicant that would reduce or negate potential impacts concerning light and glare, air quality emissions, nesting birds during the construction period, geological hazards, hazardous materials at the Project site, hydrology, signage and noise.

Aesthetics PDF 1 – Photometric Lighting Plan

The applicant will submit a photometric lighting plan at the time of Plan Check review (prior to building permit issuance for each phase) that identifies all: exterior structure lighting; landscape and perimeter lighting; or rooftop lighting. The photometric plan will ensure that there will be no spillover lighting or glare on adjacent streets or properties, to the satisfaction of the CDD Director.

All building-mounted lighting that will be directed onto the Project site shall be shielded so as not to illuminate adjacent public rights-of-way and/or freeway.

All projects shall comply with Title 9, Chapter 1, of the BMC, and the 2016 and latest edition of the California Building Code (CBC), California Residential Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Green Building Standards and Building Energy Efficiency Standards. Beginning January 1, 2019 the new 2018 CBCs go into effect.

Air Quality PDF 1 – CAL Green Building Standards Code

The Project shall incorporate the requirements of the CAL Green Building Standards Code. The Project shall be provided with minimum Tier 1 or LEED Gold certification. The Green Building Plan shall be submitted to the Chief Building Official for review.

[1] The WELL Building Standard is a performance-based system for measuring, certifying, and monitoring features of the built environment that impact human health and wellbeing. WELL Certified spaces and developments aim to create a built environment that improve nutrition, fitness, mood, and sleep patterns. (USGBC 2018).

Air Quality PDF 2 – Energy Star Appliances

Developer shall install Energy Star or equivalent appliances or equivalent energy-efficient appliance models in new residential units, which shall include a standard-size refrigerator in each unit. Installation of Energy Star or equivalent appliances shall be demonstrated to the satisfaction of the CDD Director prior to issuance of certificate of occupancy.

Air Quality PDF 3 – Air Quality Control Measures

1 Prior to issuance of any building permits for any phase, the Developer shall incorporate the following as Project Design Features in each phase of the Project:

  a. Prior to any building permit (for each phase), the Developer shall install, operate, and maintain an HVAC system that utilizes high-efficiency filters with Minimum Efficiency Reporting Value (MERV) 15 minimum or higher for the residential units.

    i. Developer may prepare and submit an air quality engineering study (for a unit-by-unit analysis) related to the MERV filtration system(s) that must be incorporated into the Project. Individual units may be provided a MERV 13, MERV 14 or MERV 15 (but not less than MERV 13) filtration system depending on the recommendations of the air quality study (i.e., depending on proximity to freeway and exposure levels); developer shall pay for 3rd party air quality expert to review submitted air quality engineering study

    ii. If the Developer elects to not prepare and submit an air quality engineering study (for a unit-by-unit analysis), then a minimum of MERV 15 shall be required for every residential unit in each building/phase.

    iii. HVAC systems with the specified MERV filter ratings are required elements of the Project design, and must be incorporated at the time of original construction.

  b. Locate the air intakes for the residential units as far from the freeway as practicable. Precise location will be ascertained and reviewed during Plan Check prior to issuance of any building permit for each phase.

  c. Provide a written notice to all new residents and tenants that disclose the potential risk from living in close proximity to a freeway, and that opening unit windows may reduce the effectiveness of the air filtration system and increases their individual exposure.

  d. Plant vegetation between residential receptors and the freeway (e.g., rear yard setback areas for each phase).

2 Prior to the issuance of any Grading Permit, the City Engineer and the Chief Building Official shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce the short-term fugitive dust impacts on nearby sensitive receptors.

  a. Prohibit truck idling in excess of five minutes, on-site and off-site;

  b. All active portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the Project site to prevent excessive amounts of dust;

c. Pave or apply water every three hours during daily construction activities or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering shall occur if dust is observed migrating from the site during site disturbance;
d. Any on-site stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied;
e. All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour;
f. Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area;
g. Gravel bed trackout aprons (3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) shall be installed to reduce mud/dirt trackout from unpaved truck exit routes;
h. On-site and unpaved-road vehicle speed shall be limited to 15 miles per hour;
i. All on-site roads shall be paved as soon as feasible, watered twice daily, or chemically stabilized;
j. Visible dust beyond the property line which emanates from the Project shall be prevented to the maximum extent feasible;
k. All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site;
l. Reroute construction trucks away from congested streets or sensitive receptor areas;
m. Track-out devices shall be used at all construction site access points;
n. All delivery truck tires shall be watered down and/or scraped down prior to departing the job site;
o. Sweep streets at the end of the day with SCAQMD Rule 1186 and 1186.1 compliant sweepers if visible soil is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water);
p. Re-route construction trucks away from congested streets or sensitive receptor areas;
q. The Project proponent shall survey and document the proposed Project's construction areas and identify all construction areas that are served by electricity. Onsite electricity, rather than temporary power generators, shall be used in all construction areas that are demonstrated to be served by electricity.

Biological PDF 1 – Nesting Bird Survey

While common bird species are not designated special-status species, destruction of their eggs, nests, or nestlings is prohibited by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (CFGC) (Sections 3503, 3503.5, 3511, and 3513). Potentially suitable habitat for nesting birds exists on-site. If site preparation and construction activities are initiated during the nesting bird season (typically February 1 and August 31, and as early as January 1 for raptors), a preconstruction nesting bird survey must be conducted within seven days prior to initial grading or vegetation removal to determine the presence/absence, location, and status of any active nests onsite or within 100 feet of the site for nesting birds, or within 500 feet of the site for nesting raptors to comply with State CFGC and Federal MBTA regulations. If results of the nesting bird survey identify active nests that could be impacted by Project construction activities, the following measures should be applied:

- If active nests are discovered on the Project site, a qualified biologist will establish an appropriate buffer around each nest(s). Typical buffers range from 100 feet for nesting birds and up to 500 feet for raptor nests, depending on the species.
- No construction within the buffer should occur until a qualified biologist has determined the nest(s) are no longer active. Encroachment into the buffer may occur at the discretion of a qualified biologist in coordination with the City of Burbank.

Geology PDF 1 – Geotechnical Design Considerations

Excavations for the subterranean portion of the proposed multi-family residential structures are anticipated to penetrate through a majority of the existing artificial fill, if not all. Based on these considerations, the proposed multi-family residential structures shall be supported on a conventional spread foundation system deriving support in the undisturbed alluvial soils found at and below a depth of 14 feet below the existing ground surface.

The following foundation design considerations related to soil engineering must be incorporated into the Project grading and building plans, revised as needed for compliance with current California Building Code (see Section 7.7 of the geotechnical report). Design and construction of the building shall be engineered to withstand the expected ground acceleration and potential liquefaction that may occur at the Project site. These include, but are not limited to:

- Continuous footings shall be designed for an allowable bearing capacity of 2,500 pounds per square foot (psf), and a minimum of 12 inches in width, 18 inches in depth below the lowest adjacent grade, and 12 inches into the recommended bearing material.
- Isolated spread foundations shall be designed for an allowable bearing capacity of 3,000 psf, and a minimum of 24 inches in width, 18 inches in depth below the lowest adjacent grade, and 12 inches into the recommended bearing material.
- The allowable soil bearing pressure above shall be increased by 300 psf and 500 psf for each additional foot of foundation width and depth, respectively, up to a maximum bearing pressure of 5,000 psf.
- The allowable bearing pressures shall be increased by one-third for transient loads due to wind or seismic forces.
- Continuous footings shall be reinforced with a minimum of four No. 4 steel reinforcing bars, two placed near the top of the footing and two near the bottom. The reinforcement for isolated spread footings shall be designed by the Project structural engineer.
- For preliminary design purposes 24-, 30-, and 36-inch diameter drilled cast-in-place friction piles have been evaluated. Piles shall be embedded a minimum of 20 feet into the competent alluvium found at and below a depth of 14 feet and derive axial and lateral support exclusively in the undisturbed alluvial soils.
- Casing may be required if caving occurs in the granular soil layers during deep drilled excavation. The contractor shall have casing available and be prepared to use it. If casing is used, extreme care shall be employed so the pile is not pulled apart as the casing is withdrawn. At no time should the distance between the surface of the concrete and the bottom of the casing be less than five feet.

Once the design and foundation loading configurations for the proposed structures proceeds to a more finalized plan, the estimated settlements presented in the geotechnical report shall be reviewed and revised, if necessary, as part of the structural plan check and building permit process and the LID submittals to the City. If the final foundation loading configurations are greater than the assumed loading conditions, the potential for settlement shall be reevaluated. The City's Building Official shall review and approve the design with any required changes to comply with applicable building and seismic regulations at the time of the construction plan submittal.

Geology PDF 2 – Geotechnical Project Design Features for Foundation Construction

The recommendations for foundation construction contained in the 2016 geotechnical report would be implemented as Project Design Features that include, but are not limited to, the following:

Shoring Design

All recommendations presented in the geotechnical report pertaining to the shoring design considerations shall be followed. Soldier piles, lagging, and tie backs shall be designed to withstand the earth pressure resulting from adjacent soils, traffic loading, and temporary equipment used to excavate the slopes and drive the shoring. For soldier piles driven below the groundwater table, special provisions shall be followed to ensure that caving is minimized. The shoring contractor shall provide its design to the City's Building Official for review and approval prior to commencement of shoring. Lagging deflection and tie back resistance strength shall be measured in the field to ensure that these features are able to withstand the earth pressures that they will undergo.

Foundation Observations

All foundation excavations shall be observed by a City-approved geotechnical engineer to verify penetration into the recommended bearing materials. The observation shall be performed prior to the placement of reinforcement. All foundation pile excavations shall be performed under the continuous observation by City-approved geotechnical engineer to verify penetration into firm undisturbed natural soils. Foundations shall be deepened if necessary to extend into satisfactory soils, or proper compaction shall be performed to ensure that the foundation slab is built upon dense compact material. Foundation excavations shall be cleaned of all loose soils prior to placing steel and concrete. Any required foundation backfill shall be mechanically compacted, flooding is not permitted.

Construction Monitoring

Compliance with the design concepts, specifications or recommendations during construction requires review by City-approved geotechnical engineer. All foundations shall be observed by a City-approved geotechnical engineer prior to placing concrete or steel. Any fill which is placed shall be observed, tested, and verified if used for engineering purposes. It is the responsibility of the contractor to ensure that all excavations and trenches are properly sloped or shored. All temporary excavations shall be cut and maintained in accordance with applicable OSHA rules and regulations.

Geology PDF 3 – Geotechnical Project Design Features if Groundwater is Encountered

Groundwater was not encountered during site exploration, and the groundwater table is sufficient deep that it will not be encountered during pile installation. However, local seepage may be encountered during excavations for the proposed soldier piles, especially if conducted during the rainy season. The recommendations contained in the 2016 geotechnical report in regards to groundwater would be implemented as Project Design Features, which include, but are not limited to, the following:

Tremie Use

If more than six inches of water is present in the bottom of the excavation, a tremie is required to place the concrete into the bottom of the hole. A tremie shall consist of a rigid, water-tight tube having a diameter of not less than six inches with a hopper at the top. The tube shall be equipped with a device that will close the discharge end and prevent water from entering the tube while it is being charged with concrete. The tremie shall be supported so as to permit free movement of the discharge end over the entire top surface of the work and to permit rapid lowering when necessary to retard or stop the flow of concrete. The discharge end shall be closed at the start of the work to prevent water entering the tube and shall be entirely sealed at all times, except when the concrete is being placed. The tremie tube shall be kept full of concrete. The flow shall be continuous until the work is completed and the resulting concrete seal shall be monolithic and homogeneous. The tip of the tremie tube shall always be kept about five feet below the surface of the concrete and definite steps and safeguards shall be taken to ensure that the tip of the tremie tube is never raised above the surface of the concrete.

Concrete Mix

A special concrete mix shall be used for concrete to be placed below water. The design shall provide for concrete with a strength of 1,000 per square inch over the initial job specification. An admixture that reduces the problem of segregation of paste/aggregates and dilution of paste shall be included. The slump shall be commensurate to any research report for the admixture, provided that it shall also be the minimum for a reasonable consistency for placing when water is present. Extreme care shall be employed so that the pile is not pulled apart as the casing is withdrawn. At no time shall the distance between the surface of the concrete and the bottom of the casing be less than five feet. Continuous observation of the drilling and pouring of the piles via inspection from a geotechnical engineer appointed by the City's Building Official.

Hazards PDF 1 – Shallow Soil Remediation

To remediate elevated metals and VOCs, shallow soil will be excavated and properly disposed offsite. The SCMP developed by Leighton (2019) will be implemented to address known and previously unidentified shallow soils impacted by the COPCs referenced in the RP.

The proposed redevelopment will include excavations for one or two-level podium style parking. Excavations will extend up to varying depths across the Project site. Leighton has estimated that approximately 31,852 cubic yards of metal-impacted soil located beneath existing pavement/building slabs in the northwestern central portion of the Project site will require excavation and offsite disposal at a permitted landfill. Excavation of any contaminant-impacted soils in these areas will further reduce threats to groundwater and potential risk to human health. Notably, Cr(VI) contamination in soil identified at specific locations in the HHRA will be removed during excavation activities.

US EPA Residential RSLs have been approved by the LARWQCB for use as cleanup goals for COPCs onsite, with the exception of arsenic. The cleanup goal for arsenic in soil will be 12 mg/kg, established by the DTSC in Determination of a Southern California Regional Background Arsenic Concentration in Soil (2008). If concentrations of COPCs exceed US EPA RSLs and/or hazardous waste criteria, the remedial excavation may be extended.

The profiling of metal-impacted excavated soil will determine whether the soil requires disposal as a non-hazardous waste or a California hazardous waste. Soil excavated from areas of known impacts will be stockpiled and profiled in accordance with the requirements of the selected disposal facility. Leighton indicated that chlorinated VOCs (primarily PCE and TCE) present in shallow soils in this area are considered relatively low and would not prevent soil disposal as a non-hazardous waste.

Prior to the start of excavation, SJ4 will obtain a permit from SCAQMD under Rule 1166. Monitoring using a photoionization detector (PID) or organic vapor analyzer (OVA) will occur every 15 minutes and results recorded during all earth-moving activities. If VOCs are detected at concentrations greater than 50 parts per million by volume (ppmv), soil will be sprayed with water or vapor suppressant and stockpiles shall be covered with plastic sheeting. If PID readings exceed 1,000 ppmv the excavation must stop, the affected area must be sprayed, and the SCAQMD must be immediately notified. Excavated soil containing VOCs at concentrations greater than 1,000 ppmv must be immediately placed in an AQMD-approved sealed container or direct-loaded into trucks. The requirements of the Rule 1166 permit will be adhered to for the duration of the excavation activities.

Under SCAQMD Rule 1466 PM_{10} monitoring will be implemented during all earth moving activities to minimize fugitive dust emissions potentially containing toxic air contaminants. Monitoring will consist of taking continuous direct-reading measurements of particulate matter less than 10 micrometers in diameter. Monitoring equipment will be placed on the upwind and downwind sides of the Project site and will be set to record particulate readings every 10 minutes. If the PM_{10} concentration averaged over two hours exceeds 25 micrograms per cubic meter, the SJ4 contractor shall cease earth-moving activities, apply dust suppressant, or implement other dust control measures until the PM10 concentration is equal to or less than 25 micrograms per cubic meter averaged over 30 minutes.

Observations will be conducted to identify any previously unknown contamination. Soil will be visually monitored during concrete removal and excavation activities by Leighton for the presence of staining and for elevated VOCs using a PID. Soil samples will be collected if evidence of potential contamination is observed. Excavated soil will be profiled for waste disposal.

Confirmation samples will be collected from the sidewalls and floors of the excavations. The sampling frequency will depend on the size of the excavation. In general, samples will be collected from the mid-point of each of the walls and floor, or every 25 linear feet of exposed sidewall at 5-foot depth increments. The floors of each excavation will be sampled at a rate of approximately one sample per 625 square feet. Samples will be analyzed for COPCs and results will be compared to US EPA Residential RSLs. If additional excavation is required beyond the base of the grading plan to achieve the RSLs, the excavated areas will be backfilled with imported clean soil.

US EPA Residential RSLs (US EPA, 2018) have been approved by the LARWQCB for use as cleanup goals for COPCs onsite, with the exception of arsenic. The cleanup goal for arsenic in soil will be 12 mg/kg, established by the DTSC in *Determination of a Southern California Regional Background Arsenic Concentration in Soil* (2008). If concentrations of COPCs exceed US EPA RSLs and/or hazardous waste criteria, the remedial excavation may be extended.

Excavation and characterization of identified and previously unidentified potentially contaminated soil will be conducted under the direction of LARWQCB. If previously unidentified contamination is encountered with a volume greater than a 55-gallon drum, the LARWQCB project manager will be contacted and consulted for proper delineation and removal. A summary report will be prepared following the completion of excavation activities.

If any historical underground features are encountered, including clarifiers, underground storage tanks (USTs), and associated piping, they will be removed under permit and oversight of the appropriate regulatory agency.

If stained soil is observed in the locations of the former transformers soil samples will be collected and analyzed for PCBs. If PCBs are detected, proper management and disposal of the PCB-affected soil will be performed. If any oil-stained concrete remains, the concrete will be resampled for the presence of PCBs and if necessary, segregated, profiled, and properly disposed.

Impacts associated with shallow contaminated soil and associated air quality or fugitive dust emissions during excavation, grading, stockpiling or transport of soils will be reduced to less than significant if the SCMP is adhered to and excavation, characterization, and disposal of contaminated soil are conducted under the oversight of the LARWQCB and in accordance with applicable local, State, and Federal regulations, including SCAQMD Rules 402, 403, 1166 and 1466. Furthermore, implementation of these measures is anticipated to mitigate the potential for exposure to offsite commercial or residential receptors, including during transport of excavated soil to disposal facilities.

Hazards PDF 2 – Shallow Soil Vapor

Engineering controls will be installed beneath the building foundations to prevent the migration of VOCs in shallow soil vapor into the proposed buildings. Engineering controls proposed in Geosyntec's Response Plan include the following:

Vapor Barrier and Venting System

Vapor barriers and venting systems will be installed as engineering controls beneath foundations of at-grade parking structures located beneath residences and beneath and around below-grade structures. The locations of the vapor barrier systems are illustrated on Drawings 2 through 4 of the RP. The vapor barrier systems beneath foundations will consist of, from top to bottom, a concrete slab underlain by a minimum 30-mil vapor barrier, followed by a cushion geotextile and/or 2 inches of sand to prevent puncture, followed by a vapor collection layer consisting of a minimum of 4-inch aggregate or geocomposite. Perforated venting pipes will be installed within the aggregate, or a strip composite venting layer will be placed immediately above the subgrade. The horizontal pipes will be connected to vertical solid vent pipes which will extend through the building to a minimum of 10 feet above grade and a minimum of 10 feet from any air inlet or operable door or window. A monitoring point will be installed within each vent riser.

The system will initially operate passively, and wind-driven turbines will be added to select vent risers to enhance venting. The venting system shall be equipped with blowers, and could therefore become an active system, if the indoor air or sub-slab VOC concentrations increase and additional engineering controls are deemed necessary or required by the LARWQCB.

The walls of below-grade structures will have a minimum 30-mil vapor barrier resistant to COPCs between the concrete walls and the subgrade soil. Cushion geotextiles and/or 2-inches of sand will be placed between the vapor barrier and surrounding soil to prevent puncture.

At-grade occupied, enclosed structures may consist of lobbies, elevators, or commercial space. Engineering controls for at-grade occupied, enclosed structures will include aerated floors such as Cupolex®. The aerated floor system will consist of, from top to bottom, a concrete slab, aerated forms, and prepared subgrade. The void space beneath the structures will be connected to vent pipes. Vent pipes will ventilate a minimum of 10 feet above grade and a minimum of 10 feet from any air inlet and/or operable door or window. A minimum of 2 ventilation pipes will be provided per enclosed continuous structure. A monitoring point will be installed within each vent riser.

At-grade, open parking garages will be constructed with a podium-style design incorporating natural ventilation meeting the requirements of 24 CCR Chapter 4 Section 406.5.2. The exterior side of the structure will have uniformly distributed openings on two or more sides that will not be less than 20 percent of the total perimeter wall area of the ground-level tier. The total length of the openings will not be less than 40 percent of the ground-level tier. Interior walls will have uniformly-spaced openings which will be a minimum 20 percent open, however size of openings may be modified if HVAC controls are implemented in the structure to provide enhanced ventilation.

Operation, Maintenance, and Monitoring

An Operation, Maintenance, and Monitoring (OMM) plan will be developed and submitted to the LARWQCB concurrently with the final Design Report detailing elements of the remedial design. The OMM plan will detail the methods for monitoring the vapor barrier and venting system and will provide monitoring frequencies and maintenance procedures for the system components. Furthermore, the OMM plan will include details of post construction indoor air monitoring for COPCs addressed in the RP in a manner that will comply with LARWQCB requirements and applicable State laws and guidance for the evaluation and mitigation of subsurface vapor intrusion to indoor air.

Further details regarding the vapor barrier and venting system details are provided in Section 7 of the RP prepared by Geosyntec. The engineering controls will be recorded as part of an administrative deed restriction for the Project site. The deed restriction will be provided to the LARWQCB when finalized.

According to the DTSC's Vapor Intrusion Mitigation Advisory, 2011, subslab venting is one of the most commonly accepted mitigation techniques and has a successful track record of performance. Utilization of a subslab liner aids in venting the sub-slab soil gas via collecting pipes rather than upward into the building and provides protection in the event that the blower fails on a depressurization system. The advisory further states that the risk from vapor intrusion may be greatly reduced through the use of podium-style buildings. Impacts associated with residual VOCs in shallow soil vapor will be reduced to less than significant provided that the following is implemented:

- The Response Plan is approved by and implemented under the direction of the LARWQCB.
- A vapor barrier and venting system, along with aerated flooring beneath certain at-grade occupied areas are implemented in accordance with the RP.
- The OMM plan is followed, including post-construction indoor air monitoring.

Hazards PDF 3 – Deep Soil and Soil Vapor Remediation

An SVE system will be operated to remove VOCs in deep soil and soil vapor to the extent feasible and practicable. SVE will be implemented for the remediation of deep soil and soil vapor to remove mass and reduce the potential for migration of VOCs to underlying groundwater to protect current and potential beneficial uses. It should be noted, however, that offsite sources of contamination continue to affect groundwater in the vicinity of the Project site. Therefore, impacts to groundwater will be reduced to the extent feasible and practicable and may not be quantifiable, given the potential continued contamination of the aquifer from offsite sources.

Components of the SVE system will be installed following excavation and rough grading at the Project site. The system will consist of 16 new SVE wells connected to a skid-mounted SVE package system equipped with granular activated carbon vessels. The SVE system will be installed on the upper level of the parking structure. Soil vapor probes will be installed in the vadose zone at various locations throughout the Project site, and subslab probes will be installed in the parking structure. Eight previously installed deep nested soil vapor probes may also be incorporated into the monitoring network.

Further details regarding location, installation, operation, and monitoring of the SVE system are provided in Section 6.3 of the RP. Detailed design plans for the remediation system were not provided in the RP. Once design plans are finalized they will be submitted to the LARWQCB for review and approval.

According to the DTSC's Proven Technologies and Remedies Guidance – Remediation of Chlorinated VOCs in Vadose Zone Soil (2010), SVE is the most frequently selected remedial alternative for chlorinated VOCs, such as PCE and TCE, in vadose zone soil. The effectiveness of SVE was determined by DTSC based on engineering and scientific analysis of performance data from past State and Federal cleanups and review of the administrative records and procedures used to implement the technologies.

Impacts associated with potential vapor migration to indoor air by residual VOCs in deep soil and soil vapor will be reduced to less than significant, provided that the following occurs:

- SVE is implemented under the direction of the LARWQCB and is conducted in conjunction with engineering controls for shallow soil vapor.

Hazards PDF 4 – Abandoned Oil Pipeline

The abandoned oil pipeline is reportedly owned by ExxonMobil and traverses the southeastern portion of the property. According to the SCMP, ExxonMobil will prepare a workplan and will be responsible for the proper removal of the pipeline. The pipeline will be removed under the oversight of SJ4's environmental consultant in accordance with the workplan, as approved by the LARWQCB.

Impacts associated with the abandoned ExxonMobil pipeline will be reduced to less than significant provided that the following is implemented:

The abandoned oil pipeline is properly removed in accordance with all applicable local, State, and Federal regulations, in accordance with a workplan approved by the LARWQCB, and under the oversight of SJ4's environmental consultant; and

- Any previously unidentified releases from the abandoned pipeline will be handled in accordance with the SCMP and/or an LARWQCB-approved workplan for the pipeline removal.

Hydrology PDF 1 – Low Impact Development Plan

Per the requirements of the MS4 Permit, a Low Impact Development (LID) Plan has been developed by the Project applicant and will be submitted to the City of Burbank Community Development Director or his/her designee for approval. The LID Plan is required because the Project would result in an alteration to 50 percent or more of the impervious surfaces of a previously existing development that was not subject to post-construction stormwater quality control requirements. Therefore, the Project is classified as a "Planning Priority Project" per the Burbank Municipal Code (BMC) and must comply with requirements of BMC Section 9-3-413, which states all stormwater runoff generated at the Project site must be treated. The LID Plan is designed to control pollutants, pollutant loads, and runoff volumes to the maximum extent feasible by minimizing impervious surface areas and controlling runoff from impervious surfaces through infiltration, evapotranspiration, bioretention and/or rainfall harvest and use. Since infiltration of stormwater runoff onsite was determined to be infeasible due to groundwater contamination, the LID plan details how the Project will include Filterra systems sized to treat 1.5 times the 85th percentile, 24-hour rain event. In addition to treating stormwater runoff the LID Plan details source control BMPs that will be implemented onsite to reduce the potential for water quality degradation. These include storm drain messages and signing, locating trash away from roof drainage, minimization of run-on to the loading docks, and installation of irrigation that minimizes dry weather urban runoff. The Project must also protect slopes and channels and provide proof of ongoing BMP maintenance.

Hydrology PDF 2 – Soil Management Plan

The Project site was investigated for potential groundwater and soil contamination under the Well Investigation Program as part of the San Fernando Valley Groundwater Basin Superfund Site. The Project site lies within the Burbank Operable Unit. As a result of these past uses, there is a potential that construction activities could uncover previously contaminated soils. Thus, the Project applicant has developed a Soil Management Plan (SMP) that outlines the framework for soils assessment, remediation, and removal actions to be undertaken if contaminated soils are encountered during construction activities. This plan will be provided to the City as part of the documents prior to issuance of building permits. As grading, excavation and trenching are performed, exposed soil would be monitored for stained or discolored soil, wet or saturated soils, or odors. If impacted soil is encountered, the soil would be analyzed to identify and characterize the impact and determine if soil remediation is required. Based on visual monitoring, “grab” soil samples would be collected at selected locations for headspace screening for volatile organic compounds using a calibrated Photoionization Detector (PID). Headspace PID readings that are elevated above those of non-impacted grab soil samples would be considered potentially contaminated.

Soil impacted by highly elevated concentrations of hexavalent chromium and/or total chromium may appear to be stained a yellow color, dissimilar to surrounding non-impacted soil. At a minimum, at least one soil sample would be collected for chemical analysis at or near the center of the suspected impact, ideally representative of the “worst case” condition. Soil samples would be analyzed by an appropriate State-certified laboratory using appropriate methods based on the parameters to be analyzed. The extent of lateral and vertical effects will be characterized where applicable. Likely excavation of impacted soil would be followed by segregated stockpiling or direct-loading, waste profiling, and off-site disposal or recycling which would be performed in accordance with applicable Federal, State, and local regulations.

Land Use PDF 1 – Master Sign Program

Prior to issuance of any building permit for Phase 1, the Developer shall submit a Master Sign Program to the CDD at the time of Plan Check review. The master sign program shall indicate maximum allowable signage permitted per street frontage, signage type(s) and locations proposed, and identify any special characteristics associated with proposed signs. The comprehensive sign program is subject to approval by the CDD Director or his/her designee.

1. As part of the master sign program, the Developer shall provide a sign plan for the residential and commercial portions of the parking garages. The plan shall indicate all wayfinding signs, including colors of paint used to indicate presence of parking stalls and elevator vestibules.

2. Revisions to the comprehensive sign program may be approved by the CDD Director or his/her designee with a standard sign permit if the intent of the original approval is not affected. Revisions that would substantially deviate from the original approval shall require the approval of a new comprehensive sign program by the CDD Director.
3. Each primary building entry for the residential portions of the project shall have no more than one major sign, and the sign shall be designed to be compatible with the structure's architectural design theme.
4. Other than permanent signs, advertising shall cover no more than 25 percent of the windows of the commercial spaces facing all public streets, or otherwise placed on the interior or exterior of the business with the intent of being visible from a public street. No additional window advertising will be permitted unless approved as a part of the Master Business Sign Program.

Noise PDF 1 – Operation and Maintenance

- Hours of operation for the commercial tenant spaces shall be limited to between 6:00 a.m. and 12:00 a.m. (midnight). Late night businesses and/or operations (including deliveries) shall be prohibited, unless otherwise approved in accordance with the BMC. The owner/operator of the Project shall be responsible for providing a written notice to all residents that they are located in a mixed-use development adjacent to retail and commercial land uses, and the residents could be affected by noise from adjacent uses.
- No exterior maintenance of the premises, including but not limited to lot sweeping and cleaning, landscaping and gardening, or washing of sidewalks shall be conducted on the premises before 7:00 a.m. or after 10:00 p.m. Monday through Saturday or before 9:00 a.m. or after 8:00 p.m. on Sunday.
- Any noise resulting from the operation of the business or conduct of the patrons, including the playing of musical instruments, whether live or mechanical, singing or other vocal sounds shall be kept at a level so as not to cause any disturbances or nuisances that would be detrimental to other properties in the area or to the welfare of the occupants thereof.

Noise PDF 2 – Sound Wall

The developer shall construct a Sound Wall located on either California Department of Transportation (Caltrans) right-of-way or on the Project site and City right-of-way adjacent to southbound Interstate 5. The northern limits of the Sound Wall shall be a point where the on-ramp to the southbound Interstate 5 is ten (10) feet above the finished grade of the mainline of Interstate 5, and the southern limit shall be a point where the Magnolia Boulevard Bridge intersects with the Caltrans right-of-way boundary.

Unless otherwise required by Caltrans, the Sound Wall shall be built consistent with the California Department of Transportation's "Sound Wall 1584" specifications and shall be a minimum of overall height of not less than ten (10) feet. The final design and construction of the Sound Wall is subject to review and approval by Caltrans (if located on State right right-of-way). If Caltrans does not approve the proposed Sound Wall to be placed on State right-of-way, then the developer shall construct the sound wall on private property and the adjacent City owned property with the final design of the Sound Wall being reviewed and approved by Community Development Director or his/her designee.

2.8 Project Objectives

- Reduce vehicle trips by providing a mixed-use, Transit Oriented Development in close proximity to transit.
- Help meet Citywide housing demand and RHNA requirements through the provision of new, quality living options in the City.
- Enhance linkages to transit by creating a streetscape that encourages pedestrian activity with a widened sidewalk and installing a new bike lane.
- Enhance the value of the site and economic vitality of the City of Burbank through the development of a project at an existing underutilized site that is responsive to market demands.
- Contribute to the economic health of the City though development of a Project that would generate new construction and long-term jobs, house new residents to support local businesses, and provide additional long-term revenues for the City, in the form of transient occupancy and sales taxes.
- Help meet the recreational needs of Project and other residents at no cost to the City by providing publicly accessible, privately maintained open space.

2.9 Required Approvals

The proposed Project would require City approval of the following entitlements:

- Specific Plan Amendment to the Burbank Center Plan to allow residential uses by changing the underlying subarea of the Project site from City Center West to City Center/City Center Access to the Regional Intermodal Transportation Center (RITC).
- Development Review for hotel and residential buildings.
- Rezoning Planned Development (PD) zone and Zone Map Amendment to change the zoning from Auto Dealership (AD) to Planned Development (PD).
- Development Agreement between the City and the Project applicant.
- Tentative Tract Map
- Purchase and Sale Agreement to sell adjacent City property to the Project applicant.
- Approval of associated building and engineering permits and pay applicable development fees to facilitate the creation of open space and pedestrian access to and from Downtown Burbank to the Project site view a new pedestrian bridge and elevator.

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3 Environmental Setting

This section provides a general overview of the environmental setting for the Project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

3.1 Regional Setting

The Project site is located in the City of Burbank, in the San Fernando Valley region of Los Angeles County (refer to Figure 2-1, *Regional Location*, and Figure 2-2, *Project Site Location*, in Section 2, *Project Description*). Incorporated in 1911, the City of Burbank encompasses approximately 17-square miles northwest of Glendale and east of North Hollywood. The City is in an urbanized area of the greater Los Angeles region and is almost entirely developed.

The estimated 2017 population of Burbank was 107,029 persons. The estimated housing stock in 2017 was 44,623 units and the average household size was estimated to be about 2.5 persons per unit. (California Department of Finance, 2018)

A grid system of east-west and north-south roadways, including arterials, collectors, and local streets, provide vehicular access throughout the City. Major roadways include Burbank Boulevard, Glenoaks Boulevard, Magnolia Boulevard, and Hollywood Way. The closest freeways are the Golden State Freeway (Interstate 5 or I-5) and the Ventura Freeway (State Route 134 or SR 134. Interstate 5 is located along the eastern boundary of the Project site and SR 134 is located approximately two miles south of the Project site.

The Mediterranean climate of the region and the coastal influence produce moderate temperatures year-round, with rainfall concentrated in the winter months. Though air quality in the area has steadily improved in recent years, the Los Angeles region remains a non-attainment area for ozone (urban smog).

3.2 Project Site Setting

As shown in Figure 2-2 in Section 2, *Project Description,* the Project site is bound by North Front Street to the west, Burbank Boulevard to the north, Old Front Street and Interstate 5 on the east, and West Magnolia Boulevard to the southeast. The approximately 348,480-square foot site currently contains mounds of soil and construction materials associated with the California Department of Transportation’s (Caltrans) ongoing construction work on Interstate 5.

The Project site has a General Plan land use designation of Downtown Commercial and is designated Mixed Commercial/Office/ Industrial by the Burbank Center Plan (Specific Plan). The site is zoned Auto Dealership (AD).

Surrounding land uses include commercial and industrial businesses across North Front Street to the west and south, Burbank Boulevard to the north, and Interstate 5 and commercial businesses including a three-story shopping mall, as well as residential buildings across Interstate 5 to the east. The Downtown Burbank Metrolink Station and a major bus hub are located southeast of the Project site. The Metrolink tracks run parallel to North Front Street, west of the Project site.

3.3 Cumulative Development

In addition to the specific impacts of individual projects, CEQA requires EIRs to consider potential cumulative impacts of the Project. CEQA defines "cumulative impacts" as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the Project and other nearby projects. For example, traffic impacts of two nearby projects may be less than significant when analyzed separately, but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

CEQA requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects or a forecast of future development potential. Currently planned and pending projects in Burbank are listed in Table 3-1. In particular, the mixed-use projects on First Street (Premier, First Street Village, and the Burbank Town Center Redevelopment) and the Burbank Commons project are either located in close proximity or along the same major arterial as the Project site and construction schedules may overlap. As appropriate, the projects listed in Table 3-1 are considered in the cumulative analyses for each issue area discussed in Section 4, *Environmental Impact Analysis*.

Table 3-1 Cumulative Projects List

Project No.	Project Location[1]	Land Use
1	3901 Riverside Drive (Riverside Drive & Kenwood Street – Media District)	Retail/Restaurant/Residential
2	3805 Olive Avenue	Restaurant/Coffee Shop
3	Media Studios North Original Entitlement 3333 Empire Avenue	General Office
4	Media Studios North Expanded Entitlement 3333 Empire Avenue	General Office
5	Talaria Mixed-Use 3401 West Olive Avenue	Whole Foods/Residential Apartments
6	First Street Village (Mixed-Use)	Residential/Restaurant/Retail
7	Premier at First Street (Mixed-Use)	Mid-Rise Residential/Retail/Hotel/General Office
8	3001 North Hollywood – Opportunity Site 6B (Overton Moore Proposal – Avion)	Industrial-Flex/Creative Office/Restaurant/Hotel
9	AC Hotel Project 550 North Third Street	Hotel
10	Airport Hotels – 2500 North Hollywood Way	Hotel/General Office
11	115 North Screenland Drive (Mixed-Use)	Residential Apartments/Retail

Project No.	Project Location[1]	Land Use
12	Burbank Town Center Redevelopment (NOMA) 600 N San Fernando Boulevard	Residential Apartments/Condominiums/Retail/ Restaurant/Hotel/Restaurant
13	Olive Station – 160 West Olive Avenue (Mixed-Use)	Residential Apartments/Grocery/Retail/Creative Office/General Office/Amenity Space
14	Lycee International de Los Angeles (LILA) 1105 Riverside Drive	Increase of School Enrollment from 350 to 450 Students
15	Burbank Common – 10 West Magnolia Boulevard (Mixed-Use)	Restaurant/Café/Brewpub/Retail/Special Event Space
16	The Burbank Studios (formerly NBC) - 3000 West Alameda Avenue	General Office
17	Warner Brothers – 4000 Warner Boulevard	General Office
18	Disney – 500 South Buena Vista Street	General Office
19	Bob Hope Center (bounded by Olive Avenue, Alameda Avenue, and Lima Street)	General Office
20	1407 West Glenoaks Boulevard	Condominiums
21	1412-1422 5th Street & 1116 Sonora Avenue	Senior Housing
22	1058 Ruberta Avenue	Living Facility

[1] Cumulative project details were sourced from the Transportation Impact Analysis prepared for the Project by Fehr & Peers, in March 2019 (see Appendix J of this EIR).

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4 Environmental Impact Analysis

This section discusses the possible environmental effects of the Project for the specific issue areas that were identified through the scoping process as having the potential to experience significant effects. Table 1-1 in Section 1, *Executive Summary*, summarizes issues from the environmental checklist that were addressed in the Initial Study (Appendix A). As indicated in the Initial Study, there is no substantial evidence that significant impacts would occur to the following issue areas: Agricultural Resources, Biological Resources, Mineral Resources, and Recreation. "Significant effect" is defined by the *CEQA Guidelines* §15382 as:

> "…a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant."

This EIR addresses impacts identified by the Initial Study to be potentially significant. The following issues were found to include potentially significant impacts and have been studied in the EIR:

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

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, which is followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the "significance thresholds," which are those criteria adopted by the City and other agencies or otherwise identified as relevant and appropriate to the issue area being analyzed, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the Project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level even with incorporation of feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the Project is approved per §15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated**. An impact that can be reduced to below the threshold level with incorporation of feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.

- **Less than Significant**. An impact that does not exceed the threshold levels and does not require mitigation measures.
- **No Impact.** The proposed Project would have no adverse effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measure(s). In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed Project in conjunction with other planned and pending developments in the area listed in Section 3, *Environmental Setting*.

The Executive Summary of this EIR summarizes all impacts and mitigation measures that apply to the Project.

4.1 Aesthetics

This section addresses potential Project impacts related to aesthetics, including changes in light and glare and shade and shadows. Because the Project is located within 0.5-mile of a transit station (i.e., Burbank-Downtown Metrolink station), the Project qualifies as a Transit Priority Project per Public Resources Code Section 21099(b)(7). According to the Public Resources Code Section 21009(d)(1), aesthetic and 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. Nonetheless, aesthetic impacts associated with the Project are analyzed and discussed in this section for informational purposes.

4.1.1 Setting

a. Existing Conditions

Visual Character of the Project Site

The Project site is comprised of approximately eight acres located on the east side of North Front Street. Figure 2-2 in the *Project Description* shows the location of the Project site in its neighborhood context. The Project site is in an industrial and commercial area that has been previously graded. The Project site currently vacant and contains mounds of soil and construction material associated with Caltrans' I-5 freeway project. Figures 2-8a through 2-8d of the *Project Description* show existing conditions at the site. The Project site has a General Plan land use designation of Downtown Commercial within the City Center West Subarea, has a land use designation of Mixed Commercial/Office/Industrial under the Specific Plan, and is zoned Auto Dealership (AD). Figures 4.8-1, 4.8-2 and 4.8-3 in Section 4.8, *Land Use and Planning*, show the General Plan land use, Specific Plan land use and zoning designations of the Project site and surrounding area, respectively.

Visual Character of Project Site Vicinity

The Project site is located in an urbanized area in the City of Burbank. The Project site is bordered by commercial and industrial businesses across North Front Street to the west and south, Burbank Boulevard and the Interstate 5 (I-5) freeway to the north, the I-5 freeway to the east, and commercial businesses associated with Downtown Burbank, across I-5 to the east. The Downtown Burbank Metrolink Station and a major bus hub are located southeast of the Project site. The Metrolink tracks run alongside North Front Street across from the western boundary of the Project site.

Properties to the northwest are zoned M-2 (General Industrial) and have a General Plan land use designation of North Victory Commercial/Industrial, and generally consist of commercial and industrial uses. These properties include one- and two-story office and warehouse buildings.

Properties northeast of the Project site, to the east side the I-5 freeway, are zoned NSFC (North San Fernando Commercial) and have a General Plan land use designation of Corridor Commercial, and generally consist of commercial and retail uses. These properties consist of one-story strip mall commercial buildings.

Properties south of the Project site are zoned M-2 and BCCM (Burbank Center Commercial Manufacturing) and have a General Plan land use designation of Institutional and Downtown

Commercial and generally include industrial uses. These properties include one- to four-story office buildings and manufacturing spaces.

Properties east of the Project site, to the east of the I-5 freeway are zoned NSFC and PD (Planned Development) and have a General Plan land use designation of Corridor Commercial and consist of retail, commercial and restaurant buildings and parking garages associated with Burbank Town Center, which range in height from one to four stories.

Properties to the west of the Project site are zoned M-2 and have a General Plan land use designation of North Victory Commercial/Industrial, and include industrial and commercial land uses These properties include one- and two-story office and warehouse buildings. Single-family residential neighborhoods are located a few blocks farther west of the Project site.

The United Water Services treatment facility located on the Burbank Water and Power (BWP) power plant site is approximately 150 feet southwest of the site.

Scenic Resources/Scenic Routes

The Project site is located in a highly developed area of Burbank, which does not contain any scenic resources, as identified in the City Open Space and Conservation Element (City of Burbank 2013). Existing vegetation on-site consists of ruderal vegetation and ornamental trees. The Project site does not contain rock outcroppings, or historic buildings on-site. The California Scenic Highway System and the County of Los Angeles Scenic Highways Element indicate that no existing or proposed County or State scenic highways are located in the vicinity of the Project site. The closest scenic highway is the northern segment of the Interstate 210 (I-210) freeway, located over three miles north of the Project site (Caltrans 2011). The Project site is not visible from this segment of the 210 freeway.

Viewsheds

Viewsheds refer to the visual qualities of a geographical area that are defined by the horizon, topography, and other natural features that give an area its visual boundary and context, or by development that has become a prominent visual component of the area. Public views are those available from vantage points that are publicly accessible, such as streets, freeways, parks, and vista points. These views are generally available to a greater number of persons than are private views. Private views are those available from vantage points located on private property.

As identified in the Conservation and Open Space Element of the City’s General Plan, scenic vistas in Burbank are limited to the Verdugo Mountains, which are located over a mile and half northeast of the Project site (City of Burbank 2013). The Verdugo Mountains to the east and Santa Monica Mountains to the southwest are visible from the Project site.

Light and Glare

The Project site is currently vacant and contains mounds of soil and construction material, and as such, no existing sources of light or glare are present on the Project site. The Project site is in an urban, industrial and commercial area with existing sources of light and glare. Primary sources of light are associated with the vehicles traveling along I-5 and existing offsite commercial and industrial buildings, including building-mounted lighting. Additionally, the Project site vicinity includes light and glare associated with the commercial uses of Downtown Burbank, east of I-5. Types of lighting include interior and exterior lighting, street lights and signals, automobile headlights, and reflection of light from windows and other reflective surfaces primarily from adjacent commercial uses. Additionally, street lamps border the Project site to the west along Front Street, to the east along the I-5 freeway and on-ramp, to the north along Burbank Boulevard and to the south along Magnolia Boulevard.

Rincon Consultants, Inc. performed an illumination survey to document existing lighting conditions along the Project site boundary and at four off-site locations to determine whether the proposed Project would result in excessive night-time light levels. The illumination survey was conducted between 9:10 p.m. and 10:15 p.m. on Friday, April 13, 2018. Illumination readings were taken from the Project site, a location along Burbank Boulevard, a location along Magnolia Boulevard, a location at the top of the parking structure located at 610 North 1st Street, which is east of the Project site across I-5, and a location at the top of external stairwell at the Holiday Inn building fronting North 1st Street at 150 E. Angeleno Avenue. Figure 4.1-1 shows the approximate location of the illumination survey and its results.

As shown in Table 4.1-1, readings indicate that existing levels of illumination on the Project site range from 0.02 foot candles (fc) to 0.23 fc. Readings from the location point at the parking garage and Holiday Inn associated with Downtown Burbank range from 1.10 fc to 0.25 fc, respectively. Additionally, readings from Burbank and Magnolia Boulevard range from 0.09 fc to 0.27 fc, respectively. Overall, the existing level of light and glare in the Project vicinity is typical of an urban area.

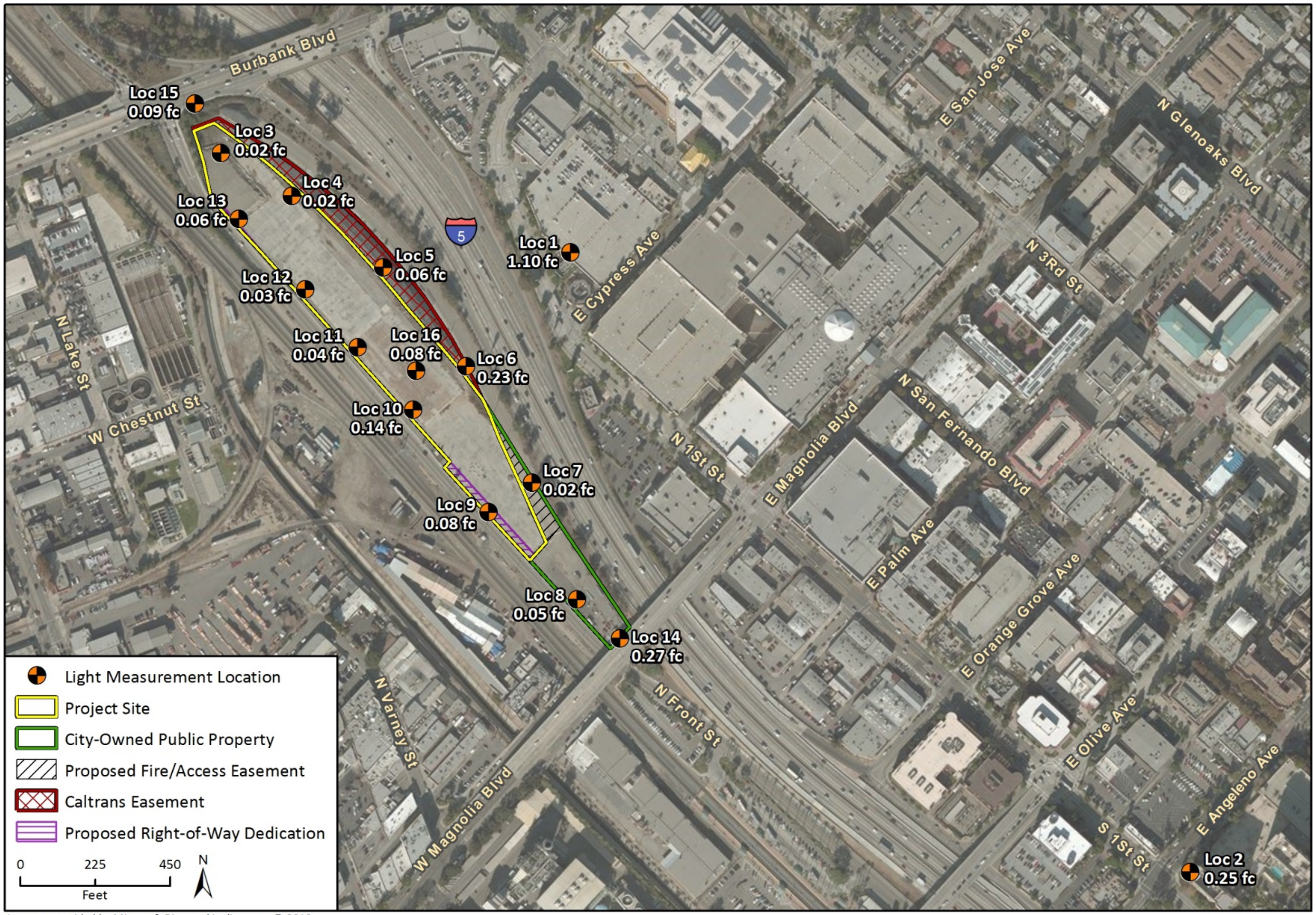
Table 4.1-1 Illumination Survey Readings

Reading No.	Location	Time	Reading (fc) [1]
1	Top of the parking structure located at 610 North 1st Street	9:10 PM	1.10
2	Top of external stairwell at the Holiday Inn building fronting North 1st Street at 150 E. Angeleno Avenue	9:31 PM	0.25
3	North end of Project site	10:10 PM	0.02
4	North east side of Project site	10:08 PM	0.02
5	North east side of Project site	10:06 PM	0.06
6	East side of Project site	9:57 PM	0.23
7	East side of Project site	9:54 PM	0.02
8	South end of Project site	9:52 PM	0.05
9	West side of Project site	9:53 PM	0.08
10	West side of Project site	10:00 PM	0.14
11	West side of Project site	10:01 PM	0.04
12	North west side of Project site	10:02 PM	0.03
13	North west side of Project site	10:11 PM	0.06
14	Sidewalk fronting Project site on Magnolia Boulevard	9:50 PM	0.27
15	Sidewalk fronting Project site on Burbank Boulevard	10:15 M	0.09
16	Middle of Project site	9:59 PM	0.08

Foot Candles = (fc)

[1] The illumination survey was conducted between 9:10 p.m. and 10:15 p.m. on Friday, April 13, 2018.

Figure 4.1-1 Illumination Survey



Imagery provided by Microsoft Bing and its licensors © 2018.

Fig 16 Illumination Survey

Shade and Shadow

Shadow impacts are generated by developments and land uses that create sources of shade to nearby areas. Shadow-sensitive uses include routinely useable outdoor spaces associated with residential, recreational, or institutional land uses (e.g., schools, convalescent homes); commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas; nurseries; and existing solar collectors. These uses are considered sensitive because sunlight is important to their function, physical comfort, and/or commerce.

In general, shadows cast by buildings are shortest on the summer solstice (June 21) and longest on the winter solstice (December 21). No shadows are currently generated from the Project site since it is vacant. The overall level of shade and shadow created by existing development adjacent to the Project site is low and typical of a commercial/industrial area. One existing shadow-sensitive use was identified within the shade and shadow envelope of the proposed Project. The El Pollo Loco fast food restaurant, located across I-5 to the east of the Project site at 521 N 1st Street, includes outdoor seating. Refer to Appendix B for the Shadow Study associated with the Project.

b. Regulatory Setting

Citywide policies on visual resource protection focus on maintaining and protecting significant visual resources, character and aesthetics that define the City.

State

Senate Bill (SB) 743

The Project qualifies under the provisions of Senate Bill (SB) 743, codified within CEQA as Section 21099 et seq., which states 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” (Public Resources Code Section 21099(d)(1)). The Project meets the definition of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area under SB 743 because: (1) the Project would include a mix of residential, commercial, office, hotel and entertainment uses, and the intensification of urban density in close proximity to transit; (2) the Project site is an infill site surrounded on all sides by urban development; and (3) the Project site is located in a transit priority area as it is located within 0.25 mile of the Regional Intermodal Transportation Center (RITC) and Burbank’s Metrolink and AMTRAK stations, and adjacent to multiple existing bus lines that run along Third Street, Burbank Boulevard, and Magnolia Avenue. Thus, the aesthetics evaluation provided in this section is included only for informational purposes.

California Code of Regulations Title 24

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

- The California Building Code (Title 24, Part 1) and California Electrical Code (Title 24, Part 3) stipulate minimum light intensities for safety and security at pedestrian pathways, circulation ways, and paths of egress. All exterior lighting will comply with the requirements of the California Building Code and California Electrical 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.
- The California Green Building Standards Code, that is Part 11 of Title 24, is commonly referred to as the CAL Green Code. Paragraph 5.1106.8, Light pollution reduction, requires that all non-residential outdoor lighting must comply with the following:
  - The minimum requirements in the California Energy Code for Lighting Zones 1–4 as defined in California Administrative Code Chapter 10 as noted above; and
  - Backlight, Uplight, and Glare (BUG) ratings as defined in the Illuminating Engineering Society of North America's Technical Memorandum on Luminaire Classification Systems for Outdoor Luminaires identified as IESNA TM-15-07 Addendum A; and
  - Allowable Backlight, Uplight, and Glare ratings not exceeding those shown in Table A5.106.8 in CALGreen Code Section 5.106.8[1]; or
  - Comply with a local ordinance lawfully enacted pursuant to Section 101.7.

California Motor Vehicle Code

The Project does not include improvements within the I-5 right-of-way (ROW), and thus is not subject to Caltrans regulations. Furthermore, according to the Lighting Study, Caltrans regulates the lighting of roadways and highways, but does not feature codes that pertain to views of a motorist. [2]

The California Motor Vehicle Code addresses light-related glare impacts to drivers. Therefore, the lighting analysis of Project lighting impacts on I-5 motorists in this section is based on the lighting standards set forth below:

SECTION 21466.5 – LIGHT IMPAIRING DRIVER'S VISION

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. A light source shall be considered vision impairing when its brilliance exceeds the values listed below when measured from the driver's perspective.

A. The maximum measured brightness of the light source within 10 degrees from the driver's normal line of sight shall not be more than 1,000 times the minimum measured brightness in the driver's field of view, except that when the minimum measured brightness in the field of view is 10 footlamberts[3] or less.

B. The measured brightness of the light source in footlamberts shall not exceed 500 plus 100 times the angle, in degrees, between the driver's line of sight and the light source.

C. No sign should be constructed that will impair a diver's vision by being exceeding bright or animated within the field of view.

[1] Table 5.106.8, Footnote 2, defines the location of the Property Line for the purpose of evaluating compliance with the BUG ratings and provides that: "For property lines that abut public walkways, bikeways, plazas and parking lots, the property line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section."

[2] Studio K1, Burbank Town Center Project Lighting Analysis, February 8, 2019.

[3] A footlambert is a Lambertian unit of luminance equal to (1/π) candelas per square foot, equal to 3.426 candela/m2.

California Energy Code

The California Energy Code limits the maximum amount of power that can be consumed by outdoor signs, regulates the types and wattages of the light sources used for externally illuminated signage, and regulates indoor and outdoor lighting controls to prevent unnecessary light usage as well as lighting trespass onto neighborhood properties.[4] The most relevant requirements of this code to the analysis of lighting impacts in this section are listed below.

SECTION 130.2 – OUTDOOR LIGHTING CONTROLS AND EQUIPMENT

Nonresidential, high-rise residential and hotel/motel buildings shall comply with the applicable requirements of Sections 130.2(a) through 130.2(c).

- (a) Outdoor Incandescent Lighting. All outdoor incandescent luminaires rated over 100 watts, determined in accordance with Section 130.0(c)2, shall be controlled by a motion sensor.
- (b) Luminaire Cutoff Requirements. All outdoor luminaires rated for use with lamps greater than 150 lamp watts, determined in accordance with Section 130.0(c), shall comply with Backlight, Uplight, and Glare (collectively referred to as "BUG" in accordance with IES TM-15-11, Addendum A) requirements as follows:
- (c) Controls for Outdoor Lighting. Outdoor lighting controls shall be installed that meet the following requirements as applicable:
  1. All installed outdoor lighting shall be controlled by a photocontrol or outdoor astronomical time-switch control, or other control capable of automatically shutting OFF the outdoor lighting when daylight is available.
  2. All installed outdoor lighting shall be independently controlled from other electrical loads by an automatic scheduling control.
  3. All installed outdoor lighting, where the bottom of the luminaire is mounted 24 feet or less above the ground, shall be controlled with automatic lighting controls that meet all of the following requirements:
     - A. Shall be motion sensors or other lighting control systems that automatically controls lighting in accordance with Item B in response to the area being vacated of occupants; and
     - B. Shall be capable of automatically reducing the lighting power of each luminaire by at least 40 percent but not exceeding 90 percent, or provide continuous dimming through a range that includes 40 percent through 90 percent, and
     - C. Shall employ auto-ON functionality when the area becomes occupied; and
     - D. No more than 1,500 watts of lighting power shall be controlled together.
  4. For Outdoor Sales Frontage lighting, an automatic lighting control shall be installed that meets the following requirements:
     - A. A part-night outdoor lighting control as defined in Section 100.1; or
     - B. Motion sensors capable of automatically reducing lighting power by at least 40 percent but not exceeding 90 percent, and which have auto-ON functionality.

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[4] Studio K1, Burbank Town Center Project Lighting Analysis, February 8, 2019.

5. For Building Facade, Ornamental Hardscape and Outdoor Dining lighting, an automatic lighting control shall be installed that meets one or more of the following requirements:
   A. A part-night outdoor lighting control as defined in Section 100.1; or
   B. Motion sensors capable of automatically reducing lighting power by at least 40 percent but not exceeding 90 percent, and which have auto-ON functionality; or
   C. A centralized time-based zone lighting control capable of automatically reducing lighting power by at least 50 percent.
   D. Outdoor wall mounted luminaires having a bilaterally symmetric distribution as described in the IES Handbook (typically referred to as "wall packs") where the bottom of the luminaire is mounted 24 feet or less above the ground shall comply with the applicable requirements in Section 130.2(c)3.

SECTION 130.3 – SIGN LIGHTING CONTROLS

Nonresidential, high-rise residential and hotel/motel buildings shall comply with the applicable requirements of Sections 130.3(a)1 through 130.3(a)3.

1. Controls for Sign Lighting. All sign lighting shall meet the requirements below as applicable:
   A. Indoor Signs. All indoor sign lighting shall be controlled with an automatic time-switch control or astronomical time-switch control.
   B. Outdoor Signs. Outdoor sign lighting shall meet the following requirements as applicable:
      i) All outdoor sign lighting shall be controlled with a photocontrol in addition to an automatic time-switch control, or an astronomical time-switch control.
      ii) All outdoor sign lighting that is ON both day and night shall be controlled with a dimmer that provides the ability to automatically reduce sign lighting power by a minimum of 65 percent during nighttime hours. Signs that are illuminated at night and for more than 1 hour during daylight hours shall be considered ON both day and night.

2) Demand Responsive Electronic Message Center Control. An Electronic Message Center (EMC) having a new connected lighting power load greater than 15 kW shall have a control installed that is capable of reducing the lighting power by a minimum of 30 percent when receiving a demand response signal.

SECTION 140.8 – REQUIREMENTS FOR SIGNS

This section applies to all internally illuminated and externally illuminated signs, unfiltered light-emitting diodes (LEDs), and unfiltered neon, both indoor and outdoor. Each sign shall comply with either Subsection (a) or (b), as applicable.

1) Maximum Allowed Lighting Power.
   A. For internally illuminated signs, the maximum allowed lighting power shall not exceed the product of the illuminated sign area and 12 watts per square foot. For double-faced signs, only the area of a single face shall be used to determine the allowed lighting power.
   B. For externally illuminated signs, the maximum allowed lighting power shall not exceed the product of the illuminated sign area and 2.3 watts per square foot. Only areas of an

externally lighted sign that are illuminated without obstruction or interference, by one or more luminaires, shall be used.

C. Lighting for unfiltered light emitting diodes (LEDs) and unfiltered neon shall comply with Section 140.8(b).

Caltrans Scenic Highway Program

The California Department of Transportation (Caltrans) Scenic Highway Program protects and enhances the natural scenic beauty of California's highways and corridors through special conservation treatment. Caltrans defines a scenic highway as any freeway, highway, road, or other public ROW that transverses an area of exceptional scenic quality. Caltrans designates a scenic highway by evaluating how much of the natural landscape a traveler sees and the extent that visual intrusions degrade the scenic corridor. The segment of I 5 that traverses the City is not designated as a California Scenic Highway.[5]

City of Burbank

Burbank2035 General Plan

The Burbank2035 General Plan (General Plan) (adopted February 2013) is the primary means for guiding future change in Burbank and provides a guide for land use decision-making. The General Plan includes the following elements: Air Quality and Climate Change, Land Use, Mobility, Noise, Open Space and Conservation, Safety and Plan Realization. Additionally, the Burbank2035 Housing Element was adopted in 2014.

Land Use Element

Goals and policies of the Land Use Element seek to maintain a balance between small-town character, economic prosperity and sustainability (City of Burbank 2013). The goals and policies applicable to the Project, with respect to aesthetics, are presented below. The Project's consistency with the Land Use Element, including the goal and policies listed below, is further discussed in Table 4.8-2 in Section 4.8, *Land Use and Planning,* of this Draft EIR.

Goal 3: Community Design and Character

Burbank's well-designed neighborhoods and buildings and enhanced streets and public spaces contribute to a strong sense of place and "small town" feeling reflective of the past.

Policy 3.2: Preserve unique neighborhoods and use specific plans to distinguish neighborhoods and districts by character and appearance and address physical and visual distinction, architecture, edge and entry treatment, landscape, streetscape, and other elements.

Policy 3.3: Maintain a healthy balance between Burbank's urban setting and its suburban roots by avoiding urban-scale residential densities and intensities in inappropriate locations, and recognizing advantages of denser development at appropriate locations.

Policy 3.4: Avoid abrupt changes in density, intensity, scale, and height and provide gradual transitions between different development types.

[5] California Department of Transportation, California Scenic Highways Mapping System, http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/, accessed August 15, 2018.

Policy 3.5: Ensure that architecture and site design are high quality, creative, complementary to Burbank's character, and compatible with surrounding development and public spaces.

Policy 3.6: Carefully regulate signs to ensure that their size and location are attractive, are appropriate for the site, and appropriately balance visibility needs with community character and aesthetics.

Policy 3.11: Carefully consider the evolution of community character over time. Evaluate projects with regard to their impact on historic character, their role in shaping the desired future community character, and how future generations will view today's Burbank.

Open Space and Conservation

The goals, policies, and implementation programs of the Open Space and Conservation Element are intended to protect the natural environment and open space within the City and provide recreation opportunities to further enhance community health (City of Burbank 2013). The goals and policies applicable to the Project, with respect to aesthetics, are presented below.

Goal 7: Visual and Aesthetic Resources

Prominent ridgelines and slopes are protected as visual resources.

Policy 7.1: Identify visually prominent ridgelines and establish regulations to promote their preservation.

Policy 7.2: Minimize the visual intrusion of development in the hillside area.

Policy 7.3: Recognize visual resources as a key element in open space acquisition programs.

Policy 7.4: Balance both public good and private property rights when considering the restoration of viewsheds.

Plan Realization

The Plan Realization Element of the General Plan establishes implementation programs to translate into action the goals and policies set forth in the General Plan (City of Burbank 2013). The Program applicable to the Project, with respect to aesthetics includes:

PROGRAM LU-1: ZONING ORDINANCE

- Require a shadow analysis for new structures proposed over 70 feet in height that would be adjacent to a shadow-sensitive public use such as, but not limited to, a park, pedestrian-oriented outdoor space, or restaurant with outdoor seating area.
- Establish standards to ensure new development over 70 feet in height does not shade shadow sensitive uses for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). Standards could include building spacing, building orientation, or step-backs.

Burbank Center (Specific Plan)

The Burbank Center Specific Plan (Specific Plan) is an economic revitalization plan that addresses long range land use and transportation planning for Downtown Burbank. The Specific Plan is divided into three subareas (City Center, South San Fernando, and City Center West) and focuses on several opportunity sites, which are currently vacant or contain inappropriate uses for the area and that could serve as catalysts for future development. The Project site is identified as Opportunity Site No. 8 in the Specific Plan. The Project site is located in the City Center West area of the Specific Plan that focuses on recycling of heavy industrial uses to mixed-use developments with an emphasis on transit oriented development. This area is currently characterized by a declining industrial base with strip commercial uses. The Project site is also identified as Opportunity Site No. 8 in the Specific Plan, and further identified in the Specific Plan as a Regional Intermodal Transportation Center (RITC), which is the focal point of the convergence of regional and local transportation in Burbank (City of Burbank 1997). A discussion of the proposed Project's consistency with the applicable goals and polices of the Specific Plan is provided in Table 4.8-3 in Section 4.8*, Land Use and Planning*.

City of Burbank Municipal Code and Zoning Ordinance

The City of Burbank Municipal Code (BMC) establishes regulations that implement the City's General Plan. Title 10, Zoning Regulations, contains a set of regulations that control the uses of land; the density of population; the locations, appearance, height and massing of structures; the open spaces associated with structures; dimensions of sites; and requirements pertaining to signage and on- and off-site parking (City of Burbank 2018). In addition to those regulations that will govern the height, density, setback, and design characteristics of the project, Division 4, Multi-Family Residential Zones, 10-1-628 (W): Property Development Standards establishes specific requirements with respect to light and glare:

1. Lighting must be provided in all common areas including, but not limited to: parking garages, outdoor parking areas, common open space areas, pedestrian paths, stairways, and hallways.
2. Outdoor lighting fixtures must be positioned and directed so as not to shine or cause glare onto adjacent properties or public rights-of-way.
3. Free-standing lighting fixtures must be no taller than eight (8) feet as measured from the abutting ground surface or floor level.
4. All lighting fixtures must be consistent with the architectural style of the building.

BMC Section 10 1 1010 limits the light intensity of signs that could impact neighboring light-sensitive uses to 343 candelas[6] per square meter (candelas/m2) at the light-sensitive use. This section also requires that an illuminated sign within a residential zone or within 500 feet of a residential zone, measured along the radius of a 180-degree arc in front of any face of the sign, shall not have a surface brightness greater than 100 footlamberts, and shall be illuminated by a source that is not exposed to view from the residential zone.

BMC Section 10 1 1103 requires that every lot have a frontage of at least 20 feet on a public or private street.

BMC Section 10 1 1153 requires the following:

A. Glare and Reflections

Building elevations facing a residential zone with 50 percent or more of the building surface in glass shall be limited to a maximum of 15 percent reflectivity for those materials. Building

[6] Candela is the basic unit for measuring luminous intensity from a light source in a given direction. A common candle emits light with a luminous intensity of roughly one candela.

elevations facing a residential zone with less than 50 percent of surface in glass shall be limited to a maximum of 20 percent reflectivity for those materials.

B. Mechanical Venting

No mechanical venting shall face a residential zone, unless such mechanical venting is more than 300 feet from the nearest residentially zoned property. Further, no mechanical venting shall be located anywhere on the building within 50 feet from the nearest residentially zoned property.

C. Refuse Bin Lids

All commercial and industrial refuse bins shall be equipped with nonmetallic lids, which shall remain closed at all times except when refuse is being deposited or emptied. [Added by Ord. No. 3503, eff. 12/26/98.]

BMC Article 19, Division 10 requires that development in a PD be compatible with existing and planned land use on adjoining properties. Building structures and facilities within the PD should be well integrated with each other, as well as to the surrounding topographic and natural features of the area. Architectural harmony with surrounding neighborhoods should be achieved as much as is practicable.

4.1.2 Project Impacts and Mitigation Measures

a. Methodology and Significance Thresholds

The assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. This evaluation measures the Project against existing visual conditions, analyzing the nature of the anticipated change. The Project site and surrounding area was observed and photographically documented (see Figures 2-8a through 2-8d of the *Project Description*) to assist in the analysis. Photo renderings of the Project were also used. See Figures 2-4 through 2-7 in Section 2, *Project Description*. An Illumination Survey was conducted to observe existing lighting conditions of the Project site See Figures 4.1-1. Lastly, a shadow analysis was performed to determine how the proposed Project would affect nearby outdoor uses. See Figures 4.1-2a and 4.1-2b, and Appendix B.

Based on the questions regarding aesthetics in Appendix G of the State CEQA Guidelines, an aesthetic impact is typically considered significant if a project would:

1 Have a substantial adverse effect on a scenic vista;
2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
3 Substantially degrade the existing visual character or quality of the site and its surroundings;
4 Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area; and/or

In addition, a project’s impact would typically be considered potentially significant impact if the project would:

5 Shade shade-sensitive uses for three hours or more between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (PST) during the winter solstice or spring or fall equinoxes,

or for four hours or more between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (PDT) during the summer solstice.

As indicated previously, the Project is a mixed-use development on an infill site within a transit priority area and, thus, qualifies for CEQA streamlining under SB 743, as codified under Public Resources Code Section 21099, whereby aesthetics impacts shall not be considered significant impacts on the environment. Therefore, although the impact categories listed above are addressed in the analysis, the aesthetic evaluation provided in this section is included only for informational purposes.[7]

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project have a substantial adverse effect on a scenic vista?

Impact AES-1 **THE PROJECT SITE IS NOT LOCATED IN AN AREA WITH VIEWS OF THE VERDUGO MOUNTAINS. ADDITIONALLY, THE PROJECT WOULD NOT INTERFERE WITH VIEWS OF THE SANTA MONICA MOUNTAINS TO THE SOUTHWEST. THE PROJECT SITE IS RELATIVELY FLAT AND DOES NOT PROVIDE VIEWS OF EITHER IDENTIFIED SCENIC VISTA.**

As identified in the Conservation and Open Space Element of the City's 2035 General Plan, scenic vistas in Burbank are limited to the Verdugo Mountains, which are located over a mile and half northeast of the Project site (City of Burbank 2013). The Verdugo Mountains to the east and Santa Monica Mountains to the southwest are visible from the Project site. As previously stated, this evaluation is provided for informational purposes only and no significance finding is required under CEQA pursuant to SB 743.

Views of the Verdugo Mountains

As shown in Figures 2-8a and 2-8b, Project Site Photographs, in Section 2, *Project Description*, the Verdugo Mountains are located to the east of the Project site. However, the Project site is not located in an area with views of the Verdugo Mountains. Additionally, as shown in Figure 2-6, Conceptual Site Rendering – East Elevation, in Section 2, *Project Description*, the Project would not interfere with established views to the northeast. For these reasons, development of the Project would not create an adverse impact with respect to public views of the Verdugo Mountains along the public rights-of-way bordering the Project site.

Views of the Santa Monica Mountains

As shown in Figure 2-8d Project Site Photograph, in Section 2, *Project Description*, the Santa Monica Mountains are visible to the southwest of the Project site. The Project site would not interfere with views of the Santa Monica Mountains to the southwest, which are over three miles with intervening development between. Additionally, as shown in Figure 2-7, Conceptual Site Rendering – North Elevation, in Section 2, *Project Description*, the Project would not interfere with established views to the southwest. For these reasons, development of the Project would not create an adverse impact

[7] The Project qualifies as a residential, mixed-use residential, or employment center project on an infill site within a transit priority area under SB 743 because: (1) the Project would include a mix of residential, commercial, office, hotel and entertainment uses, and the intensification of urban density in close proximity to transit; (2) the Project Site is an infill site surrounded on all sides by urban development; and (3) the Project Site is located in a transit priority area as it is located within 0.25 mile of the Regional Intermodal Transportation Center (RITC) and Burbank's Metrolink and AMTRAK stations, and adjacent to multiple existing bus lines that run along Third Street, Burbank Boulevard, and Magnolia Avenue.

with respect to views of the Santa Monica Mountains along the public rights-of-way bordering the Project site.

Mitigation Measures

Mitigation would not be required.

Threshold 2:	Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact AES-2 THE PROJECT SITE DOES NOT CONTAIN ANY SCENIC RESOURCES, NOR ARE THERE ANY EXISTING OR PROPOSED COUNTY OR STATE SCENIC HIGHWAYS LOCATED IN THE VICINITY OF THE PROJECT SITE.

The Project site does not contain any scenic resources, as identified in the City Open Space and Conservation Element (City of Burbank 2013). Existing vegetation on-site consists of ruderal vegetation and ornamental trees. The Project site does not contain rock outcroppings, or historic buildings on-site. The California Scenic Highway System and the County of Los Angeles Scenic Highways Element indicate that no existing or proposed County or State scenic highways are located in the vicinity of the Project site. The closest scenic highway is the 210 freeway, located over three miles north of the Project site (Caltrans 2011). Furthermore, and as previously stated, this evaluation is provided for informational purposes only and no significance finding is required under CEQA pursuant to SB 743.

Mitigation Measures

Mitigation would not be required.

Threshold 3:	Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Impact AES-3 PROJECT CONSTRUCTION ACTIVITIES AND OPERATION WOULD NOT SUBSTANTIALLY DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF THE PROJECT SITE OR ITS SURROUNDINGS.

The Project site would be cleared and excavated to accommodate new construction of a mixed-use Project that would include 573 residential units with 1,067 square feet of retail gallery space and 307 hotel rooms with ground floor and rooftop retail/restaurant uses in buildings ranging from one to 15 stories. Implementation of the proposed Project would represent a substantial change in the visual character of the site and fundamentally change the aesthetics of the site. However, the Project site has been dormant since 1991, aside from occasional use for storage, recreational entertainment (e.g., circus, equestrian shows, and etcetera) and as a filming location for the entertainment industry. The former Zero buildings were demolished with the building slabs left intact in 2004. The Project site currently contains mounds of soil and construction materials throughout the Project site as a result of its current use as a construction material storage site for the Caltrans during the I-5 project.

Construction Impacts

As described in Section 2, *Project Description*, depending on market the Project is expected to be completed in one complete phase over a period of approximately five years, with construction beginning in September 2019 and ending in September 2025. All construction activities would occur during daytime and would include the following: demolition; site preparation; grading; paving; and construction of new structures and infrastructure. Motorists traveling along Front Street, Burbank Boulevard, Magnolia Avenue, First Street, Grinnell Street, Third Street and North San Fernando Boulevard, and workers and residents in some of the development on the north side of Burbank Boulevard and the east side of Third Street would have some views of on-site construction activities over and between the construction fencing required for security, and these activities along with the construction fencing itself would alter the visual character of portions of the Project Site during construction. However, the demolished building pads, construction equipment, and truck traffic would be visible, although views of graded surfaces and stockpiled construction materials and soil would be largely obscured by the construction fencing. Also, construction activities and related visual impacts would be typical of other construction activities in the City, would not be constant over the entire construction period, and would be temporary. Furthermore, most construction activities would be internal to the Project site and not visible from the adjacent development and streets. Lastly, in accordance with City requirements, construction activities would be restricted to daytime hours. Therefore, Project construction activities would not substantially degrade the existing visual character or quality of the Project site or its surroundings. Furthermore, and as previously stated, this evaluation is provided for informational purposes only and no significance finding is required under CEQA pursuant to SB 743.

Operational Impacts

The Project would result in several visual changes at the Project site, including: (1) replacing of the remnant concrete pad from the former industrial use and mounds of dirt and construction materials from the I-5 corridor project with a new residential and commercial development that includes apartments and hotel; (2) increasing the height and mass of development on the Project site with new multistory residential and hotel buildings; (3) increasing the amount of open space on-site; (4) increasing the trees and landscaping on-site and within the fronting street ROWs; (5) replacing the existing Front Street frontage with a private tree-lined street and publicly accessible Community Plaza with hardscape and landscaping; (6) providing other open space areas including paseos and landscaped pedestrian plazas; and (7) providing sidewalk and bicycle lane improvements along Front Street.

As shown in Figure 2-8a of Section 2, *Project Description*, views to the northeast of the Project site consist of the I-5 freeway, Downtown Burbank and the Verdugo Mountains in the distance. As shown in Figure 2-8b, views to the north of the Project site are partially limited by the Burbank Boulevard. Views of the Verdugo Mountains are provided in the distance. As shown in Figure 2-8c, Views to the south of the Project site include the I-5 freeway, Downtown Burbank and the Downtown Burbank Metrolink Station. The Metrolink tracks run alongside North Front Street across from the Project site. As shown in 2-8d, the Project site is bordered by commercial and industrial businesses across North Front Street to the west and the Santa Monica Mountains in the distance.

The Project would not substantially degrade the existing visual character or quality of the Project site and its surroundings. Rather development of the Project would: provide buildings that step-down near the Project Site peripheries to better blend with the surrounding development; provide higher quality and more cohesive architecture; substantially increase trees, landscaping and open space that would complement the nature of the proposed development on-site while being compatible with nearby uses; and activate pedestrian activity and walkability within and adjacent to the Project Site. Furthermore: (1) the Downtown Burbank area has been planned to accommodate a variety of uses of various scales and intensities; (2) there are no single-family homes in the immediate Project area; (3) the infusion of residents would attract more residence- and neighborhood-serving businesses and amenities, benefitting the surrounding neighborhood; (4) the proposed seven and eight story building heights would be below the building heights permitted by both the BCP and the new PD; and (5) the existing uses on the Project site that would be replaced under the Project (e.g., vacant land with remnant building foundation) do not contain any visual or historic significance and do not contribute toward creating a valued visual character or image for the local neighborhood or greater community. All Project signage would also be reviewed and approved by the City and would be required to comply with the lighting performance standards formulated by the Lighting Study to avoid exceedance of applicable lighting standards (see PDF-1, below).

Based on the above, the Project would not substantially degrade the existing visual character or quality of the Project site and its surroundings. Furthermore, and as previously stated, this evaluation is provided for informational purposes only and no significance finding is required under CEQA pursuant to SB 743.

Project Consistency with Applicable City Aesthetics Policies and Requirements

The following provides an analysis of Project consistency with applicable City aesthetics-related plans, policies, and regulatory requirements.

General Policies and Requirements

BURBANK2035 GENERAL PLAN LAND USE DESIGNATION CONSISTENCY

The Burbank2035 General Plan land use designation of the Project site is Downtown Commercial where civic, shopping, dining, entertainment and residential are the predominant uses, and where the maximum permitted Floor Area Ratio (FAR) is 2.5:1 and the maximum permitted density is 87 du/ac (both allowable with discretionary approval). Per the BMC Section 10 1 19122, any land use may be permitted in any PD, provided such use shall be specifically listed as a permitted use in the Development Agreement for the PD. Subject to the City's approval of a PD for the Project site, it will be located in the City Center subarea of the BCP, which permits retail, restaurant, entertainment, cultural and residential uses. As proposed, the Project includes mixed use residential and hospitality uses (i.e., apartments and hotel rooms, with ancillary service commercial uses) that permitted by the land uses described above. Also, the Project would result in a site-wide FAR of 0.58 (excluding residential and parking garages per the Burbank2035 General Plan), and a site-wide density of 71 dwelling units per acre, which are within the maximums permitted by the Downtown Commercial land use designation. Based on all the aforementioned reasons, the Project would be consistent with the existing Burbank2035 General Plan land use designation of the Project site.

BUILDING HEIGHTS

The eight story maximum heights of the proposed buildings would be below currently permitted heights in the Burbank Center Plan (BCP). See EIR Section 4.9, *Land Use and Planning*, for further discussion.

PARKS AND OPEN SPACE

The Project would provide 27,800 sf of publicly accessible open space and 78,600 sf of residential open space (e.g., gyms, recreation rooms, pools, etc.). This open space would contribute to the high quality of life enjoyed by Burbank residents and the economic value of the community.

Furthermore, as indicated in Section 1, *Introduction*, the Project would meet City park and recreation facility requirements through the provision of the proposed publicly accessible open space and payment of in-lieu fees.

Specific Policies and Requirements

As indicated in, the Project would be largely consistent with applicable aesthetics and aesthetics-related policies and requirements including the Burbank2035 General Plan Open Space and Conservation Elements, the Burbank Center Plan, and the PD Zoning Design Review Criteria. A consistency analysis of the Project with the applicable goals and polices of the Burbank2035 General Plan as it related to aesthetics is provided in Table 4.8-2 in Section 4.8 *Land Use and Planning*.

Table 4.1-2 Project Consistency with Applicable Aesthetics and Aesthetics-Related Policies and Requirements

Goal/ Policy No.	Policy Text	Consistency Analysis
Burbank2035 General Plan – Open Space and Conservation Element		
Goal 2	Parks, open space and recreation facilities contribute to the high quality of life enjoyed by Burbank residents and the economic value of the community.	**Consistent** The Project would provide 27,800 sf of publicly accessible open space and 78,600 sf of residential open space (e.g., gyms, recreation rooms, pools, etc.). This open space would contribute to the high quality of life enjoyed by Burbank residents and the economic value of the community. Furthermore, as indicated in Section 1, *Introduction*, the Project would meet City park and recreation facility requirements through the provision of the proposed publicly accessible open space and payment of in-lieu fees.
Policy 2.3	Provide park and recreation facilities at a minimum level of 3 acres per 1,000 persons, with the goal of 5 acres per 1,000 persons.	
Burbank Center Plan		
Policy	Encourage increased intensity, massing and height adjacent to Interstate 5 in the City Center sub-area.	**Consistent** The Project would encourage increased intensity, massing and height adjacent to I-5 in the City Center subarea by developing a mixed-use development of up to eight stories in height. This would result in a net increase of up to 573 dwelling units and 1,067 sf of commercial development and a 307-room hotel totaling 212,350 square feet.
Policy	Encourage the construction of a gateway mid to high-rise mixed-use complex if a public amenity such as a public plaza were provided;	**Consistent** The Project would include a publicly accessible pedestrian Community Plaza, and enhanced sidewalk, protected bike lanes, enhanced crosswalks, and an elevator with staircase providing pedestrians and bicyclists with access from the Magnolia Bridge to Downtown Burbank, the Project site and the Downtown Burbank Metrolink Station, with the proposed amenities located along Front Street, such that the proposed mid-rise development would be consistent with this policy.

Goal/ Policy No.	Policy Text	Consistency Analysis
PD Zoning Design Review Criteria		
A	The design of the overall PD shall be comprehensive and shall embrace land, buildings, landscaping, and their interrelationships and shall be substantially consistent with the General Plan and any applicable Element of the General Plan.	**Consistent** The design of the overall PD would be comprehensive and embrace land, buildings, landscaping, and their interrelationships, through: (1) compliance with City's PD requirements; and (2) implementation of the comprehensive site plans, building plans, building elevations, landscape plans, open space plans, pedestrian and vehicular circulation plans, other plans, and development standards for the Project set forth in both EIR Section 2, *Project Description*, and in the Project Application and Plan Set for the Project on file at the City of Burbank Community Development Department. Furthermore, as indicated in the *Burbank2035 General Plan* land use and zoning consistency analysis in Section 4.8, *Land Use and Planning*, the Project would be consistent with the applicable *Burbank2035 General Plan* land use designation, zoning, and both the applicable *Burbank2035 General Plan* and City Center Plan land uses goals, objectives and policies, with approval of the proposed PD Amendment and Zone Map Amendment.
B	The PD shall provide for adequate permanent open areas, circulation, off-street parking, and pertinent pedestrian amenities. Building structures and facilities and accessory uses within the Planned Development shall be well integrated with each other and to the surrounding topographic and natural features of the area.	**Consistent** The proposed amended PD would provide for adequate permanent open space areas, circulation, off-street parking, and pertinent pedestrian amenities, as discussed in Section 2, *Project Description*. The proposed amended PD would also provide for buildings, structures, facilities and accessory uses that are well integrated with each other and their surrounding topographic and natural features by: (1) maintaining the existing grid-patterned public streets on and adjacent to the Project site; (2) providing sidewalk and pedestrian improvements, widened sidewalks along a segment of Front Street; (3) bicycle facilities; (4) wayfinding signage; (5) buildings that are stepped-back from surrounding streets to soften the massing appearance; and (6) landscaping, including enhanced street trees along the Project's street frontages. The Project would provide a transit-oriented mixed-use development in close proximity to Downtown Burbank and across from the Downtown Burbank Metrolink Station that would support the diverse needs of Burbank's residents, business and visitors. The Project would include residential, hotel and retail uses, and an open space area that would be available to the public. The amenities associated with the residential and hotel components of the Project would provide opportunities for employment, recreation, culture, entertainment, and socializing. Therefore, the proposed Project would be consistent with this policy.

Goal/ Policy No.	Policy Text	Consistency Analysis
C	The PD shall be compatible with existing and planned land use on adjoining properties.	**Consistent** See PD Zone Design Review Criteria B above for further discussion.
G	Compatibility of architectural design and appearance, including signage throughout the Planned Development, shall be sought. In addition, architectural harmony with surrounding neighborhoods shall be achieved so far as practicable.	**Consistent** Project architectural design and appearance, including signage throughout the PD, would undergo required City design review to ensure compatibility between on-site land uses and between on-site and adjacent off-site land uses.
Source: Rincon, March 2019		

Mitigation Measures

No mitigation measures are required.

Threshold 4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Impact AES-4 THE PROPOSED PROJECT WOULD INTRODUCE NEW SOURCES OF LIGHT AND GLARE TO THE PROJECT SITE. HOWEVER, ILLUMINATION RESULTING FROM THE PROPOSED PROJECT WOULD BE CONSISTENT WITH EXISTING LIGHT AND GLARE EMANATING FROM SURROUNDING LAND USES, INCLUDING COMMERCIAL AND RESIDENTIAL DEVELOPMENT IN DOWNTOWN BURBANK.

Site illumination serves multiple functions. It enhances visibility and safety along roadways and other public spaces for vehicles, bicyclists, and pedestrians. It can also serve to emphasize pathways, signage, focal points, gathering places, and building entrances. Implementation of the proposed Project would create new light sources from interior and exterior illumination associated with the residential, commercial, hotel and parking structure components of the development.

As discussed above under *Existing Conditions*, the Project site is in an urban, industrial and commercial area with existing sources of light and glare. Primary sources of light and glare are associated with vehicles traveling along I-5 and existing commercial and industrial buildings, including building mounted lighting.

The Project would incorporate exterior lighting in the form of pedestrian walkway lighting, building mounted lighting, and other safety related lighting including streetlamps along Front Street, in accordance with City requirements. These light sources would add to the existing lighting conditions in the Project area since the site is currently undeveloped. New sources of glare would include headlights from cars entering and leaving the site at night, as well as windows on cars and the proposed buildings, which could reflect sunlight during certain times of the day. Figures 2-4 through 2-7 in Section 2, *Project Description*, show renderings of the Project. As discussed in Section 2.5.8, *Project Description*, the Project includes Aesthetics PDF 1, which requires that the applicant submit a photometric lighting plan at the time of Plan Check review (prior to building permit issuance for each phase) that identifies all: exterior structure lighting; landscape and perimeter lighting; or rooftop lighting. This plan will ensure that there will be no spillover lighting or glare on adjacent streets or properties, to the satisfaction of the CDD Director. The Aesthetics PDF 1 will also ensure that the Project complies with Title 9, Chapter 1, of the BMC, and all other applicable State lighting regulations.

There are no residential properties immediately adjacent to Project site. The nearest single-family residential properties are located along Scott Road, approximately 0.2 mile to the northeast of the Project site, across the I-5 freeway. The nearest multi-family residential properties, including mixed-use development projects, are located approximately 0.2 mile southeast of the project site across the I-5 freeway. Additionally, single- family residential neighborhoods are located approximately 0.4 mile west of the Project site. The commercial buildings and warehouse/manufacturing spaces between Front Street and Victory Boulevard block direct views from these residences to the Project site. Therefore, based on the distance of the Project site to nearby residential properties, and intervening development, infrastructure and topography, the Project would not increase the intensity of light on surrounding residential properties. Furthermore, and as previously stated, this evaluation is provided for informational purposes only and no significance finding is required under CEQA pursuant to SB 743.

Illuminated Signs and Other Site Lighting

Moreover, the Project would not introduce any light features or cause glare that is not typical of a mixed-use development in a highly urbanized area, amid roadways (including the I-5 Freeway) with numerous sources of nighttime illumination that includes the public bridges, nearby Downtown Metrolink Station and the City's Municipal Power Plant located west of the railroad tracks and Front Street. The proposed Project would include design features that would reduce light trespass including, enclosed parking, landscaping, and awnings. The proposed Project includes materials such as awnings, wood paneling, balcony railings, cement plaster, perforated metal, green screens, street trees, planters, and landscaping, that would reduce glare. Furthermore, per the requirements of the BMC, outdoor lighting fixtures, located on the Project site, would be positioned and directed so as not to shine or cause glare onto adjacent properties or public rights-of-way. Free-standing lighting fixtures would be no taller than eight feet as measured from the abutting ground surface or floor level, and all lighting fixtures would be consistent with the architectural style of the building. The Project's lighting would include design features discussed above and also must comply with CALGreen lighting standards that limit off-site light spill by controlling light intensity and by shielding of light sources, the Project's ambient lighting would continue to blend with surrounding areas, and not create substantial contrast with overall urban lighting conditions.

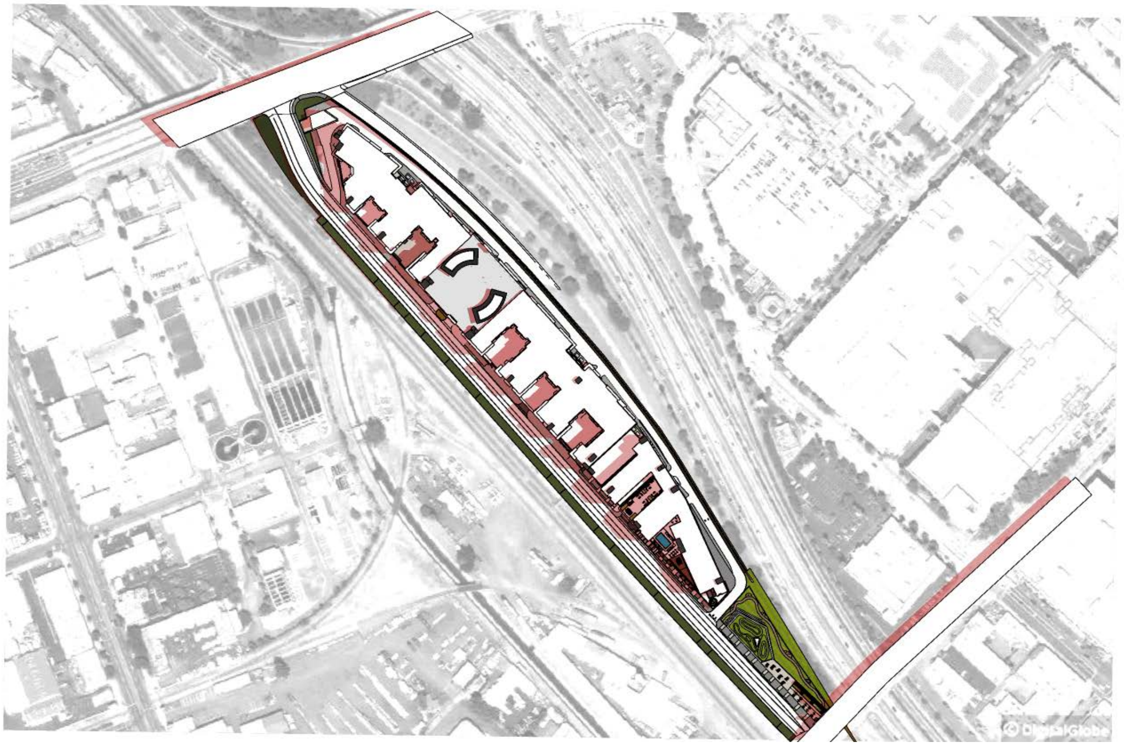
Based on the above and with implementation of Aesthetics PDF 1 Photometric Lighting Plan, the Project would not cause an adverse impact to any light sensitive uses such as residential properties.

Threshold 5:	Shade shade-sensitive uses for three hours or more between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (PST) during the winter solstice or spring or fall equinoxes, or for four hours or more between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (PDT) during the summer solstice.

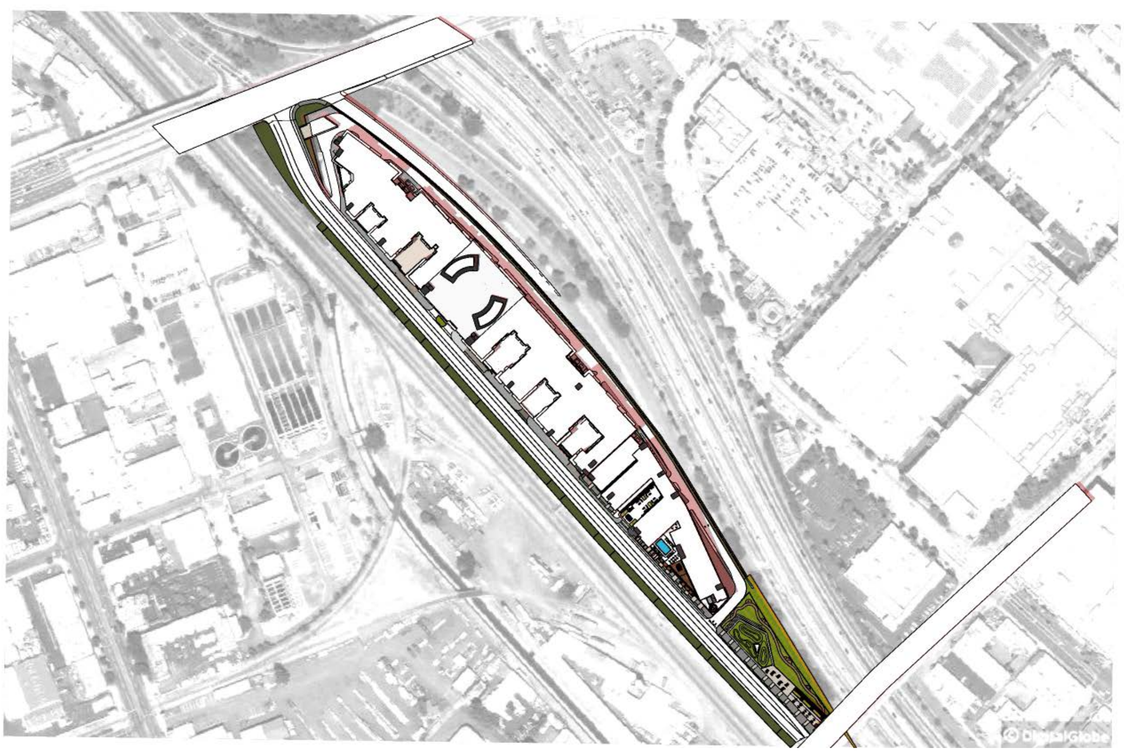
Impact AES-5 **THE BUILDING HEIGHTS UNDER THE PROPOSED PROJECT WOULD INTRODUCE NEW SOURCES OF SHADE AND SHADOWS ON THE PROJECT SITE. HOWEVER, THE SHADOWS WOULD NOT SUBSTANTIALLY INCREASE THE SHADING EXPERIENCED BY NEARBY SHADOW-SENSITIVE USES.**

The shade and shadows that would be created by the Project are also analyzed under Threshold 4. As such, a shadow analysis was performed to determine whether and how the Project would affect nearby shadow sensitive outdoor uses shown in Figures 4.1-2a-b, the full study is provided in Appendix B. Prolonged periods of shade and shadow can negatively affect the character of certain land uses. As established in the General Plan, a shadow analysis is required for new structures

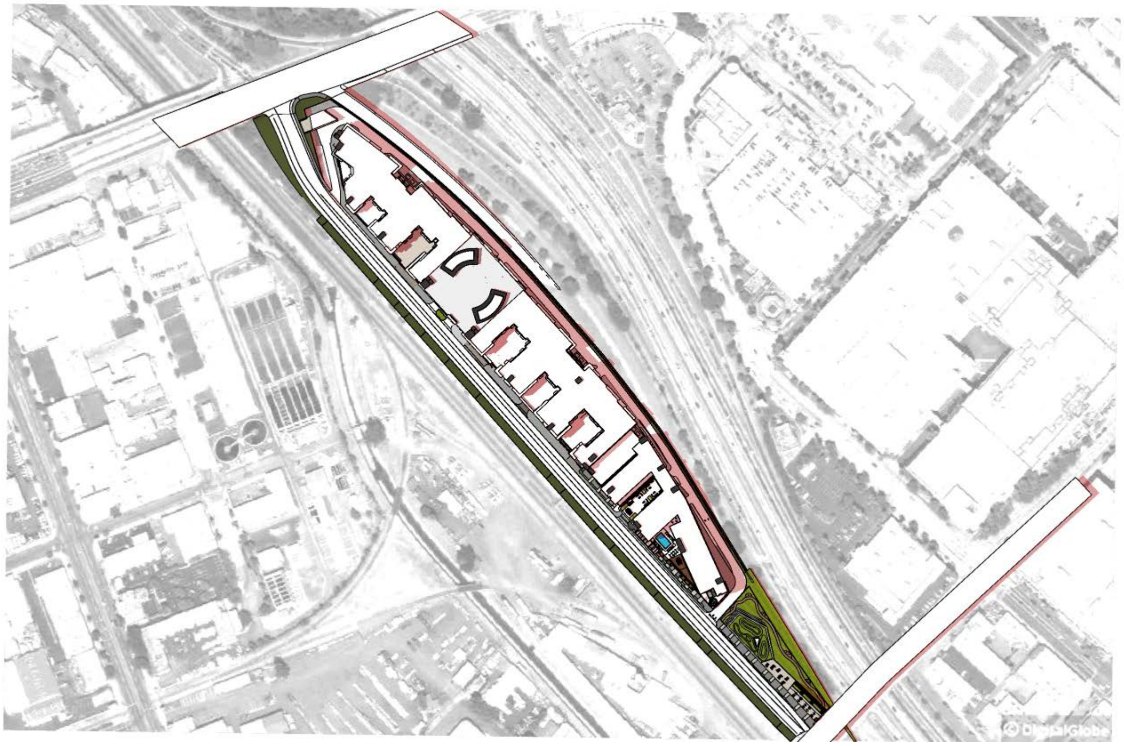
Figure 4.1-2a Shadow Study – Summer Solstice (June 21)



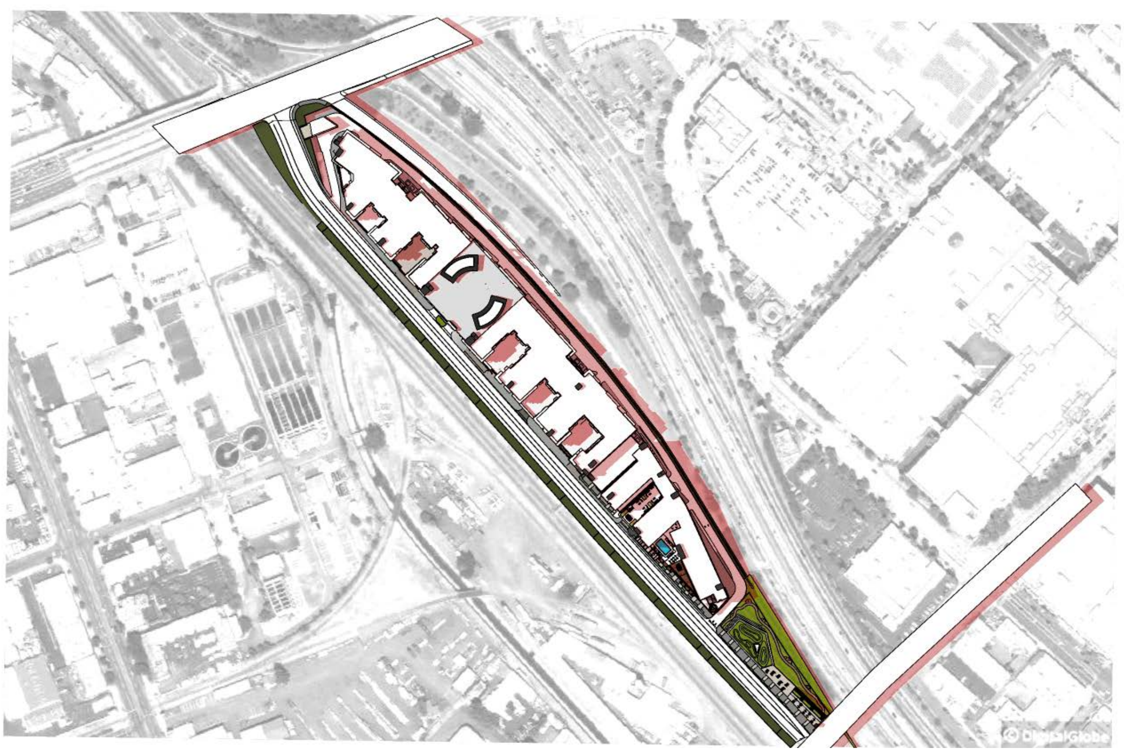
Summer Solstice: 9:00 AM



Summer Solstice: 1:00 PM



Summer Solstice 2:00 PM



Summer Solstice 3:00 PM

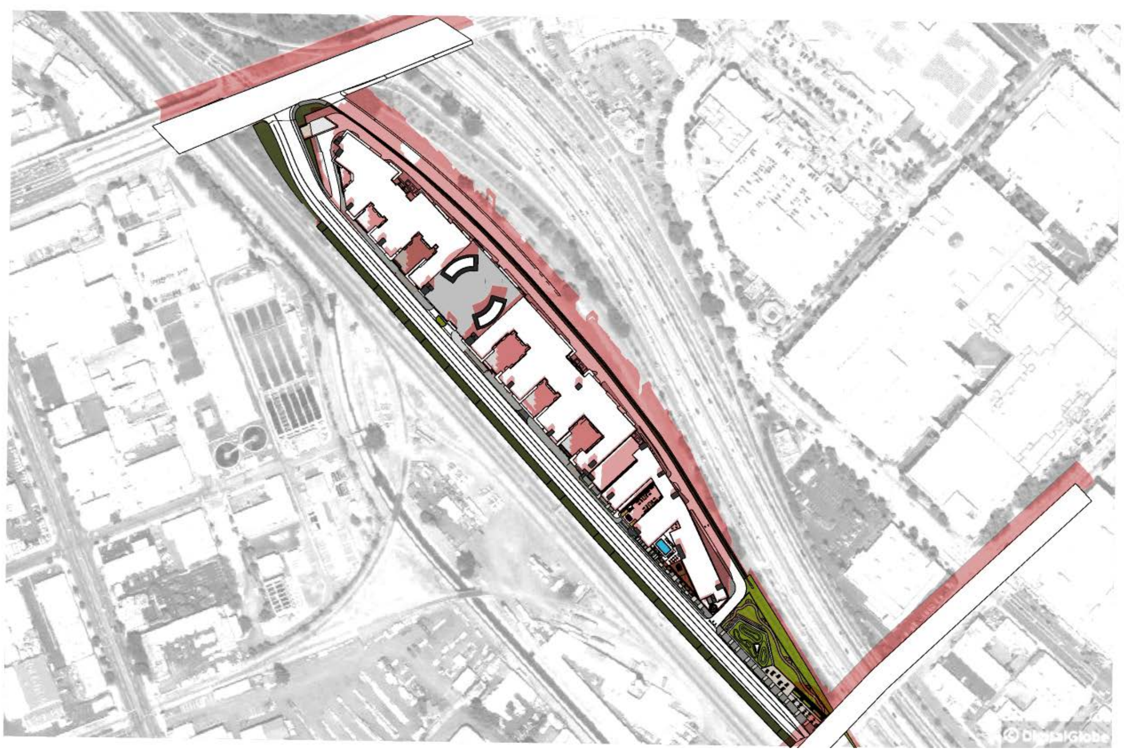
Summer Solstice 4:00 PM

Summer Solstice 5:00 PM

Source: SJ4 Burbank LLC, June 2018

Figure 4.1-2b Shadow Study – Winter Solstice (December 21)

Winter Solstice: 9:00 AM



Winter Solstice: 12:00 PM

Winter Solstice: 2:00 PM

Winter Solstice: 3:00 PM

Source: SJ4 Burbank LLC, June 2018.

proposed over 70 feet in height that would be adjacent to a shadow-sensitive public use such as, but not limited to, a park, pedestrian-oriented outdoor space, or restaurant with outdoor seating area. According to the General Plan, a significant impact would typically occur if a project shades sensitive uses for more than three hours between the hours of 9:00 AM and 3:00 PM Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 AM and 5:00 PM Pacific Daylight Time (between early April and late October) (City of Burbank 2013).

The Project site is bordered by commercial and industrial uses to the north, south and west and commercial uses associated with Downtown Burbank to the east, across the I-5 freeway. One existing shadow-sensitive use was identified within the shade and shadow envelope of the Project: an El Pollo Loco fast food restaurant with outdoor seating is located at 521 N 1st Street, across I-5 to the east of the southern end of the Project site.

The estimated summer solstice (June 21) shadows generated by the Project are illustrated on Figure 4.1-2a. During 9:00 AM to 12:00 PM, the Project's shadows would not be cast on adjacent properties to the west. Between the hours of approximately 1:00 PM to 5:00 PM, the Project's shadows would not extend beyond I-5, to the east of the Project site. Between the hours of approximately 2:00 PM and 5:00 PM, the Project would cast a shadow to the southeast on a small portion of the proposed public open space. Therefore, shadows would not be cast onto light-sensitive uses for a period greater than four hours between the hours of 9:00 AM and 5:00 PM during summer months.

The estimated winter solstice (December 21) shadows generated by the Project are illustrated on Figure 4.1-2b. From 9:00 AM to 12:00 AM, the Project would not cast shadows on adjacent properties to the west. From approximately 12:00 PM to 2:00 PM, the Project's shadows would begin to cross portions of I-5, to the east of the Project site. At some point between 2:00 PM and 3:00 PM, the proposed Project would begin to cast shadows onto the commercial property located at 401 N. 1st Street (Ashley HomeStore) and the El Pollo Loco fast food restaurant. The shadows would increase to eventually cover the outdoor seating area after 3:00 PM. However, prior to 3:00 PM, the overall duration of the shadows would be less than one hour between 9:00 AM and 3:00 PM. Therefore, shadows would not be cast onto light-sensitive uses for a period greater than three hours between the hours of 9:00 AM and 3:00 PM during the winter months. Furthermore, and as previously stated, this evaluation is provided for informational purposes only and no significance finding is required under CEQA pursuant to SB 743.

Project Design Feature

Aesthetics PDF 1 – Photometric Lighting Plan

The applicant will submit a photometric lighting plan at the time of Plan Check review (prior to building permit issuance for each phase) that identifies all: exterior structure lighting; landscape and perimeter lighting; or rooftop lighting. The photometric plan will ensure that there will be no spillover lighting or glare on adjacent streets or properties, to the satisfaction of the CDD Director.

All building-mounted lighting that will be directed onto the Project site shall be shielded so as not to illuminate adjacent public rights-of-way and/or freeway.

All projects shall comply with Title 9, Chapter 1, of the BMC, and the 2016 and latest edition of the California Building Code (CBC), California Residential Code, California Electrical Code, California

Mechanical Code, California Plumbing Code, California Green Building Standards and Building Energy Efficiency Standards. Beginning January 1, 2019 the new 2018 CBCs go into effect.

Mitigation Measures

Mitigation would not be required.

c. Cumulative Impacts

The planned and pending projects in the vicinity of the Project site, listed in Table 3-1 of this EIR, include 22 projects consisting of retail, restaurant, residential, office, industrial, hotel, school airport and transportation related land uses. Projects that are within the vicinity of the Project site include First Street Village Mixed-Use Project (Related Project No. 6), Premier at First Street Mixed-Use Project (Related Project No. 7), Burbank Town Center Redevelopment Project (Related Project No. 12), Olive Station Mixed-Use Project (Related Project No. 13), Burbank Common Project (Related Project No. 15) and the AC Hotel Project (Related Project No. 9).

It is noted that the Project, along with one or more of the above cumulative projects, are located with a Transit Priority Area (TPA) and qualify for CEQA streamlining under SB 473. Hence, per SB 743 aesthetic impacts of the Project and of those cumulative projects above located in a TPA, are not considered significant impacts on the environment. Hence, the following cumulative aesthetics analysis is provided for information disclosure purposes only.

Scenic Vistas

As indicated in the impact analysis for the Project above, the only scenic vistas of the Verdugo and Santa Monica Mountains are the only mountain ranges with potential views to the northeast and southwest, respectively from the Project site. Based the Project site location and existing land uses to the east and west of the Project site, the Project would have no impacts on location of the Project site buffered by existing commercial structures located east of the I-5 freeway and municipal facilities and commercial structures located east and southeast of the Project site as well as the amount of potential field of view obstruction of these mountains that are commonly available from elevated view points above the Project site from the north, south, east, and west oriented streets in the area.

Based on the above and because SB 743 states that the Projects aesthetics impacts (including scenic vistas impacts) shall not be considered significant impacts on the environment, the Project would not contribute considerably to cumulative scenic vistas impacts.

Scenic Resources

There are no scenic resources adjacent to the Project site as the subject site is bounded by two elevated bridges on the north and south and the I-5 Freeway to the east. Furthermore, to the west of the Project site is Front Street and beyond that the railroad right-of-way and municipal power plant with multistory vent pipes and appurtenances. There a no trees on the Project site and adjacent public right-of-way. However, as further indicated therein, the Project would result in a net increase in both on-site trees proposed within the ground floor open space plaza are with new street trees along Front Street. Also, the Project Site is not visible from a State scenic highway.

Because of this, and because per SB 743 the Projects aesthetics impacts (including scenic resources impacts) shall not be considered significant impacts on the environment, the Project's scenic resources impacts would not be substantial. Each of the four cumulative projects would similarly be expected to result in the removal of some trees, but like the Project, would be expected to replace street trees and comply with City landscape requirements. One or more of the related projects could also potentially impact other types of scenic resources (e.g., historic buildings, rock outcroppings, etc.), but like the Project would not contribute considerably to cumulative impacts on scenic resources. Hence, Project scenic resources impacts would not be cumulatively considerable.

Visual Character

As indicated under the impact for the Project above, while the Project would increase urban density, building heights, signage and lighting in portions of the Project site, the Project would not substantially degrade the existing visual character of the Project site and surrounding area for a variety of reasons. These include, but are not limited to: (1) the Project would include varied setbacks and articulation, residential balconies, and high quality exterior facade treatments; (2) the Project would include increased open space, trees and other landscaping (3) the Project would be largely consistent with applicable City aesthetics policies; (4) the Project would undergo City design review; (5) there are no single-family homes in the immediate Project vicinity; (6) there is already mid-rise development in the immediate vicinity (like the Collection Condominium Development and the approved 1st Street Village Mixed Use Project slated for construction in 2019); and (7) the Project site and surrounding properties are located in close proximity to Downtown Burbank. Furthermore, the Project would result in a site-wide FAR and building heights below that currently permitted by both the Downtown Commercial *Burbank2035 General Plan* land use designation of the Project site and the proposed PD zoning for the Project site.

Furthermore, future projects in Burbank will be required to adhere to specific development standards in the City's Zoning Ordinance and General Plan designed to protect and enhance the area's aesthetic and visual resources. Although cumulative development may, over time, alter the visual character of this part of Burbank, it would be subject to the same policies and regulations as the Project. Therefore, the Project would not have a cumulatively considerable contribution to visual character impacts.

Lastly, per SB 743, the aesthetic impacts of the Project, including its visual character impacts, shall not be considered significant impacts on the environment. Therefore, Project scenic resources impacts would not be cumulatively considerable.

Light and Glare

Light

As indicated under the impact analysis for the Project above, the Project would result in an increase in lighting at the Project site and in the immediately vicinity. However, with compliance with applicable requirements and the performance standards formulated in the Lighting Study, and per SB 743 that the Project's aesthetic impacts aesthetics impacts (including lighting impacts) shall not be considered significant impacts on the environment, the Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

As listed previously, there are six cumulative projects located in the immediate Project vicinity and could also potentially increase light and glare levels in the Project vicinity. However, the Project site and these cumulative projects are located in Downtown Burbank that is already moderately lit and bisected my major commercial corridors (e.g., Burbank Boulevard, Magnolia Avenue, etc.) that are already well lit by commercial, pedestrian and street lights. Specifically, Related Project Nos. 15 and 6, are located approximately 200 feet and 500 east of the Project site, respectively, to the east of I-

5. Due to the location and spacing between the Project and the aforementioned related projects, no cumulative impacts are anticipated to occur with respect to light. Based on the above, the Project would not contribute considerably to cumulative light impacts.

Glare

As indicated under the impact analysis for the Project above, two cumulative projects (e.g., Cumulative Project Nos. 15 and 6 are located in the immediate vicinity of the Project site and would thus have the potential to add to the glare impacts of the Project. However, as with the proposed Project, each of the related projects would be subject to City street tree requirements that would partially obstruct portions of the proposed buildings from view, would be subject to BMC Section 10-1-1153, which limits the proportion of building facades that can be in glass opposite residential uses, and would be subject to City design review. The Project would not result in substantial glare because, per SB 743, the aesthetics impacts of the Project (including glare impacts) shall not be considered significant impacts on the environment and because the Project and the cumulative projects would be subject to BMC Section 10-1-1153, which limits the proportion of building facades that can be in glass opposite residential uses, and would be subject to City design review. Thus, the Project would not contribute considerably to substantial cumulative glare.

Shade and Shadow

As indicated in the impact analysis for the Project above, the Project is bordered by commercial and industrial uses to the north, south and west and commercial uses associated with Downtown Burbank to the east, across the I-5. One existing shadow-sensitive use was identified within the shade and shadow envelope of the Project: an El Pollo Loco fast food restaurant with outdoor seating is located at 521 N 1st Street, across I-5 to the east of the southern end of the Project site. Furthermore, the Project would include a public open space plaza south of the multistory hotel structure. None of the other cumulative projects would have the potential to project shadows on the aforementioned open spaces.

Because of the direction that shadows project during the Winter and Summer solstices and Spring and Fall equinoxes (e.g., generally northeast and northwest at varying angles), only the Project would have the potential to shade these shade-sensitive open spaces and the instances of cast shade and shadows the would only roughly shade a small portion of the adjacent open space at its northeastern most corner for three hours from 2:00 pm to 5:00 pm during the summer solstice threshold. Based on the above and because per SB 743 the aesthetic impacts of the Project (including shading impacts) shall not be considered significant impacts on the environment, the Project would not contribute considerably to cumulative shade and shadow impacts.

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4.2 Air Quality

This section analyzes the effects of the Project on air quality. This section analyzes both temporary impacts relating to construction activity and possible long-term impacts associated with Project operation. The analysis herein is based partially on data from the *Transportation Impact Analysis for the 777 North Front Street Project* prepared by Fehr & Peers (F&P) dated March 2019 that is included as Appendix J of the EIR. Greenhouse gas and global climate change impacts are discussed in Section 4.5, *Greenhouse Gas Emissions.* The *777 North Front Street Project Health Risk Assessment (HRA)* prepared by Air Quality Dynamics dated June 2017, is included as Appendix C, and the Air Quality and Greenhouse Gas Emission Study prepared by Rincon is included as Appendix D.

4.2.1 Setting

a. Local Climate and Meteorology

The Project site is in the South Coast Air Basin (Basin or SCAB), which is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the San Diego County line to the south. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, as well as the San Gorgonio Pass area in Riverside County. The regional climate in the Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. Air quality in the Basin is primarily influenced by meteorology and a wide range of emissions sources, such as dense population centers, substantial vehicular traffic, and industry.

Air pollutant emissions in the Basin are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include sources such as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles and other modes of transportation, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment such as when high winds suspend fine dust particles.

b. Air Quality Regulation

The federal and State governments have established ambient air quality standards for the protection of public health. The United States Environmental Protection Agency (U.S. EPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (CARB) is the State equivalent under the California EPA. County-level Air Pollution Control Districts (APCDs) and Air Quality Management Districts (AQMDs) provide local management of air quality. The CARB has established air quality standards and is responsible for the control of mobile emission sources, while the local APCDs/AQMDs are responsible for enforcing standards and regulating stationary sources. The CARB has established 14 air basins statewide, including the SCAB.

The U.S. EPA has set primary national ambient air quality standards (NAAQS) for ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), PM_{10}, $PM_{2.5}$, and lead (Pb). Primary standards are those levels of air quality deemed necessary, with an adequate margin of safety, to protect public health. In addition, California has established health-based ambient air quality standards (CAAQS) for these and other pollutants, some of which are more stringent than the federal standards.

The South Coast Air Quality Management District (SCAQMD or District) is the designated air quality control agency for the Basin. The Basin is designated a nonattainment area for the federal and State one-hour and eight-hour ozone standards, the State PM_{10} standards, the federal 24-hour $PM_{2.5}$ standard, and the State and federal annual $PM_{2.5}$ standard. The Basin is in attainment of all other federal and State standards. Table 4.2-1 provides the federal and State ambient air quality standards.

Table 4.2-1 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standards	California Standard
Ozone	1-Hour	N/A[1]	0.09 ppm[2]
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	Annual	0.03 ppm	N/A
	24-Hour	0.14 ppm	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
PM_{10}	Annual	N/A	20 µg/m[3]
	24-Hour	150 µg/m	50 µg/m
$PM_{2.5}$	Annual	12 µg/m	12 µg/m
	24-Hour	35 µg/m	N/A
Lead	30-Day Average	N/A	1.5 µg/m
	3-Month Average	0.15 µg/m	N/A

[1] N/A: Not applicable because no standard is currently established for California
[2] ppm = parts per million
[3] µg/m = micrograms per cubic meter
Source: CARB 2016

Characteristics of ozone, CO, NO_2, and suspended particulate matter are described below.

Ozone

Ozone (O_3) is produced by a photochemical reaction (i.e., triggered by sunlight) between nitrogen oxides (NO_X) and reactive organic gases (ROG).[1] NO_X is formed during the combustion of fuels, while reactive organic gases are formed during combustion and evaporation of organic solvents. Because O_3 requires sunlight to form, it mostly occurs in substantial concentrations between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to O_3 include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide

CO is a local pollutant that is found in high concentrations only near the source. The major source of CO, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes. CO's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, CO reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity and impaired mental abilities.

Nitrogen Dioxide

Nitrogen dioxide (NO_2) is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. Nitrogen dioxide is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 ppm may occur. Nitrogen dioxide absorbs blue light and causes a reddish brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM_{10} and acid rain.

Suspended Particulates

PM_{10} is particulate matter measuring no more than 10 microns in diameter, while $PM_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates and sulfates. Both PM_{10} and $PM_{2.5}$ are by-products of fuel combustion and wind erosion of soil and unpaved roads, and are directly emitted into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and fine particulates ($PM_{2.5}$) can be very different. The small particulates generally come from windblown dust and dust kicked up from mobile sources. The fine particulates are generally associated with combustion processes, as well as being formed in the atmosphere as a secondary pollutant through chemical reactions. Fine

[1] Organic compound precursors of ozone are routinely described by a number of variations of three terms: hydrocarbons (HC), organic gases (OG), and organic compounds (OC). These terms are often modified by adjectives such as total, reactive, or volatile, and result in a rather confusing array of acronyms: HC, THC (total hydrocarbons), RHC (reactive hydrocarbons), TOG (total organic gases), ROG (reactive organic gases), TOC (total organic compounds), ROC (reactive organic compounds), and VOC (volatile organic compounds). While most of these differ in some significant way from a chemical perspective, two groups are important from an air quality perspective: non-photochemically reactive in the lower atmosphere, or photochemically reactive in the lower atmosphere (HC, RHC, ROG, ROC, and VOC). SCAQMD uses the term VOC to denote organic precursors.

particulate matter is more likely to penetrate deeply into the lungs and poses a health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

Air Quality Management Plan

Under State law, the SCAQMD is required to prepare a plan for air quality improvement for pollutants for which the District is in non-compliance. The SCAQMD updates the plan every three years. Each iteration of the SCAQMD's Air Quality Management Plan (AQMP) is an update of the previous plan and has a 20-year horizon. The 2016 AQMP, adopted on March 3, 2017, incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2012 AQMP, including the approval of the new federal 8-hour ozone standard of 0.070 ppm that was finalized in 2015.

The 2016 AQMP addresses several State and federal planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and updated meteorological air quality models (SCAQMD 2017). This Plan builds upon the approaches taken in the 2012 AQMP for the attainment of federal PM and ozone standards, and highlights the significant amount of reductions to be achieved. It emphasizes the need for interagency planning to identify additional strategies to achieve reductions within the timeframes allowed under the federal Clean Air Act, especially in the area of mobile sources. The 2016 AQMP also includes a discussion of emerging issues and opportunities, such as fugitive toxic particulate emissions, zero-emission mobile source control strategies, and the interacting dynamics among climate, energy, and air pollution. The Plan also includes attainment demonstrations of the new federal 8-hour ozone standard and vehicle miles travelled (VMT) emissions offsets, as per recent U.S. EPA requirements.

c. Current Ambient Air Quality

The SCAQMD operates a network of air quality monitoring stations throughout the Basin. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the California and federal standards. The monitoring station located closest to the Project site is the Los Angeles-North Main Street station approximately 9.5 miles southeast of the Project site. Table 4.2-2 indicates the number of days that each of the standards has been exceeded at that station.

As shown in Table 4.2-2, the eight-hour ozone concentration exceeded both State and federal standards on six days in 2015, four days in 2016, and 14 days in 2017. The ozone concentration exceeded State one-hour standards on two days in both 2015 and 2016, as well as six days in 2017. The $PM_{2.5}$ concentration exceeded standards on seven days in 2015, two days in 2016, and six days in 2017. No exceedances of federal standards for NO_2 or PM_{10} have occurred at the monitoring station in the last three years; however, the State PM_{10} standard was exceeded 30 times in 2015, 21 times in 2016, and 40 times in 2017.

Table 4.2-2 Ambient Air Quality at the Monitoring Station

Pollutant	2015	2016	2017
8 Hour Ozone (ppm), 8-Hr Maximum	0.074	0.078	0.086
Number of Days of State exceedances (>0.070)	6	4	14
Number of days of Federal exceedances (>0.070)	6	4	14
Ozone (ppm), Worst Hour	0.104	0.103	0.116
Number of days of State exceedances (>0.09 ppm)	2	2	6
Number of days of Federal exceedances (>0.124 ppm)	0	0	0
Nitrogen Dioxide (ppm) – Worst Hour	0.0791	0.0647	0.0806
Number of days of State exceedances (>0.18 ppm)	0	0	0
Number of days of Federal exceedances (0.10 ppm)	0	0	0
Particulate Matter 10 microns, $\mu g/m^3$, Worst 24 Hours	73.0	64.0	64.6
Number of days above Federal standard (>150 $\mu g/m^3$)	0	0	0
Number of days of State exceedances (>50 $\mu g/m^3$)	30	21	40
Particulate Matter <2.5 microns, $\mu g/m^3$, Worst 24 Hours	56.4	44.3	54.9
Number of days above Federal standard (>35 $\mu g/m^3$)	7	2	6

Source: CARB 2018
Note: As of March 15, 2019, 2018 data is not yet available.

d. Sensitive Receptors

Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with a margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, such as children under 14, the elderly over 65, persons engaged in strenuous work or exercise, and people with cardiovascular and chronic respiratory diseases. The majority of sensitive receptor locations are therefore schools, hospitals, and residences.

The Project site is primarily surrounded by industrial and commercial uses that are not considered sensitive receptors likely to be affected by air pollutant emissions associated with the Project. The nearest sensitive receptors are single family residences along Scott Road approximately 0.2 mile northeast of the Project site. The next closest receptors include Burbank High School approximately 0.3 mile northeast of the Project site, and the Hilton Burbank hotel approximately 0.4 mile southeast of the Project site. Additional residential uses are also located 0.4 mile west and 0.2 mile southeast of the project site, and multifamily residences located at 0.2 mile southeast of the Project site.

4.2.2 Impact Analysis

a. Methodology and Significance Thresholds

This air quality analysis conforms to the methodologies recommended in the SCAQMD's CEQA Air Quality Handbook (1993) as well as additional guidance published by SCAQMD. The handbook includes thresholds for emissions associated with both construction and operation of the Project.

Project construction would generate diesel emissions and dust. Construction equipment that would generate criteria air pollutants includes excavators, graders, cranes, dump trucks, and loaders. Some of this equipment would be used during grading activities as well as during building construction. It is assumed that all construction equipment used would be diesel-powered. The Project's construction and operational emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. CalEEMod uses project-specific information, including the Project's land uses, square footages for different uses (e.g., residential, hotel, parking, etc.), and location, to estimate a project's construction and operational emissions from new development. Construction emissions include emissions generated by construction equipment, such as backhoes and bulldozers operating on the Project site, as well as emissions generated by off-site vehicle trips associated with construction, such as hauling trips and worker travel to and from the Project site. Operational emissions include mobile source emissions (i.e., vehicle emissions), energy emissions (primarily natural gas combustion), and area source emissions (emissions generated by landscape maintenance equipment, consumer products, and architectural coatings).

Project emissions were modeled based on a 8.09-acre site with development of two mixed-use residential buildings with 573 residential units, a 1,537 space parking structure, 1,067 square feet (sf) of retail uses, a hotel with 307 rooms with a 1,800 sf high turn-over restaurant, café/bar, swimming pool, fitness center, and a 27,800 square-foot transit plaza. Construction of the Project is expected to take approximately 61 months (starting in the beginning of September 2019 and going through the end of September 2025), with full operation assumed to begin in 2026, the first full year after the end of construction. Construction would involve site preparation, grading, excavation, building construction, paving and architectural coating. Demolition was not included as a construction phase as the Project site is currently vacant and does not contain any existing development. However, the existing concrete pad covering the site would be removed and either ground up and used onsite where applicable or exported from the site. Based on applicant provided information, total grading of the Project site, including removal of the concrete pad, would result in approximately 90,000 cubic yards (cy) of cut soil that would be exported from the site.[2] Additionally, it was assumed that grading would occur over the entire Project site due to excavation activities required to construct the proposed subterranean parking.

Operational emissions were also estimated using CalEEMod. Operational emissions include mobile source emissions, energy emissions, and area source emissions. Mobile source emissions are generated by motor vehicle trips to and from the Project site associated with the Project's uses. Land use trip generation rates provided in the Institute of Transportation Engineers (ITE) Trip Generation 10th Edition Manual were used to estimate potential emissions from vehicle traffic at the Project site. Emissions attributed to energy use include natural gas consumption for space and

[2] Based on applicant provided information, it was assumed that the material would be hauled to the Kettleman Landfill, approximately 170 miles from the Project site.

water heating, as well as electricity. Area source emissions are generated by landscape maintenance equipment, consumer products, and architectural coating.

b. Regional Thresholds

To determine whether a project would have a significant impact to air quality, Appendix G of the CEQA Guidelines questions whether a project would:

1) Conflict with or obstruct implementation of the applicable air quality plan;
2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);
4) Expose sensitive receptors to substantial pollutant concentrations; and
5) Create objectionable odors affecting a substantial number of people.

The SCAQMD recommends the following quantitative regional significance thresholds for temporary construction activities and long-term project operation within the Basin:

Construction Thresholds	Operational Thresholds
75 pounds per day of ROG	55 pounds per day of ROG
100 pounds per day of NO_X	55 pounds per day of NO_X
550 pounds per day of CO	550 pounds per day of CO
150 pounds per day of SO_X	150 pounds per day of SO_X
150 pounds per day of PM_{10}	150 pounds per day of PM_{10}
55 pounds per day of $PM_{2.5}$	55 pounds per day of $PM_{2.5}$

c. Localized Significance Thresholds

In addition to regional thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the CEQA Air Quality Handbook. LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or State ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size, and distance to the sensitive receptor. However, LSTs only apply to emissions within a fixed stationary location, including idling emissions during both project construction and operation. LSTs have been developed for NO_X, CO, PM_{10}, and $PM_{2.5}$. LSTs are not applicable to mobile sources such as cars on a roadway (SCAQMD 2003). As such, LSTs for operational emissions do not apply to onsite development, as the majority of emissions would be generated by cars on the roadways.

LSTs have been developed for emissions in construction areas up to five acres in size. The SCAQMD provides lookup tables for Project sites that measure one, two, or five acres. The Project involves an 8.09-acre disturbance area. As it is unlikely that more than five acres of the site would be under construction on any given day, LSTs for a five-acre Project site were used to provide a more conservative estimate. Because the Project site is located in SRA 7, LSTs for construction in SRA 7 are shown in Table 4.2-3. LSTs are provided for receptors at a distance of 82 to 1,640 feet (at 25, 50, 100, 200, and 500 meters) from the Project site boundary. As discussed in the setting above, the closest sensitive receptors are single-family residences located approximately 900 feet (275 meters) northwest of the Project site. A receptor distance of 200 meters (656 feet) was used to provide a more conservative analysis.

Table 4.2-3 SCAQMD LSTs for Construction (SRA-7)

Pollutant	Allowable emissions from a 5-acre site in SRA-7 for a receptor 656 feet away
Gradual conversion of NO_X to NO_2	194
CO	4,119
PM_{10}	84
$PM_{2.5}$	28

Source: SCAQMD 2009

Construction Emissions Methodology

The California Emissions Estimator Model (CalEEMod version 2016.3.2) was used to estimate air pollutant emissions associated with Project construction. Construction activities associated with this development would result in temporary air quality impacts that may vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. Exhaust from internal combustion engines used by construction equipment and hauling trucks (dump trucks), vendor trucks (delivery trucks), and worker vehicles would result in emissions of NO_X, ROC, CO, SO_x, PM_{10}, and $PM_{2.5}$. The application of architectural coatings, such as exterior/interior paint and other finishes, would also produce ROC emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of SCAQMD's Rule 1113 (Architectural Coatings). The Project would also be required to comply with SCAQMD's Rule 403, which requires watering at least twice a day during active operations (e.g., demolition, construction, earth-moving activities, etc.) in order to reduce fugitive dust emissions (Fugitive Dust).

The Project includes developing two mixed-use buildings with 573 residential units and 1, 067 sf of retail gallery space, and one mid-rise hotel with 307 rooms and ground floor retail/restaurant uses. Construction of the Project is expected to occur over five years. The entire Project site would be graded and approximately 90,000 cy of soil would be exported from the Project site, as described in Section 2.5.5 of Section 2, *Project Description.*

Operational Emissions Methodology

CalEEMod was used to estimate air pollutant emissions from mobile sources associated with the Project. CalEEMod default data, including temperature, trip characteristics, variable start information, emission factors, and trip distances, were used for the model inputs. The estimate of vehicle trips associated with the Project is from the *Transportation Impact Analysis* prepared by F&P (Appendix J; also refer to Section 4.12, *Transportation and Traffic*).

CalEEMod was also used to estimate emissions from the Project area sources that include space and water heating, gasoline-powered landscape maintenance equipment, consumer products, and architectural coatings for building maintenance. Emissions for the 573-unit apartment buildings and the 307-unit mid-rise hotel were based on CalEEMod defaults.

d. Regulatory Requirements and Project Design Features

The Project would comply with all applicable regulatory standards. In particular, the Project would comply with the most current CALGreen Code, in addition to SCAQMD Rules 403 and 1113, and all other applicable provisions of the SCAQMD. Rules 403 and 1113 were added as mitigation in CalEEMod, as discussed below. CALGreen standards include indoor water usage reduction, regulation of outdoor water usage, and construction waste reduction.

The grading phase involves the greatest amount of heavy equipment and the greatest generation of fugitive dust. For the purposes of construction emissions modeling, it was assumed that the project would comply with the SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites located within the Basin. Therefore, the following conditions that would be required to reduce fugitive dust in compliance with SCAQMD Rule 403, were included in CalEEMod for the site preparation and grading phases of construction.

1. **Minimization of Disturbance.** Construction contractors should minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.
2. **Soil Treatment.** Construction contractors should treat all graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved onsite roadways to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary, and at least twice daily, preferably in the late morning and after work is done for the day.
3. **Soil Stabilization.** Construction contractors should monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials, shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.
4. **No Grading During High Winds.** Construction contractors should stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).
5. **Street Sweeping.** Construction contractors should sweep all onsite driveways and adjacent streets and roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

The architectural coating phase involves the greatest release of ROG. The emissions modeling for the proposed Project also includes the use of low-VOC paint (50 grams per liter (g/L) for non-flat coatings) as required by SCAQMD Rule 1113.

In addition, the following project design features (PDF) are proposed with regard to air quality emissions:

Air Quality PDF 1 – CAL Green Building Standards Code

The Project shall incorporate the requirements of the CAL Green Building Standards Code. The Project shall be provided with minimum Tier 1 or LEED Gold certification. The Green Building Plan shall be submitted to the Chief Building Official for review.

Air Quality PDF 2 – Energy Star Appliances

Developer shall install Energy Star or equivalent appliances or equivalent energy-efficient appliance models in new residential units, which shall include a standard-size refrigerator in each unit. Installation of Energy Star or equivalent appliances shall be demonstrated to the satisfaction of the CDD Director prior to issuance of certificate of occupancy.

Air Quality PDF 3 – Air Quality Control Measures

1. Prior to issuance of any building permits for any phase, the Developer shall incorporate the following as project design features in each phase of the project:
    a. Prior to any building permit (for each phase), the Developer shall install, operate, and maintain an HVAC system that utilizes high-efficiency filters with Minimum Efficiency Reporting Value (MERV) 15 minimum or higher for the residential units.
        i. Developer may prepare and submit an air quality engineering study (for a unit-by-unit analysis) related to the MERV filtration system(s) that must be incorporated into the Project. Individual units may be provided a MERV 13, MERV 14 or MERV 15 (but not less than MERV 13) filtration system depending on the recommendations of the air quality study (i.e., depending on proximity to freeway and exposure levels); developer shall pay for 3rd party air quality expert to review submitted air quality engineering study
        ii. If the Developer elects to not prepare and submit an air quality engineering study (for a unit-by-unit analysis), then a minimum of MERV 15 shall be required for every residential unit in each building/phase.
        iii. HVAC systems with the specified MERV filter ratings are required elements of the Project design, and must be incorporated at the time of original construction.
    b. Locate the air intakes for the residential units as far from the freeway as practicable. Precise location will be ascertained and reviewed during Plan Check prior to issuance of any building permit for each phase.
    c. Provide a written notice to all new residents and tenants that disclose the potential risk from living in close proximity to a freeway, and that opening unit windows may reduce the effectiveness of the air filtration system and increases their individual exposure.
    d. Plant vegetation between residential receptors and the freeway (e.g., rear yard setback areas for each phase).

2. Prior to the issuance of any Grading Permit, the City Engineer and the Chief Building Official shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce the short-term fugitive dust impacts on nearby sensitive receptors.

a. Prohibit truck idling in excess of five minutes, on-site and off-site;
b. All active portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the Project site to prevent excessive amounts of dust;
c. Pave or apply water every three hours during daily construction activities or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering shall occur if dust is observed migrating from the site during site disturbance;
d. Any on-site stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied;
e. All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour;
f. Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area;
g. Gravel bed trackout aprons (3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) shall be installed to reduce mud/dirt trackout from unpaved truck exit routes;
h. On-site and unpaved-road vehicle speed shall be limited to 15 miles per hour;
i. All on-site roads shall be paved as soon as feasible, watered twice daily, or chemically stabilized;
j. Visible dust beyond the property line which emanates from the Project shall be prevented to the maximum extent feasible;
k. All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site;
l. Reroute construction trucks away from congested streets or sensitive receptor areas;
m. Track-out devices shall be used at all construction site access points;
n. All delivery truck tires shall be watered down and/or scraped down prior to departing the job site;
o. Sweep streets at the end of the day with SCAQMD Rule 1186 and 1186.1 compliant sweepers if visible soil is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water);
p. Re-route construction trucks away from congested streets or sensitive receptor areas;
q. The Project proponent shall survey and document the proposed Project's construction areas and identify all construction areas that are served by electricity. Onsite electricity, rather than temporary power generators, shall be used in all construction areas that are demonstrated to be served by electricity.

e. Local Regulations

The City of Burbank 2035 General Plan Air Quality and Climate Change Element contains the following goals and related policies specific to air quality:

Goal 1: **Reduction of Air Pollution**

Policy 1.1. Coordinate air quality planning efforts with local, regional, state, and federal agencies, and evaluate the air quality effects of proposed plans and development projects.

Policy 1.2. Seek to attain or exceed the more stringent of federal or state ambient air quality standards for each criteria air pollutant.

Policy 1.3. Continue to participate in the Cities for Climate Protection Program, South Coast Air Quality Management District's (SCAQMD's) Flag Program, SCAQMD's Transportation Programs (i.e., Rule 2202, Employee Rideshare Program), and applicable state and federal air quality and climate change programs.

Policy 1.4. Cooperate with the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (ARB), and the SCAQMD to measure air quality at emission sources (including transportation corridors), and enforce the provisions of the Clean Air Act, as well as state and regional policies and established standards for air quality.

Policy 1.5. Require projects that generate potentially significant levels of air pollutants, such as landfill operations or large construction projects, to incorporate best available air quality and greenhouse gas mitigation in project design.

Policy 1.6. Require measures to control air pollutant emissions at construction sites and during soil- disturbing or dust-generating activities (i.e., tilling, landscaping) for projects requiring such activities.

Policy 1.9. Encourage the use of zero-emission vehicles, low emission vehicles, bicycles, non-motorized vehicles, and car-sharing programs. Consider requiring sufficient convenient infrastructure and parking facilities in residential developments and employment centers to accommodate these vehicles.

Policy 1.12. Provide public information describing air quality standards, health effects, and efforts that residents and businesses can make to improve regional air quality. Encourage businesses and residents to participate in SCAQMD's public education programs.

Goal 2. Sensitive Receptors

Policy 2.2. Separate sensitive uses such as residences, schools, parks, and day care facilities from sources of air pollution and toxic chemicals. Provide proper site planning and design features to buffer and protect when physical separation of these uses is not feasible.

Policy 2.3. Require businesses that cause air pollution to provide pollution control measures.

Policy 2.4. Reduce the effects of air pollution, poor ambient air quality, and urban heat island effect with increased tree planting in public and private spaces.

Policy 2.5. Require the use of recommendations from the California Air Resources Board's Air Quality and Land Use Handbook to guide decisions regarding location of sensitive land uses.

Threshold 1:	Would the project conflict with or obstruct implementation of the applicable air quality plan?

Impact AQ-1 **THE PROPOSED PROJECT WOULD INTRODUCE ADDITIONAL HOUSING TO THE AREA AND CONTRIBUTE TO POPULATION GROWTH. HOWEVER, GROWTH WOULD BE CONSISTENT WITH THE GROWTH ASSUMPTIONS IN THE AIR QUALITY MANAGEMENT PLAN. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.**

A project may be inconsistent with the AQMP if it would generate a considerable increase in regional air quality violations and affect the region's attainment of air quality standards, or if it would generate population, housing, or employment growth exceeding forecasts used in the development of the AQMP. The 2016 AQMP incorporates local city general plans and the Southern California Association of Government's (SCAG) 2016 RTP socioeconomic forecast projections of regional population, housing and employment growth.

The proposed Project involves the construction of a mixed-use residential development which would cause a direct increase in the City's population. The proposed Project would also involve development of a hotel, which would not directly increase the City's population as the purpose of this facility is to temporarily house visitors and would not generate permanent residents. However, operation of the hotel would require hiring employees. Although staff would likely come from the existing labor force, it is possible that all staff members would be newly generated employees, which would contribute to the City's regional employment growth. According to data provided to the City by the California Department of Finance (DOF), the current population of the city is 107,149, and the average household size is 2.5 persons (DOF 2018). In result, development of 573 residential units would generate approximately 1,433 new residents (573 dwelling units x 2.5 residents/dwelling unit). According to the SCAG Employment Density Study Summary, hotels in Los Angeles County have an average of 51.91 employees per acre of floor area and commercial developments have an average of one employee per 424 square feet of floor area (SCAG 2001). Based on these averages, the hotel would generate about 244 employees and the gallery would generate about three employees. The total estimated number of employees associated with the proposed Project is therefore 247. It is assumed that not all employees would become new residents of Burbank (they may, for example, already live in the City or live outside of the City after they are hired). According to SCAG's 2016 RTP/SCS, the City's population is forecasted to increase to approximately 118,700 by 2040, which is an increase of 13,667 persons from the current population (SCAG 2016). The addition of 1,433 residents in the Project area would constitute about 11 percent of the City's total projected population growth. For employment within the City, SCAG's 2017 Local Profiles Report for the City of Burbank estimated the City's total jobs to be 112,656 in 2015, and estimates an increase to 145,000 jobs in 2040 in their 2016 RTP/SCS forecasts. Thus, employment is expected to increase by approximately 29 percent (32,344 employees) between 2015 and 2040 (SCAG 2017). The possible addition of 247 new employees would comprise approximately one percent of this increase. Therefore, employment growth generated by the proposed Project would be within the SCAG 2016 employment growth forecasts. Because the proposed Project would not directly generate substantial population growth, and possible employment growth would be within SCAG regional growth projections, the proposed Project would not conflict with the AQMP.

Mitigation Measures

No mitigation measures would be required.

Threshold 2:	Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Impact AQ-2 **CONSTRUCTION OF THE PROPOSED PROJECT WOULD RESULT IN TEMPORARY GENERATION OF AIR POLLUTANTS, WHICH WOULD AFFECT LOCAL AIR QUALITY. SHORT-TERM EMISSIONS, INCLUDING CO, PM_{10}, $PM_{2.5}$, AND ROG WOULD NOT EXCEED SCAQMD REGIONAL OR LST THRESHOLDS. NO_X WOULD EXCEED THE SCAQMD THRESHOLD WITHOUT PROPER MITIGATION. THEREFORE, THIS IMPACT IS LESS THAN SIGNIFICANT WITH IMPLEMENTATION OF THE PROPOSED MITIGATION MEASURE.**

Construction emissions are generally referred to as temporary impacts of a project, but have the potential to represent a significant impact with respect to air quality. Fugitive dust emissions are among the pollutants of greatest concern with respect to construction activities. These emissions from construction activities can lead to adverse health effects and nuisance concerns, such as reduced visibility and soiling of exposed surfaces. General site grading operations are the primary sources of fugitive dust emissions. However, these emissions can vary greatly, depending on the level of activity, the specific operations taking place, the number and types of equipment operated, vehicle speeds, local soil conditions, weather conditions, and the amount of earth disturbance from site grading and excavation.

Emissions of ozone precursors NO_X and ROG are primarily generated by the operation of off-road construction equipment and mobile sources such as delivery vehicles and construction worker vehicles. Generation of these emissions vary as a function of the types and number of heavy-duty, off-road equipment used and the intensity and frequency of their operation, as well as vehicle trips per day associated with delivery of construction materials, the export of soil, vendor trips, and worker commute trips.

Based on the CalEEMod results for the proposed Project, Table 4.2-4 summarizes the estimated maximum daily emissions of pollutants during the construction period with compliance with of the requirements described above for Rules 403 and 1113, but without any additional mitigation.

Table 4.2-4 Estimated Construction Emissions

Construction Year	Maximum Emissions[1] (lbs/day)				
	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
2019 Maximum	1.0	19.1	23.8	9.3	5.5
2020 Maximum	5.4	129.2	55.4	13.8	5.4
2021 Maximum	5.0	36.5	52.3	11.0	3.7
2022 Maximum	4.8	35.3	49.7	11.0	3.7
2023 Maximum	13.8	32.3	53.7	12.9	4.2
2024 Maximum	13.6	32.0	51.5	12.9	4.2
2025 Maximum	14.0	43.0	67.1	13.6	4.9
Maximum	**14.0**	**129.2**	**67.1**	**13.6**	**5.5**
SCAQMD Regional Thresholds	75	100	550	150	55
Threshold Exceeded?	**No**	**Yes**	**No**	**No**	**No**
Maximum Onsite	**8.7**	**19.1**	**23.0**	**9.1**	**5.4**
SCAQMD LSTs Thresholds[2]	N/A	194	4,119	84	28
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**

Notes: All calculations were made using CalEEMod. See Appendix D for calculations. Site Preparation, Grading, Paving, Building Construction, and Architectural Coating totals include worker trips, soil export hauling trips, construction vehicle emissions and fugitive dust. Emission data is pulled from “mitigated” results that include compliance with regulations and project design features that will be included in the Project.

[1] Grading phases incorporate anticipated emissions reductions, which are required by SCAQMD Rule 403 to reduce fugitive dust. The architectural coating phases incorporate anticipated emissions reductions, which are required by Rule 1113.

[2] LSTs are for a 5-acre project in SRA-7 within a distance of 200 feet from the site boundary.

As shown above, emissions of CO, PM_{10}, $PM_{2.5}$, and ROG would not exceed SCAQMD regional or LST thresholds, assuming adherence to the conditions listed above required by SCAQMD Rule 403 and SCAQMD Rule 1113. However, maximum daily NO_x emissions generated during Project construction would be approximately 129 lbs/day during construction in 2020, which would exceed SCAQMD thresholds. Therefore, mitigation would be required to reduce maximum daily NO_x emissions to below threshold levels.

Mitigation Measure

Temporary impacts associated with construction-related NO_X emissions would be reduced through implementation of the following mitigation measure.

AQ-2 High Efficiency Truck Engines

All haul trucks used during construction shall have engine model years between 2010 and 2018 to ensure that all truck engines have higher average total fuel efficiency.

Significance After Mitigation

Mitigation Measure AQ-2 requires the use of hauling trucks with engines having higher average total fuel efficiency. Using engine emission factors provided on the CARB EMFAC Web Database, use of recent engine models would result in fewer emissions per mile traveled when transporting exported soil, therefore yielding lower daily NO_X emissions. Using heavy duty truck engines with model years 2010 through 2018 would reduce maximum daily NO_X emissions associated with hauling by approximately 56.8 lbs/day during the worst day from 114.3 lbs/day to 57.5 lbs/day, based on the calculation included in Appendix D. The combined maximum daily construction emissions on the worst day for offsite emissions sources, including hauling, and onsite sources would be 72.4 lbs/day of NO_X, which would be below the threshold of 100 lbs/day of $NO_{X.}$ Because implementation of Mitigation Measure AQ-2 would reduce NO_x emissions to be below SCAQMD thresholds, residual impacts would be less than significant.

Threshold 2:	Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Impact AQ-3 OPERATIONAL EMISSIONS WOULD NOT EXCEED SCAQMD'S DAILY SIGNIFICANT THRESHOLDS. THEREFORE, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Long-term operational emissions associated with the Project are those attributed to vehicle trips (mobile emissions), the use of natural gas and electricity (energy source emissions), and consumer products, architectural coatings, and landscape maintenance equipment (area source emissions). CalEEMod was used to calculate emissions based on the proposed land uses for the Project site and the number of trips generated.

Table 4.2-5 summarizes the Project's operational emissions. The majority of Project-related operational emissions would be due to vehicle trips to and from the Project site.

Table 4.2-5 Estimated Operational Emissions

	Estimated Emissions (lbs/day)					
Emissions Source	**ROG**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area	20.4	0.5	47.4	<0.1	0.3	0.3
Energy	0.3	3.1	1.9	<0.1	0.2	0.2
Mobile	8.3	38.5	102.9	0.4	40.7	11.1
Project Total	29.1	42.1	152.2	0.4	41.2	11.6
SCAQMD Thresholds	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

See Appendix D for CalEEMod computer model output. Note: Numbers may not add due to rounding.

As shown in the Table 4.2-5, Project-generated emissions would not exceed SCAQMD recommended thresholds for ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$. Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Threshold 3:	Would the project result in a cumulatively considerable net increase of criteria pollutant for which the project region is non-attainment under applicable federal or State ambient air quality standard (including releasing emissions which exceed qualitative thresholds for ozone precursors)?

Impact AQ-4 THE PROPOSED PROJECT WOULD NOT DEGRADE SERVICE LEVELS AT STUDY AREA INTERSECTIONS SUCH THAT CARBON MONOXIDE (CO) HOTSPOTS WOULD BE CREATED. IMPACTS RELATED TO CO HOTSPOTS WOULD BE LESS THAN SIGNIFICANT.

A detailed CO analysis was conducted during the preparation of SCAQMD's 2003 AQMP. The locations selected for microscale modeling in the 2003 AQMP included high average daily traffic (ADT) intersections in the Basin, those which would be expected to experience the highest CO concentrations. The highest CO concentration observed was at the intersection of Wilshire Boulevard and Veteran Avenue on the west side of Los Angeles near the I-405 Freeway. The concentration of CO at this intersection was 4.6 ppm, which is well below the 35-ppm 1hr CO federal standard. The Wilshire Boulevard/Veteran Avenue intersection has an ADT of approximately 100,000 vehicles per day.

According to traffic volumes in the *Transportation Impact Analysis* prepared by F&P for the closest intersection to the Project site, the daily traffic count for the Front Street/Burbank Boulevard intersection is approximately 51,180 vehicles. The Project would add approximately 3,460 daily trips to this intersection, resulting in approximately54,640 daily vehicles (F&P 2019). Furthermore, due to stricter vehicle emissions standards in newer cars and new technology that increases fuel economy, CO emission factors under future land use conditions would be substantially lower than those under existing conditions. Thus, even though there would be more vehicle trips under the Project than under existing conditions, Project-generated local mobile-source CO emissions would not result in or substantially contribute to concentrations that exceed the one-hour or eight-hour ambient air quality standards for CO.

In addition, the Bay Area Air Quality Management District (BAAQMD) has established a screening threshold. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2017). The trips generated by the Project would be well below the threshold and would not cause the intersection to host 100,000 vehicles per day. Localized air quality impacts related to CO hot spots would therefore be less than significant.

Mitigation Measures

No mitigation measures would be required.

Threshold 4:	Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-5 THE PROJECT WOULD NOT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS ASSOCIATED WITH CONSTRUCTION DUST OR TOXIC AIR CONTAMINANTS. IMPACTS RELATED TO THESE LOCATED POLLUTANTS WOULD BE LESS THAN SIGNIFICANT.

Construction Dust

As described under Impact AQ-2, Project construction emissions would not exceed SCAQMD or LST daily thresholds, with implementation of the proposed mitigation measure. The nearest existing sensitive receptors to the area proposed for construction include single-family residences approximately 0.2 mile northwest of the Project site along Scott Road, Burbank high school approximately 0.3 mile northeast of the Project site, and the Hilton Burbank hotel approximately 0.4 mile southeast of the Project site, as discussed under Sensitive Receptors in Section 4.2.1, *Setting*.

As shown in Impact AQ-2, the highest daily PM_{10} emissions associated with Project construction would not exceed the SCAQMD's threshold of 150 pounds per day or the SCAQMD's LST threshold of 84 pounds per day. Likewise, the highest daily $PM_{2.5}$ emissions associated with Project construction would not exceed the SCAQMD's threshold of 55 pounds per day or the SCAQMD's LST threshold of 28 pounds per day This estimate for PM_{10} emissions included the following assumptions, compliant with the SCAQMD Rule 403, during site preparation and grading phases of construction (as shown in Section 4.2.2, *Impact Analysis*):

1. **Minimization of Disturbance.** Construction contractors should minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.
2. **Soil Treatment.** Construction contractors should treat all graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved onsite roadways to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary, and at least twice daily, preferably in the late morning and after work is done for the day.
3. **Soil Stabilization.** Construction contractors should monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials, shall be

applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.

4. **No Grading During High Winds.** Construction contractors should stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).
5. **Street Sweeping.** Construction contractors should sweep all onsite driveways and adjacent streets and roads at least once per day, preferably

Therefore, the Project would have a less than significant impact on sensitive receptors.

Toxic Air Contaminants (TACs)

The greatest potential for toxic air contaminants (TAC) emissions during construction would be from diesel particulate emissions associated with heavy equipment operations. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person continuously exposed to concentrations of TACs over a 70-year lifetime will contract cancer based on the use of standard risk assessment methodology. Given the short-term construction schedule of approximately 30 months, the Project would not result in a long-term (i.e., 70-year) source of TAC emissions. No residual emissions and corresponding individual cancer risk are anticipated after construction. Because there is such a short-term exposure period (54 out of 840 months), construction TAC emissions would result in a less-than-significant impact.

In *California Building Industry Association v Bay Area Air Quality Management District*, the California Supreme Court held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of a project (S213478, December 17, 2015). An exception to this general rule is a project that may exacerbate a condition in the existing environment. For such a situation, the lead agency is required to analyze the impact of that exacerbated condition on future residents and users of a project as well as other impacted individuals or resources. For example, a development project could exacerbate hazards relating to wildfire by providing additional fuel and ignition sources, resulting in potential impacts to future residents of the project, existing residents, or resources. Thus, the significance determination with respect to toxic air contaminants focuses on whether the Project would exacerbate environmental conditions in a manner that would increase the potential to expose people or resources to environmental impacts. Because the Project is a mixed-use residential and retail development, Project operation would not generate toxic air contaminants, nor would the Project substantially increase diesel particulates in the area because it would not attract substantial diesel traffic to the Project site, like an industrial warehouse or rest area would. Furthermore, as indicated in Impact AQ-2, emissions of CO, PM_{10}, $PM_{2.5}$, NO_X, and ROG would not exceed SCAQMD's regional thresholds or LSTs during Project construction; therefore, the Project would not exacerbate environmental conditions in a manner that would increase the potential to expose sensitive receptors to environmental impacts.

Air Quality Dynamics prepared a HRA to assess the impact of pollutants on future individuals residing at the Project site (June 2017, Appendix C). The HRA analyzed the possible health effects to future site residents and guests associated with diesel particulate emissions from the adjacent I-5 freeway (see Appendix C). Health risks were quantified for each floor (seven and eight in total). For chronic, annual, and 24-hour exposures, concentration estimates for residential receptors are considered static whereby exposures are assumed to be continuous based upon the averaging time under consideration. For patrons residing at the proposed hotel development, occupancy including extended stay would be limited in duration whereby the 24-hour exposure estimate would apply. Short duration exposures (i.e., one- and eight-hour) apply to all common areas such as a pool and related residential/guest amenities since it is reasonable to assume that an individual could be present for periods of one to eight hours. Reduction of particulate impacts would be accomplished by reducing pollutant concentrations within the building structures. By restricting the rate of infiltration, exposures can be controlled to reduce particulate concentrations below SCAQMD's standards.

Carcinogenic Risks

To represent residential exposures, the assessment employs the USEPA's guidance to develop viable dose estimates based on reasonable maximum exposures (RME). Specifically, activity patterns for population mobility recommended by the USEPA and presented in the *Exposure Factors Handbook* were utilized. As a result, lifetime risk values for residents were adjusted to account for an exposure duration of 350 days per year for 30 years (i.e., 95th percentile). A 9-year exposure duration was additionally assessed to identify risk estimates associated with the average time individuals are reported to reside at a given residence. These values are consistent with CEQA, which considers the evaluation of environmental effects of proposed projects in a manner that reflects both reasonable and feasible assumptions. For body weight and inhalation, the assessment employed average adult values of 70 kilograms and 20 cubic meters per day, respectively.

Table 4.2-6 and Table 4.2-7 show the maximum predicted residential carcinogenic risk estimates for Residential 1 (the seven-story building) and Residential 2 (the eight story building). As shown in the tables, floor levels two through six for Residential 1 and floor levels three through seven for Residential 2 occupancies exceed the standard of one in one hundred thousand (1.0e-5).

Table 4.2-6 Maximum Residential 1 Receptor/Carcinogenic Risk

	Exposure Scenario	
Floor Level	**30 Year**	**9 Year**
2	2.6e-05	7.9e-06
3	2.4e-05	7.3e-06
4	2.1e-05	6.2e-06
5	1.6e-05	4.8e-06
6	1.2e-05	3.5e-06
7	7.9e-06	2.5e-06

Source: Air Quality Dynamics, 2017; see Appendix C

Table 4.2-7 Maximum Residential 2 Receptor/Carcinogenic Risk

Floor Level	Exposure Scenario	
	30 Year	9 Year
3	2.6e-05	7.7e-06
4	2.3e-05	6.9e-06
5	1.9e-05	5.8e-06
6	1.5e-05	4.4e-06
7	1.1e-05	3.2e-06
8	7.6e-06	2.3e-06

Source: Air Quality Dynamics, 2017; see Appendix C

Non-carcinogenic Hazards

The HRA included an evaluation of the potential non-cancer effects of contaminant exposures using the hazard index approach. For chronic non-carcinogenic effects, the hazard index identified for each toxicological endpoint totaled less than one for all 30-and 9-year exposure scenarios (see Appendix C). For acute exposures, the hazard indices for each respective averaging time did not equal or exceed one.

Criteria Pollutant Exposures

As discussed above, the State of California has strict ambient air quality standards for various pollutants. Pollutant emissions are considered to have a significant effect on the environment if they result in concentrations that create either a violation of an ambient air quality standard, contribute to an existing air quality violation, or expose sensitive receptors to substantive pollutant concentrations. For PM_{10} emissions, background concentrations representative of the Project area exceed the California Ambient Air Quality Standards (CAAQS) for the 24-hour and annual averaging times. As a result, a significant impact is achieved when pollutant concentrations produce a measurable change over existing background levels. Although background concentrations exceed the CAAQS annual averaging time for fine particulates, no measurable change criteria currently exists. As a result, the SCAQMD standard of 2.5 μg/m^3 for the 24-hour averaging time is used to assess PM_{10} and $PM_{2.5}$ impacts. Table 4.2-8 through Table 4.2-10 present the maximum predicted concentrations for each identified occupancy and floor level that exceed the particulate significance thresholds.

Table 4.2-8 Maximum Residential 1 Receptor/PM_{10} and $PM_{2.5}$

Floor Level	Pollutant/Averaging Time		
	PM_{10} 24-Hour	PM_{10} Annual	$PM_{2.5}$ 24-Hour
2	11.04772	7.31759	3.58444
3	10.72527	6.84941	3.48039
4	10.21925	5.99178	3.31664
5	9.03814	4.60786	2.93522
6	7.44507	3.23152	–
7	5.82255	2.17110	–

Note: Concentrations are expressed in micrograms per cubic meter (μg/m³).
Source: Air Quality Dynamics, 2017; see Appendix C

Table 4.2-9 Maximum Residential 2 Receptor/PM_{10} and $PM_{2.5}$

Floor Level	Pollutant/Averaging Time		
	PM_{10} 24-Hour	PM_{10} Annual	$PM_{2.5}$ 24-Hour
3	13.73535	9.09714	4.43438
4	13.09213	8.12667	4.22698
5	12.05673	6.46282	3.89339
6	9.96575	4.48692	3.21970
7	7.63241	2.95801	–
8	5.73936	1.97103	–

Note: Concentrations are expressed in micrograms per cubic meter (µg/m³).
Source: Air Quality Dynamics, 2017; see Appendix C

Table 4.2-10 Maximum Hotel Receptor/PM_{10} and $PM_{2.5}$

Floor Level	Pollutant/Averaging Time	
	PM_{10} 24-Hour	$PM_{2.5}$ 24-Hour
3	11.07841	3.56131
4	8.42067	2.70927
5	6.09354	–
6	4.46443	–
7	3.39506	–
8	2.67803	–

Note: Concentrations are expressed in micrograms per cubic meter ((µg/m³). Concentration estimates with receptor heights commensurate with succeeding floor levels will produce lower risk estimates.
Source: Air Quality Dynamics, 2017; see Appendix C

Background concentrations for CO (one-hour and eight-hour averaging times) and NO_2 (one-hour averaging time) are below current air quality standards. As such, significance is achieved when pollutant concentrations add to existing levels and create an exceedance of the CAAQS. The maximum modeled one-hour concentration for CO of 0.31186 parts per million (ppm) (357.13906 µg/m^3) when added to an existing background concentration of 3.0 ppm, will not cause an exceedance of the CAAQS of 20 ppm. For the 8-hour averaging time, the maximum predicted concentrations of 0.18520 ppm, (212.09453 µg/m^3) for the residential and 0.16951 ppm, (194.12644 µg/m^3) for the hotel occupancy when added to an existing background level of 3.0 ppm, does not cause an exceedance of the CAAQS of 9 ppm.

For NO_2, the maximum one-hour concentration of 0.05433 ppm (102.22127 µg/m^3) was predicted. This concentration, when added to a background concentration of 0.0795 ppm, will not cause an exceedance of the CAAQS of 0.18 ppm.

In conclusion, carcinogenic risks estimates for the 30 year exposure scenario exceed the level posing no significant risk for Residential 1 and Residential 2 receptors located on floor levels two through six and three through seven, respectively. For the nine year exposure scenario, the level posing no significant risk was not exceeded for any receptor location.

For chronic non-carcinogenic effects, the hazard index identified for each toxicological endpoint totaled less than one for all 30 year and nine year exposure scenarios. For short duration exposures, the hazard indices for the identified averaging times did not exceed unity. Therefore, non-carcinogenic hazards were predicted to be within acceptable limits.

Project Design Feature

Impacts associated with chronic, annual and/or 24-hour particulate exposures from diesel exhaust and the re-entrainment of paved roadway dust would be reduced through implementation of Air Quality PDF 1 - Particulate Filter Installation, which would limit particulate infiltration through installation of filtration systems (see the full text under Impact AQ-2). Short duration exposures associated with both toxic and criteria pollutants are below identified significance thresholds. As such, no impacts are anticipated to individuals who reside at the Project site, access common areas, utilize outdoor residential/hotel amenities, and frequent the adjoining community park.

Table 4.2-11 through Table 4.2-13 list the discrete floor levels and associated filter requirements for the heating, ventilation and air conditioning (HVAC) control equipment.

Table 4.2-11 Particulate Filter Efficiencies/Residential 1

Floor Level	MERV Rating
2	≥14
3	≥14
4	≥14
5	≥13
6	≥11
7	≥8

Source: Air Quality Dynamics, 2017; see Appendix C

Table 4.2-12 Particulate Filter Efficiencies/Residential 2

Floor Level	MERV Rating
3	≥14
4	≥14
5	≥14
6	≥13
7	≥11
8	≥8

Source: Air Quality Dynamics, 2017; see Appendix C

Table 4.2-13 Particulate Filter Efficiencies/Hotel

Floor Level	MERV Rating
3	≥10
4	≥9
5	≥8
6	≥7
7	≥6
8	≥5

Source: Air Quality Dynamics, 2017; see Appendix C

Table 4.2-14 through Table 4.2-18 present the carcinogenic risk and particulate concentration reductions associated with the incorporation of the identified MERV filtration efficiencies. For carcinogenic risks, gaseous emissions are not controlled with the above referenced MERV filtration. Therefore, organic gases are considered uncontrolled and weighted against the diesel concentration estimates to produce an overall risk estimate for a given occupancy.

Table 4.2-14 Maximum Residential 1 Receptor / Carcinogenic Risk w/ MERV Filter

Floor Level	Exposure Scenario 30 Year
2	1.0e-05
3	9.3e-06
4	8.0e-06
5	9.5e-06
6	9.9e-06

Source: Air Quality Dynamics, 2017; see Appendix C

Table 4.2-15 Maximum Residential 2 Receptor / Carcinogenic Risk w/ MERV Filter

Floor Level	Exposure Scenario 30 Year
3	1.0e-05
4	9.2e-06
5	7.6e-06
6	8.7e-06
7	8.9e-06

Source: Air Quality Dynamics, 2017; see Appendix C

Table 4.2-16 Maximum Residential 1 Receptor / PM_{10} and $PM_{2.5}$ w/ MERV Filter

	Pollutant/Averaging Time		
Floor Level	**PM_{10} 24 Hour**	**PM_{10} Annual**	**MERV Rating**
2	0.55236	0.36588	0.35844
3	0.53626	0.34247	0.34804
4	0.51096	0.29959	0.33166
5	0.90381	0.46079	0.44028
6	1.11676	0.48473	–
7	1.74677	0.65133	–

Note: Concentrations are expressed in micrograms per cubic meter (μg/m³).
Source: Air Quality Dynamics, 2017; see Appendix C

Table 4.2-17 Maximum Residential 2 Receptor / PM_{10} and $PM_{2.5}$ w/ MERV Filter

	Pollutant/Averaging Time		
Floor Level	**PM_{10} 24 Hour**	**PM_{10} Annual**	**MERV Rating**
3	0.68677	0.45486	0.44344
4	0.65461	0.40633	0.42270
5	0.60284	0.32314	0.38934
6	0.99658	0.44869	0.48296
7	1.14486	0.44370	–
8	1.72181	0.59131	–

Note: Concentrations are expressed in micrograms per cubic meter (μg/m³).
Source: Air Quality Dynamics, 2017; see Appendix C

Table 4.2-18 Maximum Hotel Receptor / PM_{10} and $PM_{2.5}$ w/ MERV Filter

Floor Level	**PM_{10} 24 Hour**	**$PM_{2.5}$ 24 Hour**
3	2.21568	1.78066
4	2.10517	1.76103
5	1.82806	–
6	2.23222	–
7	2.20679	–
8	2.14242	–

Note: Concentrations are expressed in micrograms per cubic meter (μg/m³).
Source: Air Quality Dynamics, 2017; see Appendix C

Significance After Mitigation

Impacts would be less than significant. The implementation of the Air Quality PDF 1- Particulate Filter Installation, above, would further reduce particulate matter generated by the operation of the proposed Project.

Threshold 5:	Would the project create objectionable odors affecting a substantial number of people?

Impact AQ-6 THE PROJECT WOULD NOT CREATE OBJECTIONABLE ODORS AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE. IMPACTS RELATED TO ODORS WOULD BE LESS THAN SIGNIFICANT.

The CARB *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) identifies land uses associated with odor complaints. The Project would primarily involve development of two mixed-use residential buildings, a parking structure, a hotel, along with associated open space and landscaping. None of these uses are identified as land uses associated with odor complaints by SCAQMD; therefore, the Project would not generate objectionable odors affecting a substantial number of people.

During construction activities, only short-term, temporary odors from vehicle exhaust and construction equipment engines would occur. As the Project site is in an area without tall buildings to block air movement and hold odors, construction-related odors would disperse and dissipate fairly quickly and would not cause substantial odors at the closest sensitive receptors. In addition, any construction-related odors would be relatively short-term in any event and would cease upon completion of construction. Therefore, impacts related to objectionable odors during construction or operation would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Cumulative Impacts

The planned and pending projects in the vicinity of the Project site, listed in Table 3-1 of this EIR, include 23 projects consisting of retail, restaurant, residential, office, industrial, hotel, school airport and transportation related land uses. Projects that are within the vicinity of the Project site include First Street Village Mixed-Use Project (Related Project No. 6), Premier at First Street Mixed-Use Project (Related Project No. 7), Burbank Town Center Redevelopment Project (Related Project No. 10), Olive Station Mixed-Use Project (Related Project No. 14) and Burbank Common Project (Related Project No. 15).

The Basin is designated a nonattainment area for the federal and State one-hour and eight-hour ozone standards, the State PM_{10} standards, the federal 24-hour $PM_{2.5}$ standard, and the State and federal annual $PM_{2.5}$ standard. The Basin is in attainment of all other federal and State standards. Any growth in the Los Angeles metropolitan area could have the potential to contribute to the existing exceedances of ambient air quality standards when taken as a whole with current development. The SCAQMD's approach to determining whether a project's emissions of criteria air pollutants are cumulatively considerable is to first determine whether or not the proposed Project would result in a significant project-level impact to regional air quality based on SCAQMD significance thresholds. If the proposed Project does not generate emissions exceeding SCAQMD thresholds, then the lead agency needs to consider the additive effects of related projects only if the project is part of an ongoing regulatory program, such as SCAQMD's Air Toxics Control Plan and AB 2588 Program, aimed at reducing criteria pollutants from certain sources, or is considered in a Program EIR, and the related projects are within approximately one mile of the Project site. If there are related projects within a one-mile radius that are part of an ongoing regulatory program or are considered in a Program EIR, then the additive effect of the related projects should be considered.

The Project is not part of an ongoing regulatory program and is not being studied as part of a Program EIR. Therefore, the SCAQMD recommends that project-specific air quality impacts should be used to determine the potential cumulative impacts to regional air quality. As discussed in Impact AQ-2, the Project would not conflict with or obstruct implementation of the applicable AQMP. Furthermore, as discussed in Impact AQ-2, daily emissions of construction-related pollutants would not exceed SCAQMD regional significance thresholds or LSTs with implementation of suggested mitigation measures. As discussed in Impact AQ-3, the proposed Project would not result in an increase in daily operational emissions that would exceed the SCAQMD cumulative operational thresholds. In addition, potential impacts to sensitive receptors during construction and operation would be less than significant with incorporation of suggested mitigation measures. Lastly, as discussed in Impact AQ-4, traffic from the Project would not create a CO hot spot at study area intersections .Therefore, the Projects' contribution to cumulative levels of any criteria pollutant would not be cumulatively considerable and would be less than significant.

4.3 Cultural Resources/Tribal Cultural Resources

This section assesses potential impacts to cultural resources associated with the Project. Rincon Consultants, Inc. (Rincon) conducted a cultural resources assessment for the Project that included a records search at the South Central Coastal Information Center (SCCIC), a survey of the Project site and preparation of a historic assessment report. The information below is derived from the Cultural Resources Assessment that is included as Appendix E of this EIR.

4.3.1 Setting

a. Regulatory Setting

This section describes applicable Federal, State, and local laws, ordinances, regulations, and standards governing cultural resources that must be adhered to before and during implementation of the Project.

CEQA requires a lead agency, in this case the City of Burbank, to determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]). A resource shall be considered *historically significant* if it:

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

In addition, if it can be demonstrated that a project would 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 resources cannot be left undisturbed, mitigation measures are required. PRC, Section 21083.2[a], [b], and 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, the probability is high that it:

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; or
3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CEQA does not define "a unique paleontological resource or site." However, the Society of Vertebrate Paleontology (SVP) has defined a "significant paleontological resource" in the context of environmental review. The SVP (2010) defines a significant paleontological resource as:

> Fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are generally older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years) [p. 111].

The loss of paleontological resources that meet the criteria outlined above (i.e., are considered a significant paleontological resource) would be considered a significant impact under CEQA, and the CEQA lead agency is responsible for ensuring that paleontological resources are protected in compliance with CEQA and other applicable statutes.

Assembly Bill 52

California Assembly Bill 52 (AB 52) was enacted in 2015, expanding CEQA by defining a new resource category, "tribal cultural resources." Assembly Bill 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is either:

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments, and respecting the interests and roles of project proponents, it is the intent AB 52 to:

(1) Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.

(2) Establish a new category of resources in CEQA called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.

[1] Society of Vertebrate Paleontology (2010). Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee, 11 p. http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx. Accessed June 2018.

(3) Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.

(4) Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated. Because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.

(5) In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, at the earliest possible point in CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision making body of the lead agency.

(6) Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.

(7) Ensure that local and tribal governments, public agencies, and project proponents have information available, early in CEQA environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.

(8) Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.

(9) Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be adopted or certified. AB 52 requires that lead agencies "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the consultation process are those that have requested notice of projects proposed within the jurisdiction of the lead agency, and that have responded to such notices.

Senate Bill 18 (California Government Codes 65092; 65351; 65352; 65352.3; 65352.4; 65352.5 and 65560)

As of March 1, 2005, California Government Code Sections 65092, 65351, 65352, 65352.3, 65352.4, 65352.5 and 65560), formerly known as Senate Bill 18 (SB 18), requires that cities and counties contact and consult with Native American tribes prior to amending or adopting any general plan or specific plan, or designating lands as open space. The purpose of SB 18 is to involve Native Americans at the onset of the planning process and allow for consideration concerning the protection of traditional tribal cultural places in the context of broad local land use policy prior to individual site-specific, project-level and land use decisions. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3). At least 45 days before a local government adopts or substantially amends a general plan or specific plan, the local government must refer the proposed action to agencies, including Native American tribes, for review and comment.

Codes Governing Human Remains

The disposition of human remains is governed by California Health and Safety Code Section 7050.5 and PRC Sections 5097.94 and 5097.98. If human remains are discovered, the County Coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the Native American Heritage Commission (NAHC) within 24 hours. The NAHC, pursuant to PRC Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native Americans so they can inspect the burial site and make recommendations for treatment or disposal.

California Register of Historic Places

The California Register is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1(a)). The criteria for eligibility for the California Register are based upon National Register criteria (PRC Section 5024.1(b)). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.

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

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

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

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

- California properties listed on the National Register and those formally determined eligible for the National Register;
- California Registered Historical Landmarks from No. 770 onward; and,

- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.
- Other resources that may be nominated to the California Register include:
- Historical resources with a significance rating of Categories 3 through 5 (those properties identified as eligible for listing in the National Register, the California Register, and/or a local jurisdiction register);
- Individual historical resources;
- Historical resources contributing to historic districts; and,
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

City of Burbank Historic Resource Management Ordinance

Division 6. Historic Preservation Regulations of the Burbank Municipal Code (BMC), referred to as the "Historic Resource Management Ordinance", provides criteria and procedures to designate, alter or remove historical resources within the City of Burbank. The intent of the Historic Resource Management Ordinance is "to recognize, preserve, and protect historic resources in the interest of the health, prosperity, social and cultural enrichment, and general welfare of the people" (City of Burbank 2018). The purpose of this Ordinance is to:

A. Safeguard the heritage of the City by preserving Resources that reflect elements of the City's history;
B. Encourage public understanding and involvement in the historic, cultural, architectural, archaeological, and social heritage of the City;
C. Promote the private and public use and preservation of historic Resources for the education, appreciation and general welfare of the people;
D. Promote the conservation, preservation and enhancement of historic Resources;
E. Promote the conservation of energy and natural resources through the preservation and maintenance of historic Resources;
F. Discourage the demolition, destruction, alteration, misuse or neglect of Designated Historic Resources which represent an important link to Burbank's past;
G. Provide economic benefits to owners of qualifying historic Resources to ensure their continued maintenance and preservation; and
H. To make all information about historic Resources and historic preservation accessible and available to the public. [Added by Ord. No. 3381, eff. 10/15/94; Amended by Ord. No. 3812, eff. 6/24/11.]

Burbank2035 General Plan

The Burbank2035 General Plan (adopted February 2013) is the primary mechanism for guiding future change in Burbank and provides a guide for land use decision-making. The Land Use Element and Open Space and Conservation Element include goals and policies that aim to preserve cultural resources and protect natural resources.

Land Use Element

The Burbank 2035 General Plan's Land Use Element serves as a guide for future development and land use decisions. Land use goals and policies seek to maintain a balance between small-town character, economic prosperity and sustainability. The goal and policies applicable to cultural resources are presented below. The proposed Project's consistency with the Land Use Element is discussed in Table 4.8-2 in Section 4.8, *Land Use and Planning,* of this Draft EIR.

Goal 3: Community Design and Character

Burbank's well-designed neighborhoods and buildings and enhanced streets and public spaces contribute to a strong sense of place and "small town" feeling reflective of the past.

> **Policy 3.10:** Preserve historic resources, buildings, and sites, including those owned by private parties and government agencies, including the City of Burbank. Alter such resources only as necessary to meet contemporary needs and in a manner that does not affect the historic integrity of the resource.
>
> **Policy 3.11:** Carefully consider the evolution of community character over time. Evaluate projects with regard to their impact on historic character, their role in shaping the desired future community character, and how future generations will view today's Burbank**.**

Open Space and Conservation Element

The Burbank 2035 General Plan's Open Space and Conservation Element addresses the conservation and enhancement of open space, parks, recreation, and natural resources within the City. The goals and policies of the Open Space and Conservation Element are intended to protect natural resources including historical, archeological, and paleontological resources (City of Burbank 2013). The goal and policy applicable to cultural resources are presented below.

Goal 6: Open Space Resources

Burbank's open space areas and mountain ranges are protected spaces supporting important habitat, recreation, and resource conservation.

> **Policy 6.1:** Recognize and maintain cultural, historical, archeological, and paleontological structures and sites essential for community life and identity.

Plan Realization

The Plan Realization portion of the Burbank2035 General Plan establishes implementation programs to translate into action the goals and polices set forth in Burbank2035 (City of Burbank 2013). The program applicable to the proposed Project, with respect to cultural resources, is presented below.

Program LU-4: Historic Preservation Plan

To reduce impacts to both known and as-yet-unknown historical resources within Burbank, the City shall:

- Require assessment by a qualified archeologist for projects subject to CEQA involving ground disturbing activities on previously undisturbed land to identify the potential to encounter buried historical resources (as defined in State CEQA Guidelines Section 15064.5). If the assessment determines that buried resources may be present, the City shall require preparation and implementation of a treatment plan outlining measures for monitoring, data recovery, and/or handling inadvertent discoveries.

b. Historical Background

Prehistory

During the twentieth century, many archaeologists developed chronological sequences to explain prehistoric cultural changes in all or portions of southern California (c.f., Moratto 1984; Jones and Klar 2007). Wallace (1955, 1978) devised a prehistoric chronology for the southern California coastal region based on early studies and focused on data synthesis that included four horizons: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Though initially lacking the chronological precision of absolute dates (Moratto 1984), Wallace's (1955) synthesis has been modified and improved using thousands of radiocarbon dates obtained by southern California researchers over recent decades (Koerper and Drover 1983; Mason and Peterson 1994; Koerper et al. 2002; Byrd and Raab 2007). The prehistoric chronological sequence for southern California presented below is a composite based on Wallace (1955) and Warren (1968) as well as later studies, including Koerper and Drover (1983).

Early Man Horizon (10,000 – 6,000 B.C.)

Numerous pre-8,000 B.C. sites have been identified along the mainland coast and Channel Islands of southern California (c.f., Moratto 1984; Erlandson 1991; Rick et al. 2001; Johnson et al. 2002; Jones and Klar 2007). The Arlington Springs site on Santa Rosa Island produced human femurs dated to approximately 13,000 years ago (Johnson et al. 2002; Arnold et al. 2004). On nearby San Miguel Island, human occupation at Daisy Cave (CA-SMI-261) has been dated to nearly 13,000 years ago and included basketry greater than 12,000 years old, the earliest recorded on the Pacific Coast (Arnold et al. 2004).

Although few Clovis or Folsom style fluted points have been found in southern California (e.g., Erlandson et al. 1987; Dillon 2002), Early Man Horizon sites are generally associated with a greater emphasis on hunting than later horizons. Recent data indicate that the Early Man economy was a diverse mixture of hunting and gathering, including a significant focus on aquatic resources in coastal areas (e.g., Jones et al. 2002) and on inland Pleistocene lakeshores (Moratto 1984). A warm and dry 3,000-year period called the Altithermal began around 6,000 B.C. The conditions of the Altithermal are likely responsible for the change in human subsistence patterns at this time, including a greater emphasis on plant foods and small game.

Milling Stone Horizon (6,000 – 3,000 B.C.)

The Wallace (1955:219) defined the Milling Stone Horizon as "marked by extensive use of milling stones and mullers, a general lack of well-made projectile points, and burials with rock cairns." The dominance of such artifact types indicate a subsistence strategy oriented around collecting plant foods and small animals. A broad spectrum of food resources was consumed including small and large terrestrial mammals, sea mammals, birds, shellfish and other littoral and estuarine species, near-shore fishes, yucca, agave, and seeds and other plant products (Kowta 1969; Reinman 1964). Variability in artifact collections over time and from the coast to inland sites indicates that Milling Stone Horizon subsistence strategies adapted to environmental conditions (Byrd and Raab 2007). Lithic artifacts associated with Milling Stone Horizon sites are dominated by locally available tool stone and in addition to ground stone tools, such as manos and metates, chopping, scraping, and cutting tools, are very common. Kowta (1969) attributes the presence of numerous scraper-plane tools in Milling Stone Horizon collections to the processing of agave or yucca for food or fiber. The mortar and pestle, associated with acorns or other foods processed through pounding, were first used during the Milling Stone Horizon and increased dramatically in later periods (Wallace 1955, 1978; Warren 1968).

Two types of artifacts that are considered diagnostic of the Milling Stone period are the cogged stone and discoidal, most of which have been found within sites dating between 4,000 and 1,000 B.C. (Moratto 1984), though possibly as far back as 5,500 B.C. (Couch et al. 2009). The cogged stone is a ground stone object that has gear-like teeth on the perimeter and is produced from a variety of materials. The function of cogged stones is unknown, but many scholars have postulated ritualistic or ceremonial uses (c.f., Eberhart 1961; Dixon 1968). Similar to cogged stones, discoidals are found in the archaeological record subsequent to the introduction of the cogged stone. Cogged stones and discoidals were often purposefully buried, or “cached.” Cogged stones have been collected in Los Angeles County though their distribution appears to center on the Santa Ana River basin (Eberhart 1961).

Intermediate Horizon (3,000 B.C. – A.D. 500)

Wallace’s Intermediate Horizon dates from approximately 3,000 B.C.-A.D. 500 and is characterized by a shift toward a hunting and maritime subsistence strategy, as well as greater use of plant foods. During the Intermediate Horizon, a noticeable trend occurred toward greater adaptation to local resources including a broad variety of fish, land mammal, and sea mammal remains along the coast. Tool kits for hunting, fishing, and processing food and materials reflect this increased diversity, with flake scrapers, drills, various projectile points, and shell fishhooks being manufactured.

Mortars and pestles became more common during this transitional period, gradually replacing manos and metates as the dominant milling equipment. Many archaeologists believe this change in milling stones signals a change from the processing and consuming of hard seed resources to the increasing reliance on acorn (e.g., Glassow et al. 1988; True 1993). Mortuary practices during the Intermediate typically included fully flexed burials oriented toward the north or west (Warren 1968).

Late Prehistoric Horizon (A.D. 500 – Historic Contact)

During Wallace’s (1955, 1978) Late Prehistoric Horizon the diversity of plant food resources and land and sea mammal hunting increased even further than during the Intermediate Horizon. More classes of artifacts were observed during this period and high quality exotic lithic materials were used for small finely worked projectile points associated with the bow and arrow. Steatite containers were made for cooking and storage and an increased use of asphalt for waterproofing is noted. More artistic artifacts were recovered from Late Prehistoric sites and cremation became a common mortuary custom. Larger, more permanent villages supported an increased population size and social structure (Wallace 1955).

Warren (1968) attributes this dramatic change in material culture, burial practices, and subsistence focus to the westward migration of desert people he called the Takic, or Numic, Tradition in Los Angeles, Orange, and western Riverside counties. This Takic Tradition was formerly referred to as the “Shoshonean wedge” (Warren 1968). However, this nomenclature is no longer used to avoid confusion with ethnohistoric and modern Shoshonean groups (Shipley 1978).

Ethnography

The Project site is located in the traditional territory of the Native American group known as the Gabrielino. The name Gabrielino was applied by the Spanish to those natives that were attached to Mission San Gabriel (Bean and Smith 1978). Today, most contemporary Gabrielino prefer to identify themselves as Tongva, a term that is used throughout the remainder of this section (King 1994).

Tongva territory included the Los Angeles basin and southern Channel Islands as well as the coast from Aliso Creek in the south to Topanga Creek in the north. Their territory encompassed several biotic zones, including Coastal Marsh, Coastal Strand, Prairie, Chaparral, Oak Woodland, and Pine Forest (Bean and Smith 1978). The Tongva language belongs to the Takic branch of the Uto-Aztecan language family, which can be traced to the Great Basin region (Mithun 1999). This language family includes dialects spoken by the nearby Juaneño and Luiseño, but is considerably different from those of the Chumash people living to the north and the Diegueño (including Ipai, Tipai, and Kumeyaay) people living to the south.

Tongva society was organized along patrilineal non-localized clans, a common Takic pattern. Each clan had a ceremonial leader and contained several lineages. The Tongva established permanent villages and smaller satellite camps throughout their territory. Recent ethnohistoric work (O'Neil 2002) suggests a total tribal population of nearly 10,000, considerably more than earlier estimates of around 5,000 people (Bean and Smith 1978:540). Tongva subsistence was oriented around acorns supplemented by the roots, leaves, seeds, and fruits of a wide variety of plants. Meat sources included large and small mammals, freshwater and saltwater fish, shellfish, birds, reptiles, and insects. (Kroeber 1976; Bean and Smith 1978; McCawley 1996; Langenwalter et al. 2001). The Tongva employed a wide variety of tools and implements to gather and hunt food. The digging stick, used to extract roots and tubers, was frequently noted by early European explorers (Rawls 1984). Other tools included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Like the Chumash, the Tongva made oceangoing plank canoes (known as a ti'at) capable of holding six to 14 people and used for fishing, travel, and trade between the mainland and the Channel Islands. Tule reed canoes were employed for near-shore fishing (Blackburn 1963; McCawley 1996).

Chinigchinich, the last in a series of heroic mythological figures, was central to Tongva religious life at the time of Spanish contact (Kroeber 1976). The belief in *Chinigchinich* was spreading south among other Takic-speaking groups at the same time the Spanish were establishing Christian missions. Elements of *Chinigchinich* beliefs suggest it was a syncretic mixture of Christianity and native religious practices (McCawley 1996). Prior to European contact, deceased Tongva were either buried or cremated, with burial more common on the Channel Islands and the adjacent mainland coast and cremation on the remainder of the coast and in the interior (Harrington 1942; McCawley 1996). After pressure from Spanish missionaries, cremation essentially ceased during the post-contact period (McCawley 1996).

History

The post-contact history of California is generally divided into three time spans: the Spanish period (1769–1822), the Mexican period (1822–1848), and the American period (1848–present). Each of these periods is briefly described below.

Spanish Period (1769 – 1822)

Spanish exploration of California began when Juan Rodriguez Cabrillo led the first European expedition into the region in 1542. For more than 200 years after his initial expedition, Spanish, Portuguese, British, and Russian explorers sailed the California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003). In 1769, Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in what was then known as Alta (upper) California at Mission San Diego de Alcalá. This was the first of 21 missions erected by the Spanish between 1769 and 1823. It was during this time that initial Spanish settlement of the Project vicinity began. Mission San Fernando Rey de España, approximately 12.7 miles northwest of the Project site, was founded in 1797 as the 17th mission to be established in California. Mission San Fernando Rey de España's location closed the gap between Mission San Buenaventura on the Ventura coast, and Mission San Gabriel Arcángel in the Los Angeles interior (California Missions Foundation, N.d.).

Mexican Period (1822 – 1848)

The Mexican Period commenced when news of the success of the Mexican War of Independence (1810-1821) against the Spanish crown reached California in 1822. This period saw the privatization of mission lands in California with the passage of the Secularization Act of 1833. This Act federalized mission lands and enabled Mexican governors in California to distribute former mission lands to individuals in the form of land grants. Successive Mexican governors made approximately 700 land grants between 1833 and 1846, putting most of the state's lands into private ownership for the first time (Shumway 2007).

The Mexican Period for the Los Angeles County region ended in early January 1847. Mexican forces fought and lost to combined U.S. Army and Navy forces in the Battle of the San Gabriel River on January 8 and in the Battle of La Mesa on January 9 (Nevin 1978). On January 10, leaders of the pueblo of Los Angeles surrendered peacefully after Mexican General Jose Maria Flores withdrew his forces. Shortly thereafter, newly appointed Mexican Military Commander of California Andrés Pico surrendered all of Alta California to U.S. Army Lieutenant Colonel John C. Fremont in the Treaty of Cahuenga (Nevin 1978).

American Period (1848 – Present)

The American Period officially began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for conquered territory including California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. Settlement of the Los Angeles region increased dramatically in the early American Period.

The discovery of gold in northern California in 1848 led to the California Gold Rush, though the first California gold found by settlers was previously discovered in Placerita Canyon in 1842 (Workman 1935; Guinn 1977). By 1853, the population of California exceeded 300,000. Thousands of settlers and immigrants continued to immigrate to the state, particularly after the completion of the First Transcontinental Railroad in 1869. The U.S. Congress in 1854 agreed to let San Pedro become an official port of entry. By the 1880s, the railroads had established networks from the port and throughout the county of Los Angeles, resulting in fast and affordable shipment of goods, as well as a means to transport new residents to the booming region (Dumke 1944). New residents included many health-seekers drawn to the area by the fabled Southern California climate in the 1870s–1880s.

Burbank

The City of Burbank was established in 1867 by New Hampshire dentist Dr. David Burbank when the dentist purchased the land encompassing Rancho San Rafael and Rancho La Providencia in the modern day city. Dr. Burbank combined the land into one large ranch and sold portions of his property to the Southern Pacific Railroad, land investors, and development companies. On May 1, 1887, the town of Burbank was officially founded and in 1911 was voted for incorporation (City of Burbank 2017).

Burbank experienced tremendous growth following World War II, including in 1962 when the National Broadcasting Company (NBC) moved its network television headquarters to the City, and in 1978 when the Burbank-Glendale-Pasadena Airport (now Hollywood Burbank Airport) was purchased from Lockheed. Today, Burbank is known the “Media Capital of the World” in reference to its longstanding relationships with entertainment companies, such as Warner Brothers and Disney (City of Burbank 2017).

Geologic Setting

The Project area is in the eastern portion of the San Fernando Valley situated along the southwestern edge of the Verdugo Mountains within the east-west trending Transverse Ranges geomorphic province (California Geological Survey 2002; Yerkes and Campbell 2005). The San Fernando Valley is approximately 23 miles wide and 12 miles long and is underlain by a structural depression that contains a thick accumulation of more than 20,000 feet of Cenozoic alluvial, shallow marine, and deep shelf sedimentary deposits (McCulloh and Beyer 2004). The alluvium within the San Fernando Valley is mainly derived from the Santa Monica Mountains to the south, the Santa Susana Mountains to the north, the Simi Hills to the west, the San Gabriel Mountains to the northeast, and the Verdugo Mountains to the east. The San Fernando Valley is structurally complex and is transected by several faults, including the San Fernando fault, Sylmar fault zone, and Verdugo fault.

c. Existing Project Site Conditions

The Project site is located at 777 North Front Street in the City of Burbank within Township 1 north, Range 14 west, and Section 11 of the United States Geological Survey (USGS) Burbank, CA 7.5-minute topographic quadrangle. The Project site encompasses approximately eight acres of vacant land that currently contains mounds of soil and construction materials throughout the site.

Based on the results of the records search and field survey, the Cultural Resources Assessment (see Appendix E) found that no historic built-environment resources (buildings or structures) or archaeological resources (prehistoric or historic) are present on the Project site.

The Project site is the former location of the General Water Heater Company (GWHC), which operated at the site from the 1930's until 1961. The Zero Corporation (Zero) subsequently manufactured metal cases and other products at the site from approximately 1961 to 1991 in a facility comprised of six buildings. In 1998, the Ford Leasing Development Company (FLDC) purchased the site with the intent to redevelop the property as a car dealership, which did not occur. The Project site has been dormant since 1991, aside from occasional use for storage, recreational entertainment (e.g., circus, equestrian shows, etc.) and as a filming location for the entertainment industry. The former Zero buildings were demolished with the building slabs left intact in 2004. Although the structure’s foundation is still present on the Project site, the building associated with it was less than 50 years old, thus not reaching sufficient age for management consideration as a cultural resource under CEQA.

The Project site has been developed for at least 80 years. Pedestrian survey indicates extensive disturbance of the ground surface with no native intact sediments visible on the Project site. The presence of gravel along the edges of the developed and paved portions of the Project site indicates that the underlying soils are disturbed and may contain fill material.

In accordance with AB 52, the City sent letters on January 18, 2019 to the following Native American groups that had requested notification of CEQA projects:

- Fernandeño Tatavium Band of Mission Indians
- Gabrieleno Band of Mission Indians – Kizh Nation
- San Gabriel Band of Mission Indians

On February 13, 2018, the City sent SB 18 letters to the following local Native American groups:

- Fernandeño Tatavium Band of Mission Indians
- Gabrieleno Band of Mission Indians – Kizh Nation
- Gabrieleno Tongva Indians of California Tribal Council
- Gabrieleno/Tongva Nation
- Gabrieleno/Tongva Band of Mission Indians
- Gabrieleno/Tongva Tribe
- San Fernando Band of Mission Indians

The Fernandeño Tatavium Band of Mission Indians (FTBMI) requested consultation under AB 52. On November 7, 2019, the FTBMI emailed a request for additional information on the Project in order to assess the potential impacts on Tribal Cultural Resources. The City provided the FTBMI with the requested information on November 20, 2018. Following their review, the FTBMI informed the City on December 11, 2018, that they had no concerns with the Project and were concluding consultation. However, the FTBMI requested that specific language regarding the discovery of Native American cultural resources and human remains and funerary objects be added to the Project's condition of approval.

The Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation) requested consultation under both AB 52 and SB 18. The City conducted the consultation processes concurrently with the tribe. A consultation meeting was held between the City and the Kizh Nation via teleconference on January 9, 2019. During the meeting, Kizh Nation representatives provided a general history of Native American use of the area but did not identify any site-specific Tribal Cultural Resources that would be impacted by the Project. On January 25, 2019, the Kizh Nation emailed historical map information and proposed mitigation measures to the City. In their correspondence, the Kizh Nation noted that the Project is located within the vicinity of major waterways, a known and prominent village area, and prominent overland trade routes.

4.3.2 Impact Analysis

a. Methodology and Significance Thresholds

The analysis of cultural resources impacts is based on empirical research presented in the Cultural Resources Assessment prepared for the proposed project. The full report is included as Appendix E of this EIR. The methodologies and significance thresholds employed for the cultural resources impact analyses are described below and in the *Regulatory Setting*, above. This Cultural Resources Assessment included a cultural resources records search and pedestrian field survey; however, a separate paleontological resources assessment was not prepared for the Project. Therefore, a discussion of methodology and significant thresholds for the assessment of impacts to paleontological resources is presented below.

In accordance with Appendix G of the State *CEQA Guidelines*, an impact to Cultural Resources is considered significant if it can be demonstrably argued that the project would:

1. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5;
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5;
3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; and/or
4. Disturb any human remains, including those interred outside of dedicated cemeteries.

The Initial Study (see Appendix A) concluded that there would be no potential impact to historical resources since the Project site is currently vacant. Additionally, no historic structures immediately border the Project site and therefore the Project would not result in adverse impacts, either directly or indirectly, to historic resources. As such, further analysis of threshold 1, as identified above, is not warranted. Grading and ground disturbing activity associated with the development of the Project could potentially impact currently unknown subsurface archaeological or paleontological resources or human remains. Therefore, impacts associated with thresholds 2, 3 and 4, are analyzed below.

Recent revisions to Appendix G of the *State CEQA Guidelines* include thresholds for potential impacts to Tribal Cultural Resources. In accordance with Appendix G of the *State CEQA Guidelines*, an impact to Tribal Cultural Resources from the Project would be significant if the Project would:

1. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
    b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Grading and ground disturbing activity could potentially impact currently unknown subsurface Tribal Cultural Resources. Therefore, impacts associated with tribal cultural resources under threshold 1 are analyzed below.

Paleontological Resources

Paleontological resources (fossils) are the remains and/or traces of prehistoric life. Fossils are typically preserved in layered sedimentary rocks and the distribution of fossils is a result of the sedimentary history of the geologic units within which they occur. Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on a number of factors. Although it is not possible to determine whether a fossil will occur in any specific location, it is possible to evaluate the potential for geologic units to contain scientifically significant paleontological resources, and therefore evaluate the potential for impacts to those resources and provide mitigation for paleontological resources if they do occur during construction.

Methodology

Rincon evaluated the paleontological sensitivity of the geologic units that underlie the Project area using the results of the paleontological locality search and review of existing information in the scientific literature concerning known fossils within those geologic units. Rincon reviewed fossil collections records from the University of California Museum of Paleontology (UCMP) online database, which contains known fossil localities in Los Angeles County.

Significance Thresholds and Paleontological Sensitivity

Significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, rare, diagnostically important, or are common but have the potential to provide valuable scientific information for evaluating evolutionary patterns and geologic processes. New or unique specimens can provide new insights into evolutionary history; however, additional specimens of even well represented lineages can be equally important for studying evolutionary pattern and process, evolutionary rates and paleophylogeography. Even unidentifiable material can provide useful data for dating geologic units if radiocarbon dating is possible. As such, common fossils (especially vertebrates) may be scientifically important, and therefore considered highly significant.

Absent specific agency guidelines, most professional paleontologists in California adhere to guidelines set forth by SVP (2010) in “Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources”. These guidelines establish detailed protocols for the assessment of the paleontological resource potential (i.e., “sensitivity”) of a Project site and outline measures to follow in order to mitigate adverse impacts to known or unknown fossil resources during Project development. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units.

Using baseline information gathered during a cultural resource assessment, the paleontological resource potential of the geologic unit(s) (or members thereof) underlying a Project area can be assigned to a high, undetermined, low, or no paleontological sensitivity category, as defined by SVP (2010). This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. While these standards were specifically written to protect vertebrate paleontological resources, all fields of paleontology have adopted these guidelines.

b. Project Impacts and Mitigation Measures

Cultural Resources

Threshold 2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5.

Threshold 3: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Threshold 4: Disturb any human remains, including those interred outside of dedicated cemeteries.

Tribal Cultural Resources

Threshold 1: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact CUL-1 CONSTRUCTION OF THE PROSED PROJECT WOULD INVOLVE GROUND-DISTURBING ACTIVITIES SUCH AS GRADING AND SURFACE EXCAVATION, WHICH HAVE THE POTENTIAL TO UNEARTH OR ADVERSELY IMPACT PREVIOUSLY UNIDENTIFIED ARCHAEOLOGICAL RESOURCES, PALEONTOLOGICAL RESOURCES, HUMAN REMAINS, AND/OR TRIBAL CULTURAL RESOURCES. NO KNOWN CULTURAL OR TRIBAL CULTURAL RESOURCES ARE PRESENT ON THE PROJECT SITE. THEREFORE, POTENTIAL IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

The cultural resources records search and pedestrian field survey did not identify any prehistoric or historic cultural resources on the Project site. The Project site has been developed for at least 80 years and does not contain any areas of native or undisturbed ground surfaces. The presence of gravel along the edges of the developed and paved portions of the Project site indicates that the underlying soils are disturbed and may contain fill material. No archaeological resources are known to have been discovered and none were observed during the site survey.

Although Project implementation is not expected to uncover historic and/or archaeological resources, it would involve grading of the entire site and excavation to a maximum depth of about 28 to 30 feet. Therefore, the possibility for the discovery of buried cultural resources cannot be ruled out during excavation and grading for the proposed Project and impacts would be potentially significant.

Cultural Resources Records Search

As listed and further described in Table 1 of the Cultural Resources Assessment (see Appendix E), the SCCIC records search identified eight previously recorded cultural resources in the records search area. None of these resources are located on the current Project site. As listed and further described in Table 2 of the Cultural Resources Assessment, the SCCIC records search additionally identified 24 previously conducted cultural resources studies in the records search area. Of these, two studies included a portion of the Project site. Neither of these studies identified any cultural resources on the Project site.

Map and Imagery Research

A review of maps depicting Native American village locations for the Burbank area of Los Angeles County (Flaherty 2016; Kirkman 1938) shows that no known village sites have been identified within the general area of the Project site. The nearest recorded villages were noted along the southern end of the Verdugo Hills and at the northern end of Griffith Park, approximately 4.5 miles southeast and two miles south of the Project site, respectively.

According to historic aerial images of the area (NETRonline 2017), several commercial structures existed on the Project site as early as 1952. By 1972, a larger building had been constructed on the property. The building appears to have undergone several modifications continuing through 2004. Aerial imagery indicates that by 2005, all the buildings and structures on the Project site were removed. The property has since remained vacant with no permanent buildings or structures present on the Project site.

Field Survey

The entirety of the Project site has been developed with pavement and concrete. At the time of the field survey, the site was in use as a construction equipment staging area and industrial storage yard associated with Caltrans' work on the I-5 freeway. The northwest portion of the Project site contains a flat paved area. According to historic aerial images of the Project site (NETRonline 2017), it appears that this area may have been the foundation for the main building that existed on the property as early as 1972. Modern refuse and homeless shelters were also present on the Project site. Some areas, particularly around the boundaries of the Project site, were not paved and were inspected for cultural materials. However, gravel was noted in these areas, indicating that they had been previously disturbed.

No cultural resources were identified during the pedestrian field survey. The area displays high levels of disturbance, indicating that intact native soils are not likely to exist in and around the Project site.

Paleontological Resources

The Project area includes one (1) geologic unit mapped at the surface by Dibblee and Ehrenspeck (1991): Quaternary alluvial fan deposits (Qf) of Holocene age. The Holocene alluvium is composed of silt, sand, and fine gravel deposited on alluvial fans emanating from the Verdugo Mountains to the northeast. A search of the paleontological locality records on the (UCMP) online database (2018) resulted in no previously recorded vertebrate fossil localities within Holocene sedimentary deposits within the Project area or vicinity.

Holocene sedimentary deposits, particularly those younger than 5,000 years old, are generally too young to contain fossilized material, but in some locations in the San Fernando Valley they may shallowly overlie older (Pleistocene to Miocene) paleontologically sensitive sedimentary deposits at an unknown depth (SVP 2010; Yerkes and Campbell 2005; UCMP online database 2018). Based on the geotechnical investigations for the Project (Appendix F), artificial fill was encountered during subsurface boring to a maximum depth of 14 feet below ground surface. Given that the maximum depth of disturbance is anticipated to be 28 to 30 feet, previously undisturbed native sediments may be impacted by Project excavation.

In accordance with SVP (2010) guidelines, the Holocene alluvial fan sediments mapped at the surface of the Project area have been assigned a low paleontological sensitivity and impacts to paleontological resources are very unlikely to occur as a result of the Project. Further paleontological resource management is not recommended unless paleontologically sensitive strata are unexpectedly encountered during ground disturbance resulting in the discovery of unanticipated resources during the course of the Project. However, with implementation of the below mitigation measures, potential impacts relating to the discovery of unanticipated resources would be reduced to a less-than-significant level.

Human Remains

No human remains have been identified in the Project site or vicinity. Moreover, because of the level of prior disturbance within the Project site, no interred human remains are expected to be encountered during construction. Although Project implementation is not expected to uncover human remains, it would involve grading of the entire site and excavation to a maximum depth of about 28 to 30 feet. Therefore, the possibility for the discovery of human remains cannot be ruled out during excavation and grading for the proposed Project and impacts would be potentially significant. Implementation of the below mitigation measure would reduce potential impacts related to the discovery of human remains to a less-than-significant level.

Tribal Cultural Resources

As of the date of this Draft EIR, no specific Tribal Cultural Resources were identified within the Project site. The entire Project site displays high levels of disturbance, indicating that intact native soils are not likely to exist in and around the Project site. Project implementation is not expected to uncover cultural resources of Native American origin, which could be considered Tribal Cultural Resources. However, the Project would involve grading of the entire site and excavation to a maximum depth of about 28 to 30 feet. Therefore, the possibility for the discovery of previously undiscovered Tribal Cultural Resources cannot be ruled during excavation and grading for the proposed Project and impacts would be potentially significant. Implementation of the below mitigation measure would reduce potential impacts related to the discovery of Tribal Cultural Resources to a less-than-significant level.

Mitigation Measures

The following mitigation measures would reduce impacts related to previously unidentified cultural resources to a less than significant level.

CUL-1a Unanticipated Discovery of Archaeological Resources

- Prior to start of ground-disturbing activities, a qualified archaeologist (who meets the Secretary of the Interior's Professional Qualifications Standards) shall be retained by the Project applicant to conduct cultural resources sensitivity training for all construction personnel. Construction personnel shall be informed of the types of archaeological resources that may be encountered, the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains, and safety precautions to be taken when working with archaeological monitors. The Project applicant shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

- In the event of the unanticipated discovery of archaeological materials, the Project applicant shall immediately cease all work activities in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. Construction shall not resume until the qualified archaeologist has conferred with the City on the significance of the resource. If it is determined that the discovered archaeological resource constitutes a historical resource or unique archaeological resource pursuant to CEQA, avoidance and preservation in place shall be the preferred manner of mitigation. Preservation in place maintains the important relationship between artifacts and their archaeological context and also serves to avoid conflict with traditional and religious values of groups who may ascribe meaning to the resource. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is determined to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the City that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The City shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond that which is scientifically important, are considered.

CUL-1b Unanticipated Discovery of Paleontological Resources

- A qualified paleontologist, defined as a paleontologist who meets the standards of the Society for Vertebrate Paleontology (SVP[2]), shall be retained by the Project applicant to carry out all mitigation measures related to paleontological resources.
- Prior to the start of construction, the Project applicant shall cause the qualified paleontologist, or his or her designee to conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The Project applicant shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance. This training may be conducted concurrently with the cultural resources sensitivity training required under Mitigation Measure CUL-1a or CUL-1b.
- Ground disturbing construction activities (including grading, trenching, foundation work, and other excavations) in previously undisturbed sediments that exceed 10 feet in depth shall be monitored on a full-time basis during initial ground disturbance. Monitoring shall be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources and meets the minimum standards of the SVP (2010). The duration and timing of the monitoring shall be determined by the qualified paleontologist and the location and extent of proposed ground disturbance. If the qualified

[2] Society for Vertebrate Paleontology. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology, Impact Mitigation Guideline Revision Committee. Available online ate http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx. Accessed September 29, 2017.

paleontologist determines that fulltime monitoring is no longer warranted, based on the specific geologic conditions at the surface or at depth, the qualified paleontologist may recommend that monitoring be reduced to periodic spot-checking or cease entirely. Monitoring shall not be required in artificial fill or for activities that do not reach 10 feet in depth.

- In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. The qualified paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the qualified paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources: 1) Salvage of Fossils. The qualified paleontologist (or paleontological monitor) shall recover significant fossils following standard field procedures for collecting paleontological resources, as described by the SVP (2010). Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case the paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. 2) Preparation and Curation of Recovered Fossils. Once salvaged, significant fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology), along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the qualified paleontologist.

CUL-1c Unanticipated Discovery of Human Remains

- If human remains are encountered, the Project applicant shall halt work in the vicinity (within 100 feet) of the discovery and contact the Los Angeles County Coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the County Coroner determines that the remains are Native American, the NAHC will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98 (as amended by AB 2641). The NAHC will designate a Most Likely Descendent (MLD) for the remains per PRC Section 5097.98. Until the landowner has conferred with the MLD, the contractor shall ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices, and that further activities take into account the possibility of multiple burials.

CUL-1d Unanticipated Discovery of Tribal Cultural Resources

- In the event that cultural resources of Native American origin are identified during construction, the City shall consult with a qualified archaeologist (who meets the Secretary of the Interior’s Professional Qualifications Standards) and begin or continue Native American consultation procedures. If the City, in consultation with local Native Americans, determines that the resource is a Tribal Cultural Resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. The mitigation plan may include, but would not be limited to avoidance, capping in place, excavation and removal of the resource, interpretive displays, sensitive area signage, or other mutually agreed upon measure.

Significance After Mitigation

Through the monitoring of ground disturbance and evaluation of any unidentified cultural resources, should they be discovered, implementation of Mitigation Measures CUL-1a through CUL-1d would reduce impacts to previously unidentified archaeological resources, paleontological resources, human remains, and tribal cultural resources to a less than significant level.

c. Cumulative Impacts

The Project, in conjunction with other nearby planned, pending, and potential future projects in the City of Burbank as discussed in Section 3, Environmental Setting, would have the potential to adversely impact as yet undiscovered cultural resources. However, like the Project, other planned and pending developments in the area would involve redevelopment of already graded and developed sites in an urban area. The Project would result in no impact to historic resources and a less than significant impact to archaeological, paleontological, and tribal cultural resources as well as human remains with mitigation identified above. As such, the Project would not contribute to cumulative impacts on cultural resources in the Project vicinity. In addition, individual development proposals are reviewed separately by the appropriate jurisdiction and undergo environmental review when it is determined that the potential for significant impacts exist. In the event that future cumulative projects would result in impacts to known or unknown cultural resources, impacts to such resources would be addressed on a case-by-case basis. Future cumulative projects would also be required to comply with existing regulatory requirements related to the unanticipated discovery of cultural resources and human remains. Therefore, impacts related to cultural resources would not be significant and the Project would not make a considerable contribution to cumulative cultural resource impacts.

4.4 Geology and Soils

This section analyzes potential impacts related to soils and geologic processes. The analysis is based in part on the February 12, 2016, geotechnical report prepared by GeoCon West, Inc. (Appendix F).

4.4.1 Setting

The Project site is in the eastern portion of the San Fernando Valley situated along the southwestern edge of the Verdugo Mountains (Hitchcock & Wills 2000). The San Fernando Valley is an alluvial-filled basin, approximately 23 miles wide and 12 miles long. The alluvium within the San Fernando Valley is mainly derived from the Santa Monica Mountains to the south, the Santa Susana Mountains to the north, the Simi Hills to the west, the San Gabriel Mountains to the northeast, and the Verdugo Mountains to the east. Regionally, the Project site is in the southern portion Transverse Ranges geomorphic province, which is characterized by east-west trending geologic structures such as the nearby Santa Monica Mountains and the east-west trending active San Fernando fault zone. Topography at the Project site gently slopes to the south-southeast with elevations ranging from approximately 578 to 588 feet above mean sea level (U.S. Geological Survey datum).

Soil and Geologic Conditions

Based on the field investigation conducted for the geotechnical report and published geologic maps of the area, the Project site is underlain by artificial fill and Holocene to late Pleistocene age alluvial fan deposits consisting of unconsolidated to slightly consolidated sand, silt and gravel (California Geological Survey 2010; Hitchcock and Wills 2000). Detailed stratigraphic profiles are provided on the boring logs in Appendix F.

Artificial fill was encountered in the field explorations to a maximum depth of 14 feet below existing ground surface. The artificial fill consists primarily of brown, reddish brown and grayish brown fine- to medium-grained silty sand with some fine gravel and lesser amounts of silt, and is characterized as slightly moist and very loose to medium dense or soft. The fill is likely the result of past grading and construction activities at the Project site. Deeper fill may exist between excavations and in other portions of the Project site that were not directly explored.

Holocene to late Pleistocene age alluvial fan deposits were encountered beneath the fill materials. The alluvium generally consists of light brown to yellowish brown, interbedded well-graded to poorly graded sand, silty sand, sand with silt, sandy silt, and silt with varying amounts of gravel. The alluvium is fine- to coarse-grained and characterized as slightly moist and loose to very dense or very soft to stiff.

Groundwater

Based on a review of the Seismic Hazard Zone Report for the Burbank 7.5-Minute Quadrangle (California Division of Mines and Geology [CDMG] 1998), the historically highest groundwater level in the general area is between 20 and 30 feet beneath the ground surface. Groundwater information was generated from data collected in the early 1900s to the late 1990s.

Groundwater was not encountered in the field explorations drilled to a maximum depth of 61.5 feet below the existing ground surface. However, it is not uncommon for groundwater levels to vary seasonally or for groundwater seepage conditions to develop where none previously existed, especially in impermeable fine-grained soils that are heavily irrigated or after seasonal rainfall. As concluded in the geotechnical report, a groundwater depth of 50 feet was chosen based on a review of groundwater well data near the Project site with regular readings over the past 50 years. Based on current groundwater basin management practices, it is unlikely that groundwater levels will ever exceed the historic high levels (see Appendix F). In addition, as concluded in the geotechnical report, recent requirements for stormwater infiltration could result in shallower seepage conditions in the immediate Project site vicinity (see Appendix F). The geotechnical report will be submitted for City review as part of the Low Impact Development (LID) submittals for City review.

Geologic Hazards

Surface Fault Rupture

The numerous faults in Southern California include active, potentially active, and inactive faults. The criteria for these major groups are based on criteria developed by the California Geological Survey (CGS, formerly known as CDMG) for the Alquist-Priolo Earthquake Fault Zone Program (Bryant and Hart, 2007). By definition, an active fault is one that has had surface displacement within Holocene time (about the last 11,000 years). A potentially active fault has demonstrated surface displacement during Quaternary time (approximately the last 1.6 million years), but has had no known Holocene movement. Faults that have not moved in the last 1.6 million years are considered inactive.

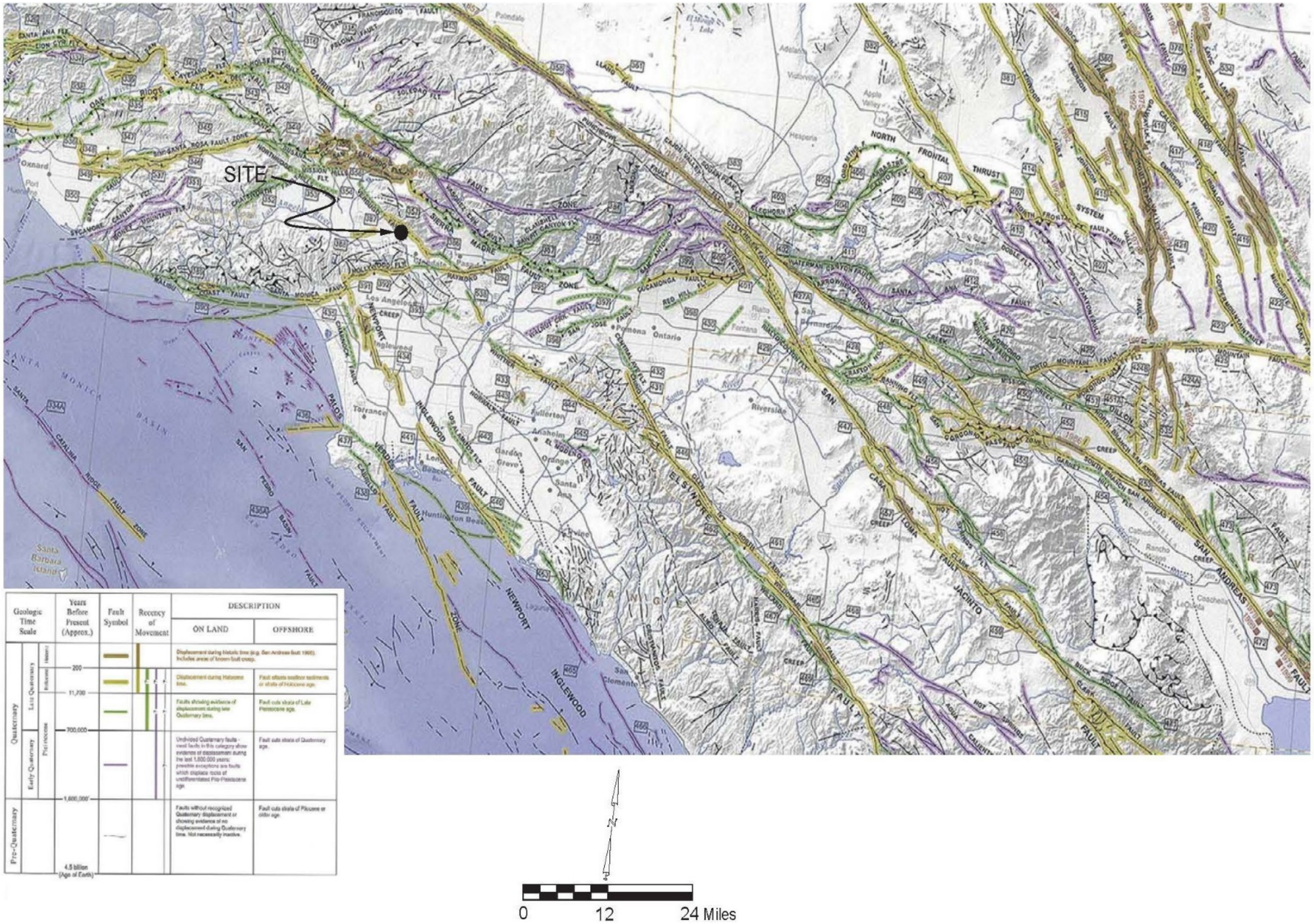
The Project site is not within an Alquist-Priolo Earthquake Fault Zone and no active or potentially active faults with the potential for surface fault rupture are known to pass directly beneath the Project site. The closest surface trace of an active fault to the Project site is the Verdugo Fault located approximately one mile to the northeast (CGS 2014). Other nearby active faults are the Hollywood Fault, Sierra Madre Fault, and the Raymond Fault located approximately five miles south, 5.6 miles northeast, 6.3 miles southwest of the Project site, respectively (Ziony and Jones 1989). The active San Andreas Fault Zone is located approximately 29 miles northeast of the Project site. Figure 4.4-1 depicts the location of various faults within the region.

Several buried thrust faults, commonly referred to as blind thrusts, underlie the Los Angeles Basin at depth. These faults are not exposed at the ground surface and are typically identified at depths greater than 1.9 miles. The October 1, 1987 magnitude 5.9 Whittier Narrows earthquake and the January 17, 1994 magnitude 6.7 Northridge earthquake were a result of movement on the Puente Hills Blind Thrust and the Northridge Thrust, respectively. Thrust faults do not present a potential surface fault rupture hazard; however, these active features can generate future earthquakes and significant ground motion.

Seismicity

As with all of Southern California, the Project site has experienced historic earthquakes from various regional faults. The epicenters of recorded earthquakes with magnitudes equal to or greater than 5.0 in the site vicinity are depicted on Figure 5, Regional Seismicity Map of the geotechnical report (see Appendix F). Additionally, a partial list of moderate to major magnitude earthquakes that have occurred in the Southern California area within the last 100 years are included in the geotechnical report. The seismicity of the region surrounding the Project site was formulated based on research of an electronic database of earthquake data.

Figure 4.4-1 Regional Fault Map



Source: Geocon West, Inc., February 2016.

Liquefaction Potential

Liquefaction is a phenomenon in which loose, saturated, relatively cohesionless soil deposits lose shear strength during strong ground motions. Primary factors controlling liquefaction include intensity and duration of ground motion, gradation characteristics of the subsurface soils, in-situ stress conditions, and the depth to groundwater. Liquefaction is typified by a loss of shear strength in the liquefied layers due to rapid increases in pore water pressure generated by earthquake accelerations. Liquefaction typically occurs in areas where the soils below the water table are composed of poorly consolidated, fine to medium-grained, primarily sandy soil. In addition to the requisite soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to induce liquefaction.

The State of California Seismic Hazard Zones Map for the Burbank Quadrangle (CDMG 1999) identifies the Project site as being in an area that has a potential for liquefaction. In addition, the County of Los Angeles Safety Element (Leighton 1990) and the Safety Element of the City of Burbank General Plan (2013) indicate that the Project site is located in an area designated as "liquefiable."

A liquefaction analysis was performed for the soils underlying the Project site for the Design Earthquake level by using a groundwater table of 50 feet below the ground surface, a magnitude 6.66 earthquake, and a peak horizontal acceleration of 0.56g ($^2/_3$ PGA_M). A groundwater depth of 50 feet was chosen based on a review of groundwater well data near the Project site with regular readings over the past 50 years. Exploration of the Project site included eight boring locations. The liquefaction analyses for borings B1, B5, and B8 located at the northern, central and southern portions of the site, respectively, indicate that the alluvial soils below the groundwater level could be prone to less than 0.1 inch of liquefaction induced settlement during Design Earthquake ground motion. Figure 4.4-2 depicts the approximate location of boring.

Additional analysis to evaluate the potential for liquefaction was performed during a Maximum Considered Earthquake Ground Motion (MCE) event using a groundwater table of 50 feet below the ground surface, a magnitude 6.66 earthquake, and a peak horizontal acceleration of 0.84g (PGA_M). The liquefaction analyses for borings B1, B5, and B8, indicate that the alluvial soils below the groundwater level could be prone to less than 1.1 inch of liquefaction induced settlement during Maximum Considered Earthquake ground motion.

Seismically–Induced Settlement

Dynamic compaction of dry and loose sands may occur during a major earthquake. Typically, settlements occur in thick beds of such soils. Seismically-induced settlement calculations were performed in accordance with the American Society of Civil Engineers, Technical Engineering and Design Guides as adapted from the US Army Corps of Engineers, No. 9. The calculations provided for borings B1, B5 and B8 indicate that the soil above the groundwater level of 50 feet could be prone to less than 0.59 ($^2/_3$ PGA_M). The calculations provided for borings B1, B5, and B8 indicate that the soil above the groundwater level of 50 feet could be prone to less than 0.91 inches of settlement as a result of the Maximum Considered Earthquake peak ground acceleration (PGA_M).

Slope Stability – Landslides and Lateral Spreading

Landslides occur when slopes become unstable and masses of earth material move downslope. Landslides are generally considered to be rapid events, often triggered during periods of rainfall or by earthquakes. Mudslides and slumps are a shallower type of slope failure compared to landslides.

Figure 4.4-2 Boring Location Map

Imagery provided by Microsoft Bing and its licensors © 2018.
Additional data provided by Geocon West, Inc, 2016.

Lateral spreading may occur when potentially liquefiable soils are present and exposed in conjunction with a sloping ground surface. If soils in the slope liquefy, temporary instability could result in movement of sediments and slope failure. The topography at the Project site is relatively flat to gently sloping to the southwest. According to the County of Los Angeles Safety Element (Leighton 1990) and the Safety Element of the City of Burbank General Plan (2013), the Project site is not located in an area identified as having a potential for slope instability. In addition, the Project site is not in an area designated as having a potential for seismic slope instability (CDMG 1999). There are no known landslides near the Project site, nor is the site in the path of any known or potential landslides.

Subsidence

Subsidence occurs when a large portion of land is displaced vertically, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content. Based on the field investigation conducted for the geotechnical report and published geologic maps of the area, the Project site is underlain by artificial fill and Holocene to late Pleistocene age alluvial fan deposits consisting of unconsolidated to slightly consolidated sand, silt and gravel (California Geological Survey 2010; Hitchcock and Wills 2000). The Project site is not located in an area of known ground subsidence. No large-scale extraction of groundwater, gas, oil, or geothermal energy is occurring or planned at the Project site or in the site vicinity.

Regulatory Setting

International and Federal Regulations

INTERNATIONAL BUILDING CODE

The International Building Code (IBC) is published by the International Code Council (ICC). The scope of this code covers major aspects of construction and design of structures and buildings. The IBC has replaced the Uniform Building Code (UBC) as the basis for the California Building Code (CBC) and contains provisions for structural engineering design. The IBC addresses the design and installation of structures and building systems through requirements that emphasize performance. The IBC includes codes governing structural as well as fire- and life-safety provisions covering seismic, wind, accessibility, egress, occupancy, and roofs.

EARTHQUAKE HAZARDS REDUCTION ACT

U.S. Congress passed the Earthquake Hazards Reduction Act in 1977 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 (NEHRP). This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act (NEHRPA), which refined the description of agency responsibilities, program goals, and objectives.

State Regulations

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONING ACT

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (Public Resources Code Sections 2621-2630) was passed into law following the destructive February 9, 1971 San Fernando Earthquake that had a magnitude of 6.6. The Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. Generally, siting of structures for human occupancy must be set back from the fault by approximately 50 feet. This Act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive.

SEISMIC SAFETY ACT

The California Seismic Safety Commission was established by the Seismic Safety Act in 1975 with the intent of providing oversight, review, and recommendations to the Governor and State Legislature regarding seismic issues. The commission's name was changed to Alfred E. Alquist Seismic Safety Commission in 2006. Since then, the Commission has adopted several documents based on recorded earthquakes, such as the 1994 Northridge earthquake, 1933 Long Beach earthquake, the 1971 Sylmar earthquake, and etcetera. Some of these documents are listed as follows:

- Research and Implementation Plan for Earthquake Risk Reduction in California 1995 to 2000, report dated December 1994;
- Seismic Safety in California's Schools, 2004, "Findings and Recommendations on Seismic Safety Policies and Requirements for Public, Private, and Charter Schools," report dated December 1994;
- Findings and Recommendations on Hospital Seismic Safety, report dated November 2001;
- Commercial Property Owner's Guide to Earthquakes Safety, report dated October 2006; and
- California Earthquake Loss Reduction Plan 2007–2011, report dated July 2007.

SEISMIC HAZARDS MAPPING ACT

The Seismic Hazards Mapping Act of 1990 was enacted, in part, to address seismic hazards not included in the Alquist-Priolo Act, including strong ground shaking, landslides, and liquefaction. Under this Act, the State Geologist is assigned the responsibility of identifying and mapping seismic hazards. CGS Special Publication 117, adopted in 1997 by the State Mining and Geology Board, constitutes guidelines for evaluating seismic hazards other than surface faulting, and for recommending mitigation measures as required by Public Resources Code Section 2695 (a). In accordance with the mapping criteria, the CGS seismic hazard zone maps identifies areas with the potential for a ground shaking event that corresponds to 10 percent probability of exceedance in 50 years.

The purpose of the Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and State agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The Act requires site-specific geotechnical investigations prior to permitting most urban development projects in seismic hazard zones.

CALIFORNIA BUILDING CODE (CBC)

The California Building Code (CBC), Title 24, Part 2 provides building codes and standards for the design and construction of structures in California. 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 controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of building and structures. The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control. Chapter 16 of the CBC contains definitions of seismic sources and the procedure used to calculate seismic forces on structures.

The CBC is updated every three years by order of the legislature, with supplements published in intervening years. State Law mandates that local government enforce the CBC. In addition, a City, County, or City and County may establish more restrictive building standards reasonably necessary because of local climatic, geological, or topographical conditions. The CBC is based on the International Building Code with the addition of more extensive structural seismic provisions. Pursuant to Title 9, Chapter 1, of the Burbank Municipal Code (BMC) the City of Burbank has adopted the 2016 CBC.

Local Regulations

BURBANK MUNICIPAL CODE

BMC Title 7, Article 1, Section 105(c) and (d), define the requirements of the Engineering Geological Report and Soil Engineering Report required with a project’s grading plans. The Engineering Geological Report shall be prepared and signed by an engineering geologist and shall include a description of the geology of the site, conclusions and recommendations regarding the effect of geological conditions on the proposed development, and a geologic map of sufficient detail as to portray the existing field condition. The Soils Engineering Report shall be prepared by a soils engineer and shall include data regarding the nature, distribution and strength of existing soils, conclusions and recommendations for grading procedures, design criteria for corrective measures, or other criteria as may be necessary. Conclusions from these reports shall be incorporated into the grading plans or specifications for the Project.

CITY OF BURBANK GENERAL PLAN

The Burbank2035 General Plan Chapter 7, Safety Element, contains the following geology and soils policies applicable to the Project:

Goal 5: Seismic Safety

Injuries and loss of life are prevented, critical facilities function, and property loss and damage is minimized during seismic events.

> **Policy 5.1:** Require geotechnical reports for development within a fault area that may be subject to risks associated with surface rupture.
>
> **Policy 5.2:** Require geotechnical reports for new development projects in areas with the potential for liquefaction or landslide.
>
> **Policy 5.3:** Enforce seismic design provisions of the current California Building Standards Code related to geologic, seismic, and slope hazards.
>
> **Policy 5.4**: Encourage and facilitate retrofits of seismically high-risk buildings to reduce risks from seismic ground shaking.

4.4.2 Impact Analysis

a. Methodology and Significance Thresholds

This evaluation is based on review of existing information developed for the Project site, including a geotechnical evaluation and report prepared by Geocon West, Inc. (2016), the County of Los Angeles Safety Element (Leighton 1990), and the Safety Element of the City of Burbank General Plan (2013).

In accordance with Appendix G of the *CEQA Guidelines*, a project would result in a significant impact related to geology and soils if it would:

1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
   a. Rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
   b. Strong seismic ground shaking;
   c. Seismic-related ground failure, including liquefaction; or
   d. Landslides.
2. Result in substantial soil erosion or the loss of topsoil;
3. 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;
4. Be located on expansive soil, as defined in Table 18-1-B of the International Building Code, creating substantial risks to life or property; or
5. 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 Initial Study (Appendix A) determined that the Project could result in potentially significant impacts related to liquefaction (criterion 1c), substantial soil erosion or the loss of topsoil (criterion 2), and geologic instability (criterion 3). As such, an analysis of these issues is included in this section of the EIR. The Initial Study found no potentially significant impacts related to criteria 1(a), 1(b), 1(d), 4, or 5; therefore, these issues are not studied further herein.

b. Project Impacts and Mitigation Measures

Threshold 1c:	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.
Threshold 3:	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.

Impact GEO-1 SEISMICALLY-INDUCED GROUND SHAKING COULD CAUSE LIQUEFIABLE SEDIMENTS TO LOSE SUPPORTING STRENGTH AND LIQUEFY, RESULTING IN LOSS OF PROPERTY OR RISK TO HUMAN HEALTH AND SAFETY. ALTHOUGH THE PROPOSED PROJECT IS NOT LOCATED ON A GEOLOGIC UNIT OR SOIL THAT IS UNSTABLE, THERE IS POTENTIAL FOR LIQUEFACTION AND LIQUEFACTION INDUCED SUBSIDENCE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The Project site is in an area designated as having the potential for liquefaction as indicated in the Burbank2035 General Plan Safety Element, Exhibit S-4: Liquefaction Zones and on the CGS Seismic Hazard Zone map for the area. As discussed in the geotechnical report (see Appendix F), the current standard of practice, as outlined in the “Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigating Liquefaction in California” and “Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California,” requires liquefaction analysis to a depth of 50 feet below the lowest portion of the proposed structure. In addition to the requisite soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to induce liquefaction.

As discussed above under *Existing Conditions*, a liquefaction analysis was performed for the soils underlying the Project site. The liquefaction analyses for borings B1, B5, and B8 located at the northern, central and southern portions of the Project site, respectively, indicate that the alluvial soils below the groundwater level could be prone to less than 0.1 inch of liquefaction induced settlement during Design Earthquake ground motion and the groundwater level could be prone to less than 1.1 inch of liquefaction induced settlement during Maximum Considered Earthquake ground motion. Based on the results of the geotechnical analysis, the following PDFs proposed by the applicant would address potential impacts associated with liquefaction. All PDFs would also be incorporated into the Development Agreement review process as Conditions of Approval. With adherence to all PDFs, revised as needed for compliance with current CBC requirements and to the satisfaction of the City’s Building Official or his/her designee, and the City’s Structural Engineer, the design and construction of the building would be engineered to withstand the expected ground acceleration and potential liquefaction that may occur at this Project site. Project construction would not increase liquefaction potential and impacts would be less than significant.

Project Design Features

Geology PDF 1 – Geotechnical Design Considerations

Excavations for the subterranean portion of the proposed multi-family residential structures are anticipated to penetrate through a majority of the existing artificial fill, if not all. Based on these considerations, the proposed multi-family residential structures shall be supported on a conventional spread foundation system deriving support in the undisturbed alluvial soils found at and below a depth of 14 feet below the existing ground surface.

The following foundation design considerations related to soil engineering must be incorporated into the Project grading and building plans, revised as needed for compliance with current California Building Code (see Section 7.7 of the geotechnical report). Design and construction of the building shall be engineered to withstand the expected ground acceleration and potential liquefaction that may occur at the Project site. These include, but are not limited to:

- Continuous footings shall be designed for an allowable bearing capacity of 2,500 pounds per square foot (psf), and a minimum of 12 inches in width, 18 inches in depth below the lowest adjacent grade, and 12 inches into the recommended bearing material.
- Isolated spread foundations shall be designed for an allowable bearing capacity of 3,000 psf, and a minimum of 24 inches in width, 18 inches in depth below the lowest adjacent grade, and 12 inches into the recommended bearing material.
- The allowable soil bearing pressure above shall be increased by 300 psf and 500 psf for each additional foot of foundation width and depth, respectively, up to a maximum bearing pressure of 5,000 psf.
- The allowable bearing pressures shall be increased by one-third for transient loads due to wind or seismic forces.
- Continuous footings shall be reinforced with a minimum of four No. 4 steel reinforcing bars, two placed near the top of the footing and two near the bottom. The reinforcement for isolated spread footings shall be designed by the Project structural engineer.
- For preliminary design purposes 24-, 30-, and 36-inch diameter drilled cast-in-place friction piles have been evaluated. Piles shall be embedded a minimum of 20 feet into the competent alluvium found at and below a depth of 14 feet and derive axial and lateral support exclusively in the undisturbed alluvial soils.
- Casing may be required if caving occurs in the granular soil layers during deep drilled excavation. The contractor shall have casing available and be prepared to use it. If casing is used, extreme care shall be employed so the pile is not pulled apart as the casing is withdrawn. At no time should the distance between the surface of the concrete and the bottom of the casing be less than five feet.

Once the design and foundation loading configurations for the proposed structures proceeds to a more finalized plan, the estimated settlements presented in the geotechnical report shall be reviewed and revised, if necessary, as part of the structural plan check and building permit process and the LID submittals to the City. If the final foundation loading configurations are greater than the assumed loading conditions, the potential for settlement shall be reevaluated. The foundation design shall comply with the applicable California Building Standards Code at the time of a building permit application and shall be to the satisfaction of the City's Building Official.

Geology PDF 2 – Geotechnical Project Design Features for Foundation Construction

The recommendations for foundation construction contained in the 2016 geotechnical report would be implemented as Project Design Features that include, but are not limited to, the following:

SHORING DESIGN

Unless otherwise modified by the City's Building Official or his/her designee, all recommendations presented in the geotechnical report pertaining to the shoring design considerations shall be followed. Soldier piles, lagging, and tie backs shall be designed to withstand the earth pressure resulting from adjacent soils, traffic loading, and temporary equipment used to excavate the slopes and drive the shoring. For soldier piles driven below the groundwater table, special provisions shall be followed to ensure that caving is minimized. The shoring contractor shall provide its design to the City's Building Official or his/her designee for review and approval prior to commencement of shoring. Lagging deflection and tie back resistance strength shall be measured in the field to ensure that these features are able to withstand the earth pressures that they will undergo.

FOUNDATION OBSERVATIONS

All foundation excavations shall be observed by a City-approved geotechnical engineer to verify penetration into the recommended bearing materials. The observation shall be performed prior to the placement of reinforcement. All foundation pile excavations shall be performed under the continuous observation by City-approved geotechnical engineer to verify penetration into firm undisturbed natural soils. Foundations shall be deepened if necessary to extend into satisfactory soils, or proper compaction shall be performed to ensure that the foundation slab is built upon dense compact material. Foundation excavations shall be cleaned of all loose soils prior to placing steel and concrete. Any required foundation backfill shall be mechanically compacted, flooding is not permitted.

CONSTRUCTION MONITORING

Compliance with the design concepts, specifications or recommendations during construction requires review by a California licensed geotechnical engineer. All foundations shall be observed by a California licensed geotechnical engineer prior to placing concrete or steel. Any fill which is placed shall be observed, tested, and verified if used for engineering purposes. It is the responsibility of the contractor to ensure that all excavations and trenches are properly sloped or shored. All temporary excavations shall be cut and maintained in accordance with applicable OSHA rules and regulations.

Geology PDF 3 – Geotechnical Project Design Features if Groundwater is Encountered

Groundwater was not encountered during site exploration, and the groundwater table is sufficient deep that it will not be encountered during pile installation. However, local seepage may be encountered during excavations for the proposed soldier piles, especially if conducted during the rainy season. The recommendations contained in the 2016 geotechnical report in regards to groundwater would be implemented as Project Design Features that include, but are not limited to, the following:

TREMIE USE

If more than six inches of water is present in the bottom of the excavation, a tremie is required to place the concrete into the bottom of the hole. A tremie shall consist of a rigid, water-tight tube having a diameter of not less than six inches with a hopper at the top. The tube shall be equipped with a device that will close the discharge end and prevent water from entering the tube while it is being charged with concrete. The tremie shall be supported so as to permit free movement of the discharge end over the entire top surface of the work and to permit rapid lowering when necessary to retard or stop the flow of concrete. The discharge end shall be closed at the start of the work to prevent water entering the tube and shall be entirely sealed at all times, except when the concrete is being placed. The tremie tube shall be kept full of concrete. The flow shall be continuous until the work is completed and the resulting concrete seal shall be monolithic and homogeneous. The tip of the tremie tube shall always be kept about five feet below the surface of the concrete and definite steps and safeguards shall be taken to ensure that the tip of the tremie tube is never raised above the surface of the concrete.

CONCRETE MIX

A special concrete mix shall be used for concrete to be placed below water. The design shall provide for concrete with a strength of 1,000 per square inch over the initial job specification. An admixture that reduces the problem of segregation of paste/aggregates and dilution of paste shall be included. The slump shall be commensurate to any research report for the admixture, provided that it shall also be the minimum for a reasonable consistency for placing when water is present. Extreme care shall be employed so that the pile is not pulled apart as the casing is withdrawn. At no time shall the distance between the surface of the concrete and the bottom of the casing be less than five feet. Continuous observation of the drilling and pouring of the piles shall be inspected by a Certified Special Inspector certified in concrete inspections.

Mitigation Measures

The previously noted PDFs and resulting Conditions of Approval would address impacts related to liquefaction; therefore, mitigation would not be required.

Threshold 2:	Result in substantial soil erosion or the loss of topsoil.

Impact GEO-2 GRADING, EXCAVATION, AND OTHER CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE PROPOSED PROJECT COULD RESULT IN EROSION RESULTING FROM EXPOSED SOILS. HOWEVER, THE PROPOSED PROJECT SHALL ADHERE TO THE BURBANK MUNICIPAL CODE (BMC) WHICH REQUIRES IMPLEMENTATION OF A STORMWATER POLLUTION PREVENTION PLAN AND BEST MANAGEMENT PRACTICES TO CONTROL EROSION, SEDIMENT RELEASE, AND OTHERWISE REDUCE THE POTENTIAL FOR DISCHARGE OF POLLUTANTS IN STORMWATER. UPON COMPLIANCE WITH THE BMC, IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Erosion is an impact caused by human activity and disturbance of surface soil, and can naturally occur by wind and water. Increased soil erosion could occur as a result of ground disturbance, including construction activity. Accelerated erosion within an urban area could cause damage by undermining structures; blocking storm sewers; and depositing silt, sand, or mud in roads and tunnels, and result in degradation of water quality. The BMC (Article 4, 9-3-407, 9-3-413, and 9-3-414) requires construction site operators to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) that outlines project-specific Best Management Practices (BMP) to control erosion, sediment release, and otherwise reduce the potential for discharge of pollutants in stormwater. Typical BMPs for controlling erosion may include, but are not limited to:

- Requiring that permanent slopes and embankments be vegetated following final grading;
- Installation of silt fences, erosion control blankets; and
- Installation of anti-tracking pads at site exits to prevent off-site transport of soil materials.

As discussed further in Section 4.7, *Hydrology and Water Quality*, through regulatory compliance, potential impacts associated with erosion would be less than significant.

Mitigation Measures

Implementation of the City's requirements for a SWPP and associated BMPs would result in a less than significant impact and therefore no mitigation is required.

c. Cumulative Impacts

The planned and pending projects in the vicinity of the Project site, listed in Table 3-1 of this EIR, include 22 projects consisting of retail, restaurant, residential, office, industrial, hotel, school airport and transportation related land uses. Projects that are within the vicinity of the Project site include First Street Village Mixed-Use Project (Related Project No. 6), Premier at First Street Mixed-Use Project (Related Project No. 7), Burbank Town Center Redevelopment Project (Related Project No. 10), Olive Station Mixed-Use Project (Related Project No. 14) and Burbank Common Project (Related Project No. 15). These planned and pending projects would increase structural development in the vicinity of the Project site. Such development would expose new residents and property to potential risks from seismic hazards in the area. However, like the proposed Project, all new planned and pending development in the City would be subject to current seismic and erosion control standards. In addition, although new development would be subject to existing geologic and seismic hazards, it would not increase the potential for such hazards. Geologic hazards are site-specific and individual developments would not create additive impacts that would affect geologic conditions on other sites. Therefore, impacts would be less than significant.

4.5 Greenhouse Gas Emissions

This section analyzes greenhouse gas (GHG) emissions associated with the Project and potential impacts related to climate change. Air quality impacts are discussed in Section 4.2, *Air Quality,* and the Air Quality and Greenhouse Gas Emission Study prepared by Rincon is included as Appendix D.

4.5.1 Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The term "climate change" is often used interchangeably with the term "global warming," but "climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years. Per the United Nations Intergovernmental Panel on Climate Change (IPCC, 2014), the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-20th century (IPCC 2014).

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHG). The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHG because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

Both natural processes and human activities emit GHGs. CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills. Observations of CO_2 concentrations, globally-averaged temperature, and sea level rise are generally well within the range of the extent of the earlier IPCC projections. The recently observed increases in CH_4 and N_2O concentrations are smaller than those assumed in the scenarios in the previous assessments. Each IPCC assessment has used new projections of future climate change that have become more detailed as the models have become more advanced.

Man-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and SF6 (CalEPA 2006). Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally 100 years). Because GHG absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO_2e), and is the amount of a GHG emitted multiplied by its GWP. CO_2 has a 100-year GWP of one. By contrast, CH_4 has a GWP of 25, meaning its global warming effect is 25 times greater than CO_2 on a molecule per molecule basis (IPCC 2007). The United States Environmental Protection Agency (USEPA) began regulating GHG emissions under the Clean Air Act. Specifically, the Clean Air Act regulates carbon dioxide, methane, nitrous oxide, and fluorinated gases[1] USEPA 2017a). The IPCC outlines multiple methods of calculating GWPs; therefore, the USEPA presents the GWPs in a range, as outlined below (USEPA 2017a):

- Carbon dioxide (CO_2) – 1
- Methane (CH_4) – 28 – 36
- Nitrous oxide (N_2O) – 265 - 298
- Fluorinated gases –thousands or tens of thousands, depending

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat trapping effect of GHGs, Earth's surface would be about 34° C cooler (CalEPA 2006). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

4.5.2 Greenhouse Gas Emissions Inventory

Worldwide anthropogenic emissions of GHG were approximately 49,000 million metric tons (MMT, or gigatonne) of CO_2e in 2010 (IPCC 2014). CO_2 emissions from fossil fuel combustion and industrial processes contributed about 65 percent of total emissions in 2010. Of anthropogenic GHGs, CO_2 was the most abundant accounting for 76 percent of total 2010 emissions. CH_4 emissions accounted for 16 percent of the 2010 total, while N_2O and fluorinated gases account for approximately 6.2 and two percent, respectively (IPCC 2014).

Total U.S. GHG emissions were 6,586.7 million metric tons (MMT or gigatonne) CO_2e in 2015 (USEPA 2017b). Total U.S. emissions have increased by 3.5 percent since 1990; emissions decreased by 2.3 percent from 2014 to 2015 (USEPA 2017b). The decrease from 2014 to 2015 was a result of multiple factors, including: (1) substitution from coal to natural gas consumption in the electric power sector; (2) warmer winter conditions in 2015 resulting in a decreased demand for heating fuel in the residential and commercial sectors; and (3) a slight decrease in electricity demand (USEPA 2017b). Since 1990, U.S. emissions have increased at an average annual rate of 0.2 percent. In 2015, the industrial and transportation end-use sectors accounted for 29 percent and 27 percent of CO_2 emissions (with electricity-related emissions distributed), respectively. Meanwhile, the residential and commercial end-use sectors accounted for 16 percent and 17 percent of CO_2 emissions, respectively (USEPA 2017b).

Based on the CARB California Greenhouse Gas Inventory for 2000-2015, California produced 440.4 MMT CO_2e in 2015 (CARB 2017b). The largest single source of GHG in California is transportation, contributing 39 percent of the state's total GHG emissions. Industrial sources are the second largest source of the state's GHG emissions, contributing 23 percent of the state's GHG emissions (CARB 2017b). California emissions are due in part to its large size and large population compared to other states. However, the mild climate reduces California's per capita fuel use and GHG emissions as compared to other states. The CARB has projected statewide unregulated GHG emissions for the

[1] Chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) are considered fluorinated gases.

year 2020 will be 509.4 MMT CO_2e (CARB 2017c). These projections represent the emissions that would be expected to occur in the absence of any GHG reduction actions.

4.5.3 Potential Effect of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air, land, and water temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Long-term trends have found that each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The global combined land and ocean temperature data show an increase of about 0.89°C (0.69°C–1.08°C) over the period 1901–2012 and about 0.72°C (0.49°C–0.89°C) over the period 1951–2012 when described by a linear trend. Several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations are in agreement that LSAT, and surface temperatures, have increased. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014).

According to the CalEPA's 2010 Climate Action Team Biennial Report, potential impacts of climate change in California may include decreased snow pack, sea level rise, and increase in extreme heat days per year, high ground-level O3 days, large forest fires, and drought (CalEPA 2010). Below is a summary of some of the potential impacts that could be experienced in California as a result of climate change.

a. Air Quality

Higher temperatures, which are conducive to air pollution formation, could worsen air quality in many areas of California. Climate change may increase the concentration of ground-level O_3, but the magnitude of the effect, and therefore its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thereby ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (CEC 2009).

b. Hydrology and Sea Level Rise

As discussed above, climate changes could potentially affect the amount of snowfall, rainfall and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Sea level rise can be a product of global warming through two main processes: expansion of seawater as the oceans warm, and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California's water supply, and increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

c. Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future water supplies in California. However, the average early spring snowpack in the Sierra Nevada decreased by about 10 percent during the last century, a loss of 1.5 million acre-feet of snowpack storage. During the same period, sea level rose eight inches along California's coast. California's temperature has risen 1°F, mostly at night and during the winter, with higher elevations experiencing the highest increase. Many Southern California cities have experienced their lowest recorded annual precipitation twice within the past decade. In a span of only two years, Los Angeles experienced both its driest and wettest years on record (DWR 2008; CCCC 2009).

This uncertainty complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The Sierra snowpack provides the majority of California's water supply by accumulating snow during the state's wet winters and releasing it slowly during the state's dry springs and summers. Based upon historical data and modeling DWR projects that the Sierra snowpack will experience a 25 to 40 percent reduction from its historic average by 2050. Climate change is also anticipated to bring warmer storms that result in less snowfall at lower elevations, reducing the total snowpack (DWR 2008).

d. Agriculture

California has a $30 billion annual agricultural industry that produces half of the country's fruits and vegetables. Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater air pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (CCCC 2006).

e. Ecosystems and Wildlife

Climate change and the potential resulting changes in weather patterns could have ecological effects on the local and global levels. Increasing concentrations of GHGs are likely to accelerate the rate and severity of climate change impacts. Scientists project that the average global surface temperature could rise by 1.0-4.5°F (0.6-2.5°C) in the next 50 years, and 2.2-10°F (1.4-5.8°C) during the next century, with substantial regional variation. Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3) species' composition within communities; and (4) ecosystem processes, such as carbon cycling and storage (Parmesan 2006).

Existing/Baseline Project Site Greenhouse Gas Emissions

The Project site is vacant and does not generate substantial GHG emissions. Therefore, this GHG analysis conservatively assumed the baseline emissions to be zero and focused on potential impacts from construction and operations of the proposed Project.

4.5.4 Regulatory Setting

The following regulations address both climate change and GHG emissions.

a. Federal Regulation

The United States Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al*. ([2007] 549 U.S. 05-1120) held that the U.S. EPA has the authority to regulate tail pipe emissions from motor-vehicles under the Federal Clean Air Act.

The U.S. EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines, and requires annual reporting of emissions. The first annual reports for these sources were due in March 2011.

On May 13, 2010, the U.S. EPA issued a Final Rule that took effect on January 2, 2011, setting a threshold of 75,000 tons of CO_2e per year for GHG emissions. New and existing industrial facilities that meet or exceed that threshold will require a permit after that date. On November 10, 2010, the U.S. EPA published the "PSD and Title V Permitting Guidance for Greenhouse Gases." The U.S. EPA's guidance document is directed at state agencies responsible for air pollution permits under the Federal Clean Air Act to help them understand how to implement GHG reduction requirements while mitigating costs for industry. It is expected that most states will use the U.S. EPA's new guidelines when processing new air pollution permits for power plants, oil refineries, cement manufacturing, and other large pollution point sources.

On January 2, 2011, the U.S. EPA implemented the first phase of the Tailoring Rule for GHG emissions Title V Permitting. Under the first phase of the Tailoring Rule, all new sources of emissions are subject to GHG Title V permitting if they are otherwise subject to Title V for another air pollutant and they emit at least 75,000 tons of CO_2e per year. Under Phase 1, no sources were required to obtain a Title V permit solely due to GHG emissions. Phase 2 of the Tailoring Rule went into effect July 1, 2011. At that time new sources were subject to GHG Title V permitting if the source emits 100,000 tons of CO_2e per year, or they are otherwise subject to Title V permitting for another pollutant and emit at least 75,000 tons of CO_2e per year.

On July 3, 2012, the U.S. EPA issued a Final Rule that retains the GHG permitting thresholds that were established in Phases 1 and 2 of the GHG Tailoring Rule. These emission thresholds determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

In 2014, the U.S. Supreme Court in *Utility Air Regulatory Group v. EPA* (134 S. Ct. 2427 [2014]) held that U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology (BACT).

b. California Regulations

CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. California has numerous regulations aimed at reducing the State's GHG emissions. These initiatives are summarized below.

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires ARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, U.S. EPA granted the waiver of Clean Air Act preemption to California for its GHG standards for motor vehicles beginning with the 2009 model year. Pavley I took effect for model years starting in 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" will cover 2017 to 2025. Fleet average emission standards would reach 22 percent reduction from 2009 levels by 2012 and 30 percent by 2016. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (ARB 2011).

In 2005, the governor issued Executive Order (EO) S-3-05, establishing statewide GHG emissions reduction targets. EO S-3-05 provides that by 2010, emissions shall be reduced to 2000 levels; by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent below 1990 levels (CalEPA 2006). In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report") (CalEPA 2006). The 2006 CAT Report identified a recommended list of strategies that the state could pursue to reduce GHG emissions. These are strategies that could be implemented by various state agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the state agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, etc. In April 2015, the governor issued EO B-30-15 calling for a new target of 40 percent below 1990 levels by 2030.

California's major initiative for reducing GHG emissions is outlined in Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006," signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels; the same requirement as under S-3-05), and requires ARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires ARB to adopt regulations to require reporting and verification of statewide GHG emissions.

After completing a comprehensive review and update process, ARB approved a 1990 statewide GHG level and 2020 limit of 427 MMT of CO_2e. The Scoping Plan was approved by ARB on December 11, 2008 and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since approval of the Scoping Plan. Implementation activities are ongoing.

In May 2014, ARB approved the first update to the AB 32 Scoping Plan. The 2013 Scoping Plan update defines ARB's climate change priorities for the next five years and sets the groundwork to reach post-2020 goals set forth in EO S-3-05. The update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluates how to align the State's longer-term GHG reduction strategies with other State policy priorities, such as for water, waste, natural resources, clean energy and transportation, and land use (CARB 2017d).

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the California Resources Agency (Resources Agency) adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

ARB Resolution 07-54 establishes 25,000 MT of GHG emissions as the threshold for identifying the largest stationary emission sources in California for purposes of requiring the annual reporting of emissions. This threshold is just over 0.005 percent of California's total inventory of GHG emissions for 2004.

Senate Bill (SB) 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing ARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the RTP. On September 23, 2010, ARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035.

SCAG was assigned targets of an eight percent reduction in GHGs from transportation sources by 2020 and a 13 percent reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements.

In April 2011, the governor signed SB 2X, requiring California to generate 33 percent of its electricity On September 8, 2016, the governor signed Senate Bill 32 (SB 32) into law, extending AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies and policies, such as SB 350 and SB 1383 (see below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) CO_2e by 2030 and two MT CO_2e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.

Adopted on October 7, 2015, SB 350 supports the reduction of GHG emissions from the electricity sector through a number of measures, including requiring electricity providers to achieve a 50 percent renewables portfolio standard by 2030, a cumulative doubling of statewide energy efficiency savings in electricity and natural gas by retail customers by 2030.

Adopted in September 2016, SB 1383 requires the CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

The bill also requires CalRecycle, in consultation with the State board, to adopt regulations that achieve specified targets for reducing organic waste in landfills. For more information on the Senate and Assembly Bills, Executive Orders, and reports discussed above, and to view reports and research referenced above, please refer to the following websites: www.climatechange.ca.gov and www.arb.ca.gov/cc/cc.htm.

c. California Environmental Quality Act

Pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted CEQA Guidelines provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. To date, a variety of air districts have adopted quantitative significance thresholds for GHGs.

d. Regional Regulations

As discussed above, SB 375 requires MPOs to prepare an RTP/SCS that will achieve regional emission reductions through sustainable transportation and growth strategies. On September 23, 2010, CARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. SCAG was assigned targets of an 8 percent reduction in GHGs from transportation sources by 2020 and a 13 percent reduction in GHGs from transportation sources by 2035. Most recently, SCAG adopted the 2016-2040 RTP/SCS on April 7, 2016. It includes a number of strategies and objectives to encourage transit-oriented and infill development and use of alternative transportation to minimize vehicle use.

e. Local Regulations

The City of Burbank adopted the Burbank 2035 Greenhouse Gas Reduction Plan (GGRP) in 2013. Guided by the framework set forth in the City's 2035 General Plan, the GGRP implements Goal 3 and associated Policies 3.1 and 3.2. Policy 3.1 establishes the target for Burbank to reduce communitywide greenhouse gas emissions by at least 15% from current levels by 2020, and Policy 3.2 establishes the goal to reduce emissions by at least 30% from current levels by 2035. This target and goal are consistent with statewide efforts established in the Scoping Plan to reduce statewide GHG emissions to 1990 levels by 2020 and 80% below 1990 levels by 2050 (City of Burbank 2013).

Based on the 2010 jurisdictional emissions inventory and projections for the City provided in the GGRP, the 2020 communitywide emissions reduction target is 1,430,120 MT of CO_2e/year. Reductions from current statewide policies would contribute emissions reductions of 368,670 MT of CO_2e/year. Therefore, local actions must address an emissions gap of 61,109 MT of CO_2e/year by 2020. To achieve the 2035 communitywide emissions reduction goal of 1,177,746 MT of CO_2e/year, the City would require reductions of 949,754 MT of CO_2e/year. Reductions achieved from statewide policies would contribute 494,944 MT of CO_2e/year and local actions would be needed to achieve the remaining emissions gap of 454,810 MT of CO_2e/year by 2035.

As discussed in Section 2, *Air Quality*, the Burbank 2035 General Plan provides goals and policies related to greenhouse gas reductions in the Air Quality and Climate Change Element. The specific goals and policies include the following:

Goal 3: Reduction of Greenhouse Gas Emissions

Policy 3.1: Develop and adopt a binding, enforceable reduction target and mitigation measures and actions to reduce communitywide greenhouse gas emissions within Burbank by at least 15% from current levels by 2020.

Policy 3.2: Establish a goal and strategies to reduce communitywide greenhouse gas emissions by at least 30% from current levels by 2035.

Policy 3.3: Continue to participate in the Cities for Climate Protection program and applicable State and federal climate change programs.

Policy 3.4: Reduce greenhouse gas emissions from new development by promoting water conservation and recycling; promoting development that is compact, mixed-use, pedestrian-friendly, and transit-oriented; promoting energy-efficient building design and site planning; and improving the jobs/housing ratio.

Policy 3.5: Submit an annual report on implementation of the Greenhouse Gas Reduction Plan, in conjunction with the annual report to the City Council regarding implementation of Burbank2035.

Policy 3.6: Reduce greenhouse gas emissions by encouraging the retrofit of older, energy inefficient buildings.

Policy 3.8: Transition all economic sectors, new development, and existing infrastructure and development to low- or zero-carbon energy sources. Encourage implementation and provide incentives for low- or zero-carbon energy sources.

Goal 4: Climate Change

Policy 4.1: Evaluate the potential effects of climate change on Burbank's human and natural systems and prepare strategies that allow the City to appropriately respond.

Policy 4.2: Consult with state resource and emergency management agencies regarding updates to climate change science and development of adaptation priorities.

4.5.5 Impact Analysis

a. Significance Thresholds

Based on Appendix G of the State CEQA Guidelines, impacts related to GHG emissions from the Project would be significant if the Project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (AEP 2017).

In guidance provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010, SCAQMD considered a tiered approach to determine the significance of residential and commercial projects. The draft tiered approach is outlined in meeting minutes dated September 29, 2010. However, the SCAQMD never adopted this approach.

- **Tier 1.** If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- **Tier 2.** Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines Section 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.
- **Tier 3.** Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 3,000 metric tons (MT) of CO_2e per year for mixed use projects.
- **Tier 4.** Establishes a service population efficiency threshold to determine significance. The Working Group has provided a recommendation of 4.1 MT of CO_2e per year for plans based on statewide service population.

CEQA Guidelines Section 15064.4 recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of project-related GHG emissions, including: the extent to which the project may increase or reduce GHG emissions; whether a project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs.

Section 15064.4 does not establish a threshold of significance. Lead agencies have the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), as long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see CEQA Guidelines Section 15130(f)). As a note, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions." Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The SCAQMD has not adopted GHG emissions thresholds that apply to land use projects where the SCAQMD is not the lead agency. Additionally, the City of Burbank has not adopted quantitative GHG emissions thresholds. However, the City has adopted a qualified local GHG reduction plan (the GGRP) that establishes GHG emissions targets for 2020 and 2035 and is consistent with CEQA Section 15183.5(b). Therefore, the Project's GHG emissions would be considered less than significant if there is substantial evidence to support the finding that the Project is consistent with the City's GGRP (Tier 2).

b. Project Impacts

Threshold 1:	Would the proposed project conflict with the applicable plan, policy or regulation of the purpose of reducing emissions of greenhouse gases?

Impact GHG-1 THE PROJECT WOULD NOT CONFLICT WITH THE APPLICABLE PLAN, POLICY, OR REGULATION FOR REDUCING GREENHOUSE GAS (GGRP). THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Consistency Evaluation

As mentioned under *Local Regulations*, the City of Burbank has developed a Greenhouse Gas Reduction Plan (GGRP) in addition to the Air Quality and Climate Change Element included in the City's General Plan. There are a number GGRP and General Plan policies that were established to reduce the citywide levels of GHG over time, which were summarized under Local Regulations above. The General Plan has a specific policy (Policy 3.4) that's aimed to reduce GHG emissions from new development by promoting water conservation and recycling; promoting development that is compact, mixed-use, pedestrian-friendly, and transit-oriented; promoting energy-efficient building design and site planning; and improving the jobs/housing ratio. The Project would be consistent with this policy as it is an infill development, located near existing transit, and would include water efficient appliances and fixtures, drip irrigation, and drought tolerant landscaping that uses recycled water. The Project is also consistent with applicable GGRP policies, as outlined in Table 4.5-1. Additionally, the design and implementation of the Project would comply with applicable State policies to reduce GHG emissions associated with energy use, including the Renewable Portfolio Standard and Title 24 of the California Building Code that would reduce anticipated emissions associated with the proposed Project. The Project would be conditioned to comply with these existing requirements. For example, in accordance with the 2016 California Green Building Standards Code, the Project would include a schedule of plumbing fixtures and fixture fittings that would reduce the overall use of potable water within the building by at least 20 percent. The reduction would be based on the maximum allowable water use per plumbing fixture and fitting as required by the California Building Standards Code.

Furthermore, the Project would involve a residential development in an urbanized area that is served by public transit. Specifically, two commuter rail line and 10 bus lines currently serve the Project area. As outlined in Section 4.12, *Transportation and Traffic*, the project would be served by the Metrolink commuter rail, Los Angeles County Metropolitan Transportation Authority (Metro) bus lines, Burbank Bus lines, and Glendale Beelines. The Project would also be located within 0.3 miles of Chandler Boulevard that has a bike path and within 0.4 miles of Victory Boulevard, which has a bike lane. The project's proximity to these bicycle facilities would encourage the use of active transportation. Therefore, the proposed Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and would be consistent with the objectives of SCAG's RTP/SCS as well as other applicable plans and policies.

Table 4.5-1 Project Consistency with Applicable GGRP Measures

Measure	Project Consistency
Mandatory Measures	
E-1.1 Energy Efficiency in New Construction The City will require new commercial project to be constructed to Title 24 Tier 1 levels (e.g., exceed current efficiency standards by 15 percent).	**Consistent** The Project would be constructed in a manner that would provide consistency with Title 24 Tier 1 levels. Additionally, the design and development of residential uses included in the Project would comply with CALGreen Building Standards, which includes measures to reduce emissions and energy consumption. The Project would also comply with SCAQMD Rule 1113 that limits ROGs from building architectural coatings to 50 g/ L.
E-1.7 Building Shade Trees BWP will continue to administer the Made in Shade Program. The City will also revise the Zoning Ordinance to require the planning of two building shade trees per parcel to accompany each new single-family residential unit. The City will update its Street Tree Plan and Urban Forestry program, with a focus on identifying streets that currently lack street trees, parking lots that could accommodate additional shade trees, and locations for new tree plantings in City parks and open space.	**Consistent** Although the Project would not include single-family residential units, the Project involves the development of internal courtyards, expanded sidewalks, and a publicly accessible plaza that would include a mix of amenities such as landscaping, seating, and new shade trees. The Project also involves the creation of earth mounds and the use of sound walls to provide a sound buffer as well as the incorporation of evergreen trees where physically feasible to act as a screen and reduce the heat island effect.
E-2.1 Renewable Energy Requirements The City will require new single-family residential homes to include a 1.8 kWh solar voltaic system, and will require new multi-family and commercial construction to provide 10% of the buildings modeled energy use from renewable sources (e.g., solar PV, geothermal heat pumps). The City will require installation of solar water heaters in all new residential construction, to the fullest extent possible. The City will also require pre-wiring and pre-plumbing on new construction for residential solar PV and solar water heaters to provide for easier and less costly future installation.	**Consistent** The Project would include renewable energy via roof-top solar panels, use of the Green Building Code, pre-wiring for solar and electric vehicles and the payment of applicable development impact and aid in construction fees to the City's public utilities. Collectively these efforts will ensure compliance with the City's long-term goals of moving toward the use of alternative fuels.
E-2.1 Transportation Management Organization Expansion The City will work with the TMO to expand the geographic reach of its programs and the extent of services it currently provides; first expanding into the Golden State and Empire areas (by 2020), and then expanding citywide at a later date. In each case, the City will require that all	**Consistent** The Project applicant would be a participant in the TMO and will fulfill the associated reporting requirements. Additionally, the Project would promote trip reduction measures through the following: ▪ A total of 73 bicycle parking spaces for residences and the hotel (57 residential and 16 hotel).

Measure	Project Consistency
new businesses with 25 or more employees located within the TMP boundary become TMO members and fulfill reporting requirements.	▪ Direct sidewalk access from street to Project building. ▪ Safe bicycle access from the street to bicycle parking facilities.
SW-1.1 Food Scrap and Compostable Paper Diversion Ordinance The City will adopt a food scraps and compostable paper diversion ordinance, requiring all food waste and compostable paper to be diverted from the waste stream to composting facilities. As part of this ordinance, the City will update its yard waste collection program to allow customers to include food scraps and compostable paper in their yard waste bins.	**Consistent** The Project would be required to comply with all applicable City ordinances, including those specific to diverting food scraps and compostable paper.
SW-1.2: Yard Waste Diversion Ordinance The City will adopt an ordinance banning disposal of yard waste in trash bins. Multi-family residential and non-residential properties that are not currently served by the City's solid waste collection program would need to contract with a yard waste collection service provider.	**Consistent** The Project would be required to comply with all applicable City ordinances, including those specific to diverting yard waste.
Voluntary Measures	
E-1.3 ENERGY STAR Appliances The City will encourage voluntary community participation to install ENERGY STAR appliances or other energy-efficient appliance models in both new and existing residential units.	**Consistent** The Project would include ENERGY STAR or similarly rated appliances in new residential units in order to maximize all appliances energy efficiency.

As outlined in the above paragraph and Table 4.5-1, the mixed-use Project would be consistent with the local GGRP policies related to GHG emission reduction; therefore, impacts would be less than significant, and mitigation is not required. Due to consistency with the applicable GHG reduction plan, City's General Plan, and the SCAG RTP/SCS, Project impacts would be less than significant under the with SCAQMD's draft tiered approach.

Mitigation Measures

The Project would be consistent with the City's GGRP; therefore no mitigation measures are required.

c. Cumulative Impacts

Table 3-1 in Section 3.0, Environmental Setting, lists planned and pending developments in Burbank. Such development would incrementally increase overall GHG emissions generated in Burbank and the region. GHG and climate change are by definition cumulative impacts, as they affect the accumulation of greenhouse gases in the atmosphere. As discussed above, the Project would be consistent with applicable plans and programs designed to reduce GHG emissions. Therefore, the project's contribution to cumulative GHG emissions would not be considerable.

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4.6 Hazards and Hazardous Materials

This section evaluates potential impacts related to hazardous materials in soil and groundwater on and around the Project site. Refer to Section 2, *Project Description*, for a summary of the Response Plan (RP) and Soil Contingency and Management Plan (SCMP) that have been submitted to the Los Angeles Regional Water Quality Control Board (LARWQCB) for concurrence and approval. Other hazards analyzed under CEQA include the long-term use, transport, or storage of large quantities of hazardous materials, and potential impacts related to airports, private airstrips, emergency response plans, and wildland fires. Impacts were found to be less than significant in the Initial Study (Appendix A) and are not discussed further in this section.

4.6.1 Setting

a. Regulatory Setting

Federal, State, and/or local government laws define hazardous materials as substances that are toxic, flammable/ignitable, reactive, or corrosive. Extremely hazardous materials are substances that show high acute or chronic toxicity, carcinogenicity, bioaccumulative properties, persistence in the environment, or that are water reactive.

Federal

Resource Conservation and Recovery Act

At the Federal level, the U.S. Environmental Protection Agency (U.S. EPA) has primary responsibility for enforcing laws and regulations that govern the use, storage, and disposal of hazardous materials and hazardous waste. The Resource Conservation and Recovery Act of 1976 (RCRA) defines when a hazardous substance is a hazardous waste based on a number of criteria, and regulates hazardous wastes from “cradle to grave,” that is, from generation of the waste through disposal. Title 49 of the Code of Federal Regulations (CFR 49) contains lists of more than 2,400 hazardous materials and regulates the transport of those materials.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C Section 9601 et seq.), also known as Superfund, was established to hold multiple parties, including past and present owners, operators, transporters, and generators jointly, severally, and strictly liable for the remediation costs of a hazardously contaminated site.

Superfund Amendments and Reauthorization Act

The Superfund Amendments and Reauthorization Act (SARA) amends CERCLA and increases state involvement and requires Superfund actions to consider state environmental laws and regulations. SARA also established a regulatory program for USTS and the Emergency Planning and Community Right-to-Know Act.

Safe Drinking Water Act

The Safe Drinking Water Act (42 U.S.C Section 300 [f] et seq.) regulates discharges of pollutants to underground aquifers and establishes standards for drinking water quality.

Toxic Substances Control Act

The Toxic Substances Control Act (15 U.S.C. 2601 et seq.) regulates manufacturing, inventory, and disposition of industrial chemicals, including hazardous materials. It addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos-containing materials (ACMs), and lead-based paint (LBP).

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act regulates the transport of hazardous materials by motor vehicles, rail, marine vessels, and aircraft.

Hazardous Materials Uniform Safety Act of 1990

The Hazardous Materials Transportation Uniform Safety Act of 1990 (Public Law 101-615) regulates the safe transport of hazardous material intrastate, interstate, and for foreign commerce. The statute includes provisions to encourage uniformity between different state and local highway routing regulations, to develop criteria for the issuance of federal permits to motor carriers of hazardous materials, and to regulate the transport of radioactive materials.

Emergency Planning and Community Right to Know Act

The Emergency Planning and Community Right to Know Act (42 U.S.C. Section 11001 et seq. and 40 CFR Part 350.1 et seq.) regulates facilities that use hazardous materials in quantities that mandate reporting to emergency response officials.

Occupational Health and Safety Administration Standard 1910.120

The Occupational Health and Safety Administration (OSHA) published Standard 1910.120, which in part requires that employers evaluate the potential health hazard that hazardous materials pose in the workplace and communicate information concerning hazards and appropriate protective measures to employees. Under OSHA Standard 1910.120, a health hazard is defined as "a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees."

State

California Code of Regulations, Title 22, Hazardous Waste Management

At the State level, under Title 22, Division 4.5 of the California Code of Regulations (CCR 22), the California Department of Toxic Substance Control (DTSC) regulates hazardous waste in California primarily under the authority of the federal RCRA and the California Health and Safety Code (HSC). The Hazardous Waste Control Law (HWCL), under Title 22 CCR, Chapter 30, establishes regulations that are similar to RCRA but more stringent in their application and empowers the DTSC to administer the State's hazardous waste program and implement the federal program in California. The DTSC is responsible for permitting, inspecting, ensuring compliance, and imposing corrective action programs to ensure that entities that generate, store, transport, treat, or dispose of potentially hazardous materials and waste comply with federal and State laws. The DTSC defines hazardous waste as waste with a chemical composition or other properties that make it capable of causing illness, death, or some other harm to humans and other life forms when mismanaged or released into the environment.

The DTSC shares responsibility for enforcement and implementation of hazardous waste control laws with the State Water Resources Control Board (SWRCB) and, at the local level, the Regional Water Quality Control Board, and city and county governments.

Proposition 65 – Safe Drinking Water and Toxic Enforcements Act

The California Safe Drinking Water and Toxic Enforcements Act of 1986 (Proposition 65), adopted in November 1986, established a prohibition on contaminating drinking water with chemicals known to cause cancer or reproductive harm, as outlined in the HSC, Division 20, Chapter 6.6 Sections 25249.5 - 25249.14. It also requires businesses to provide warnings before causing exposure to chemicals known to cause cancer or reproductive toxicity, and requires a list of such chemicals to be published and updated annually.

The La Follette Bill

The La Follette Bill (Assembly Bill 3777) established guidelines for Hazardous Materials Management as outlined in the HSC, Division 20, Chapter 6.95, Article 2, Sections 25531-25540. It requires owners or operators of each business in the state, which at any time, handles any acutely hazardous material in quantities equal to or greater than 500 pounds, 55 gallons, or 200 cubic feet under standard temperature and pressure for compressed gas, to register with an administering agency.

The California Environmental Protection Agency (CalEPA) is directly responsible for administrating the “Unified Program,” that consolidates and coordinates the administrative requirements, permits, inspections, and enforcement activities for environmental and emergency management programs. The Unified Program is intended to provide relief to businesses complying with the overlapping and sometimes conflicting requirements of formerly independently managed programs and is implemented at the local government level by Certified Unified Program Agencies (CUPA). A local CUPA is responsible for administering/overseeing compliance with the following programs, as required by State and federal regulations:

- Hazardous Materials Release Response Plans and Inventories (Business Plans)
- California Accidental Release Prevention (CalARP) Program
- Underground Storage Tank Program (UST)
- Aboveground Petroleum Storage Act Requirements for Spill Prevention, Control and Countermeasure (SPCC) Plans
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs
- California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements

Hazardous Waste Control Act

The Hazardous Waste Control Act (HSC, Section 25100 et seq.), is similar to the Federal RCRA in that it regulates the identification, generation, transportation, storage, and disposal of materials deemed hazardous by the State of California.

Cortese List Statute

The Cortese List Statute requires DTSC to compile and maintain lists of potentially contaminated sites located throughout the state, and includes the Hazardous Waste and Substances Sites List.

California Public Resources Code, Section 21151.4

California Public Resources Code Section 21151.4 requires the lead agency to consult with any school district with jurisdiction of a school within 0.25 mile of the Project about potential impacts on the school if the Project might reasonably be anticipated to emit hazardous air emission, or to handle an extremely hazardous substance or a mixture containing an extremely hazardous substance.

California Health and Safety Code, Title 22, Risk-Based Screening Levels and Cleanup Goals

Toxicity criteria for all human health risk assessments, human health risk-based screening levels and remediation (cleanup) goals are established in the California HSC, Title 22, Chapter 50, Section 68400.5 and Chapter 51, Sections 69020 – 69022. Section 68400.5 states that "for any release of hazardous waste or hazardous constituents, the human health risk assessment calculations, including, but not limited to, all cancer risk and non-cancer hazard screening levels and corrective action objectives, shall use the toxicity criteria specified in … Sections 69022, subdivision (a) and (b)." Per Section 69021, all human health risk assessments, and human health risk-based screening levels and remediation goals must use the Office of Environmental Health Hazard Assessment (OEHHA) risk factors, oral slope factors, chronic reference exposure levels, references does(s) and blood-lead values. These values are listed in Appendix I of Section 69021. For any COPC not listed in Appendix I, toxicity criteria provided in the US EPA Integrated Risk Information System (IRIS) database shall be used. For COPCs not listed in Appendix I or the IRIS database, toxicity criteria from another source may be used, provided that it applies the best available science and is health-based.

The California HSC Section 25395.95 (c), states that "on or before 60 days after the date an agency receives a response plan, the agency shall make a written determination that proper completion of the response plan constitutes appropriate care for purposes of subdivision (a) of Section 25395.67." The statute defines appropriate care in HSC Section 25395.67 as either of the following:

(a) The performance of a response action, with respect to hazardous materials found at a site, for which the agency makes the determination specified in paragraph (1) of subdivision (c) of Section 25395.96 and that meets all of the following conditions:

   (1) The response action is determined by an agency to be necessary to prevent an unreasonable risk to human health and safety or the environment, as defined in Section 25395.90.

   (2) The response action is performed in accordance with a response plan approved by the agency pursuant to Article 6 (commencing with Section 25395.90).

   (3) The approved response plan includes a provision of oversight and approval of the completed response action by the agency pursuant to Article 6 (commencing with Section 25395.90); or

(b) A determination that no further action is required pursuant to Section 25395.95.

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) was created by the State legislature to facilitate compliance with the federal Clean Air Act and to implement the State air quality program in Los Angeles County. SCAQMD Rule 402 prohibits discharges from any source such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or 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. SCAQMD Rule 403 reduces the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions. Rule 1166 sets requirements to control the emission of volatile organic compounds (VOC) from excavating, grading, handling and treating VOC-contaminated soil as a result of leakage from storage or transfer operations, accidental spillage, or other deposition. SCAQMD Rule 1466 sets forth air monitoring requirements for toxic air contaminants during earth moving activities at sites designated as cleanup sites by a regulatory agency (such as the LARWQCB). The purpose of the rule is to minimize off-site fugitive dust emissions containing toxic air contaminants. SCAQMD Rule 1403 specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities.

Local

In the City of Burbank, the local CUPA is Los Angeles County CUPA, which is managed by the Los Angeles County Fire Department Health Hazardous Materials Division. The City of Burbank Fire Department oversees UST and piping removal per the City of Burbank Municipal Code.

Health Risk Assessment Regulatory Oversight

Regulatory agencies such as the U.S. EPA, DTSC, and OEHHA set forth guidelines that list concentration thresholds over which contaminants may pose a risk to human health. The U.S. EPA combines current toxicity values of contaminants with exposure factors to estimate concentrations of contaminants that may pose a risk to human health. The concentrations set forth by the U.S. EPA are termed Regional Screening Levels (RSL) for various pollutants in soil, air, and tap water (U.S. EPA, 2018). RSL concentrations can be used to screen pollutants in environmental media, trigger further investigation, and provide an initial cleanup goal. RSLs for soil contamination have been developed for both industrial and residential land uses. Residential RSLs are more conservative than industrial RSLs and take into account the possibility of the contaminated environmental media coming into contact with sensitive receptor sites such as childcare facilities and schools. RSLs consider exposure to pollutants by means of ingestion, dermal contact, and inhalation.

The DTSC has set forth Screening Levels (DTSC-SLs) for select contaminants in soil, indoor air, and tap water based on values calculated using Cal-EPA toxicity criteria and risk assessment procedures. While the majority of the DTSC-SLs reflect RSL values, some are up to three times more conservative (DTSC, 2018).

The Project site currently has an open environmental case with the LARWQCB. The agency is overseeing site assessment and remediation in accordance with the provisions of the California Land Reuse and Revitalization Act (CLRRA) of 2004. It is our understanding that the LARWQCB has agreed to the use of USEPA Residential RSLs for soil as site-specific cleanup goals for the Project. According to the RP, cleanup goals have not been established for the Project site for contaminants in soil vapor.

Groundwater Regulatory Oversight

Both the U.S. EPA and the California Department of Health Services (DHS) promulgate regulations with respect to the concentration of various chemicals in drinking water. The DHS thresholds for drinking water are generally stricter than those set by the U.S. EPA. Primary maximum contaminant levels (CalMCLs) are established for a number of chemical and radioactive contaminants (Title 22, Division 4, Chapter 15, CCR) in groundwater. CalMCLs are often used by regulatory agencies to determine cleanup standards when contaminants affect groundwater with beneficial uses or potential beneficial uses as drinking water aquifers.

The State Water Resources Control Board (SWRCB) and LARWQCB regulate water quality in the State of California pursuant to statutory requirements set forth in the Porter-Cologne Water Quality Control Act (Cal. Water Code, Section 13000 et seq.), including oversight of water monitoring and contamination cleanup and abatement.

b. Project Site Hazardous Materials Setting

Historical Land Use

The Project site has a history of industrial use involving manufacturing, fabrication and assembly operations extending from the 1930s until about 1991. Former businesses located at the Project site included the General Water Heater Company (1930s-1961) and the Zero Manufacturing Company (1961-1991). From 1964 to 1973, Zero subleased a portion of their property to Ocean Technology, Inc. for the manufacturing of electronic products; however, few details regarding this operation are noted in available documentation (Blackstone, 2018).

General Water Heater Company facilities included a metal-working building with an oil tank, a boiler shop, a galvanizing and foundry building, an assembly, stockroom and machine shop with spray painting and plating rooms, storage buildings, and offices (Blackstone 2016). Zero Manufacturing Company (Zero), a manufacturer of metal containers and cases, purchased the site in 1961 and demolished all former buildings. Zero occupied the site until approximately 1991. Manufacturing operations included metal and foam packaging, sulfuric anodizing, chromate conversion coating, degreasing, assembly, aluminum case drawing and washing, aluminum alodining, chromate deoxidizing, and steel phosphate coating (Mactec 2005; Blackstone 2016). Facilities included paint booths, a water-based paint shop and drying booth, aluminum machining, etching, deoxidizing and cleaning, and chemical and hazardous waste storage areas (Blackstone 2016; Mactec 2005).

Violations pertaining to discharge limitations for cadmium, chromium, lead, and total toxic organics were identified during an environmental evaluation conducted by Law/Crandall in 1997. According to information obtained during a document review conducted by Ninyo & Moore during a parcel acquisition site investigation in 2009, a violation for discharging waste water with elevated chromium concentrations was identified, and hazardous wastes generated at the Project site included solvents, waste oil, acids, and paint sludge. Chemicals routinely used reportedly included 1,1,1-trichloroethane (1,1,1-TCA), hydrochloric acid, nitric acid, chromic acid, sodium hydroxide, paint thinner, and hydraulic oil (Ninyo & Moore, 2009).

Two 5,000-gallon underground storage tanks were reportedly removed from the Project site from near either Building 10 or 15 circa 1987 according to Burbank Fire Department Records. In a letter dated August 10, 1987 the Los Angeles County Department of Public Works indicated that closure was considered final and no further action was required. Soil samples were collected from 3 feet below the UST inverts. TPH as gasoline was detected at concentrations ranging from 2.5 to 31 parts per million (Mactec 2005).

Onsite manufacturing operations ceased in 1991. In 1993 one clarifier was removed and four were capped in place. The Project site was used for storage and filming purposes through 2002 and has been unoccupied since that time. Buildings were demolished in 2004, however concrete pads were left in place (Mactec, 2005). An abandoned crude oil pipeline traverses the southeast portion of the property, trending northeast to southwest (Mactec 2005; Blackstone, 2016; and NPMS 2018). ExxonMobil reportedly owns the pipeline and will prepare a workplan to remove the pipeline under the appropriate environmental oversight agency.

Summary of Environmental Assessments

Industrial and manufacturing operations historically conducted at the Project site have impacted soil vapor with VOCs, and soil is impacted with VOCs and metals. Extensive environmental assessment has been conducted at the Project site, and previous assessment and remedial activities have been reported in the following documents that have been reviewed by Rincon:

- Blackstone Consulting LLC (Blackstone), 2016, Phase I Environmental Site Assessment (ESA), Proposed Redevelopment Property, 777 North Front Street, Burbank, Los Angeles County, California, March 14
- Blackstone, 2018, Phase I ESA Report, Redevelopment Property, 777 North Front Street, Burbank, Los Angeles County, California 91502, June 27
- Emcon, 1997, Results of Phase II Environmental Site Assessment Along North Front Street, Burbank, California, October 22
- Geosyntec Consultants (Geosyntec), 2012, Soil Assessment Report, 777 North Front Street, Burbank, California, September 10
- Geosyntec, 2016, Soil Assessment Report, Additional Boring SS-4A, 777 North Front Street, Burbank, California, July 22
- Geosyntec, 2017, Groundwater Impacts Assessment, 777 North Front Street, Burbank, California, May
- Geosyntec, 2017, Human Health Risk Assessment (HHRA), 777 North Front Street, Burbank, California, May
- Geosyntec, 2018, Technical Memorandum, Addendum to the HHRA dated May 2017, 777 North Front Street, Burbank, California, May
- Geosyntec, 2018, Supplemental Site Investigation Report, 777 North Front Street, Burbank, California, April
- Geosyntec, 2019, Response Plan, 777 North Front Street, Burbank, California, March 19.
- Golder Associates, 2005, Environmental Sampling and Analysis Report, Front Street Property, Burbank, California, May 2
- Hydro Geo Chem, 1992, Subsurface Investigation, Zero Enclosures Facility, September 29
- Hydro Geo Chem, Inc., 2001a, Results of Site Remediation and Request for No Further Action, Former APW Facility, 777 Front Street, Burbank, CA, April 5
- Hydro Geo Chem, Inc., 2001b, Supplemental Site Closure Information, Former APW Facility, 777 Front Street, Burbank, CA, August 23
- Law/Crandall, 1997, Report of Environmental Evaluation, 777 North Front Street, Burbank, California, October 1
- Leighton Consulting, Inc. (Leighton), 2016, Report, Soil Gas Survey and Soil Investigation, Eight-Acre Proposed Mixed Use Development, 777 North Front Street, City of Burbank, California, July 12

- Leighton, 2019, Soil Contingency and Management Plan, 777 North Front Street, Burbank, California, March 15.
- Los Angeles Regional Water Quality Control Board (LARWQCB), 2001, No Further Requirements – Former Zero Corporation Facility, 777 Front St., Burbank, CA, November 28
- Mactec, Inc., 2005, Report of Phase I Environmental Site Assessment, Former Zero Corporation Facility, 777 North Front Street, Burbank, California, April 5
- Ninyo & Moore, 2009, Parcel Acquisition Site Investigation, 777 North Front Street, I-5 Southbound between Magnolia and Burbank Avenues, 07-LA-5; PM 28.1/31.9, June 30.
- Targhee, 1991, Final Report, Subsurface Investigation, Zero West, Report of Findings, February 14

Select reports are provided in Appendix G.

Initial Subsurface Investigations (1991-1992)

In 1991, Targhee conducted an initial subsurface investigation in response to a directive from the Los Angeles Regional Water Quality Control Board (LARWQCB) Well Investigation Program (WIP). Soil samples were collected from boreholes drilled at the influent and effluent ends of each of four onsite industrial waste clarifiers and at six chemical and waste storage areas. Total petroleum hydrocarbons were detected, as were tetrachloroethylene (PCE), trichloroethylene (TCE), and other volatile organic compounds (VOCs). Although plating operations were conducted onsite, soil samples were not analyzed for Title 22 Metals during the initial investigation (Targhee 1991).

In 1992, a site investigation was conducted by Hydro Geo Chem to assess VOCs in soil, soil gas, and groundwater beneath the Zero facility and at a neighboring parcel owned by Southern Pacific Transportation Company and formerly leased by Zero. Six groundwater monitoring wells were reportedly installed and groundwater was encountered at depths ranging from 105 to 115 feet below ground surface (bgs). Groundwater flow was interpreted to be toward the south to southwest. Results of the investigation indicated that VOCs, including PCE, TCE, 1,1,1-TCA and 1,1-dichloroethane (1,1-DCE), were present in soil and soil vapor. VOCs were primarily detected in soil collected in the former Building 11 chemical storage area, soil borings located in Buildings 11 and 12, near the former Building 14 degreaser, and near the former Building 14 1,1,1-TCA tank. Total recoverable petroleum hydrocarbons (TRPH), toluene and 1,2-dichlorobenzene were detected in soil samples at relatively low concentrations. TCE was present in groundwater at significant concentrations, but PCE was present at only trace concentrations. Hydro Geo Chem concluded that TCE concentrations in groundwater were not consistent with the known onsite distribution of TCE in soil and soil gas, suggesting the possibility of an offsite TCE source. PCE concentrations, however, were reportedly suggestive of an onsite source (Hydro Geo Chem 1992).

Environmental Evaluation (1997)

Law/Crandall evaluated previous environmental reports for the Project site in 1997. Hot-spot VOC soil contamination locations included Building 12; a former acid/caustic storage area southwest of Building 14; a former chemical storage area southwest of Building 11; and a former hazardous waste storage area located southwest of Building 11. The highest soil vapor VOC concentrations were detected beneath Buildings 11 and 12 during the 1997 investigation.

Law/Crandall noted that the Project site was listed as a WIP site and that Zero was listed as a potential responsible party by the USEPA for the San Fernando Valley, Area 2, Crystal Springs

Superfund Site. PCE and TCE concentrations in groundwater exceeded their maximum contaminant levels (MCLs) in all onsite and adjacent monitoring wells (MW-1 through MW-10). Law/Crandall noted that Lockheed operated a groundwater remediation system at their facility which was reportedly located to the west and up gradient from the Project site.

Law/Crandall further indicated that the City of Burbank stated in a letter to the LARWQCB dated March 7, 1996 that Zero had allegedly inadvertently contaminated a City-owned property identified as the "Hyrail Site," located adjacent to the southwest, when Zero used portions of the Hyrail Site for chemical and hazardous waste storage. However, based on review of the GeoTracker website, the Hyrail Site had been investigated for Cr(VI) by LARWQCB, the Project site received case closure and no other contaminants of concern were identified on GeoTracker.

In addition to hot-spot areas identified during document review, Law/Crandall identified areas that could have significant soil contamination, including a clarifier, degreaser, assembly area, and chemical/hazardous waste storage locations. Based on these findings, Law/Crandall conducted a subsurface environmental assessment in September 1997. In addition to the hot-spot locations, Law/Crandall collected a soil sample adjacent to the concrete pads of each onsite transformer. Results of the 1997 assessment indicated that total petroleum hydrocarbons (TPH) as heavy oil hydrocarbons and PCE were detected in soil. Semi-volatile organic compounds (SVOC), TPH in the gasoline and diesel (TPHg and TPHd, respectively) range, and polychlorinated biphenyls (PCBs) were not detected above the analytical laboratory detection limits in soil. Detected concentrations of Title 22 Metals were below hazardous waste thresholds (Law/Crandall, 1997).

Old North Front Street ESA (1997)

In 1997 Emcon conducted a Phase II ESA on a portion of Old North Front Street adjacent to the east of the Project site to address potential soil contamination identified in a Phase I ESA conducted in September 1997. TRPH and TPH as heavy oils were detected in the soil. With the exception of copper, Title 22 Metals were not detected at concentrations exceeding hazardous waste thresholds. VOCs, TPHg, and TPHd were not detected above analytical laboratory reporting limits; however, copper was detected in one soil sample at a concentration exceeding the hazardous waste screening threshold. Therefore, Emcon recommended that the Soluble Threshold Limit Concentration (STLC) laboratory analysis for leachability be conducted. No further analysis for leachability of copper was reported (Emcon, 1997).

Remediation (1998-2001)

Two phases of soil vapor extraction (SVE) were conducted onsite between May 1998 and October 2000. Approximately 8,000 pounds of VOCs were removed, with 71% reportedly consisting of chlorinated VOCs and 29% consisting of petroleum hydrocarbons. The shallow VOC vapor concentrations were substantially reduced as a result of the SVE system. However, VOCs remaining in deep soil gas close to the water table continued to exceed cleanup goals. Elevated TCE concentrations in deep soil gas were attributed to volatilization of TCE-impacted groundwater and not from a source within shallower soil (Hydro Geo Chem 2001a). The remediation report and request for case closure is provided in Appendix G.

In 2001 a targeted 30-day remediation event was conducted in Building 12 that consisted of soil vapor extraction and air injection. Additional VOC mass removed was estimated to be between 7 and 12 pounds, and VOC concentrations reportedly declined to levels below the cleanup goals in place at that time (Hydro Geo Chem 2001b). The supplemental site closure information report is provided in Appendix G. In November 2001, LARWQCB granted closure for the Project site and supplemented closure with a Certificate of Completion in June 2002. Copies of the closure documentation are provided in Appendix G.

Phase I ESA (2005)

Mactec conducted a Phase I ESA at the Project site in 2005. Moderate staining was observed on concrete and aggregate base material near transformers at Building 10, and heavy staining was observed on concrete and surrounding aggregate base near transformers at Building 11. Mactec noted that a Mobil Oil pipeline had been removed by the City of Burbank in the vicinity of the Project site. Soil samples were collected by Emcon following the removal of the pipeline, and TPH was not detected in soil above laboratory reporting limits. The pipeline was interpolated to extend beneath the Project site. Building department records indicated that Mobil Oil issued a letter to Zero in 1967 objecting to the construction of a building above their existing pipeline. No indications of the presence of the pipeline were observed during the site reconnaissance. Mactec concluded that the only Recognized Environmental Condition was the Project site's location within the boundaries of the San Fernando Valley Area 2 Superfund Site (Mactec 2005).

Limited Soil Sampling (2005)

In 2005 Golder Associates collected soil samples adjacent to an onsite hydraulic elevator and collected bulk concrete and gravel samples from stained areas adjacent to onsite electrical equipment. PCBs and TPH were not detected above the laboratory detection limit in soil samples collected adjacent to the elevator. PCBs were detected in bulk concrete and gravel samples. Based on these results, oil-containing electrical equipment, concrete, and gravel would be designated as non-hazardous PCB waste, and dielectric oils from electrical equipment would require disposal at a facility licensed to accept low levels of PCBs. Golder recommended collecting soil samples following removal of gravel in unpaved areas (Golder 2005).

Property Acquisition ESA - 2009

In 2009, a site investigation was conducted by Ninyo & Moore on a strip of land on the east side of 777 North Front Street in support of an acquisition by Caltrans for an Interstate 5 widening project. The investigation consisted of soil and soil vapor sampling. TPH, PCE, TCE, PCBs, and phenol were detected in soil at the Project site; however, none of the analytes were detected above regulatory screening levels in place at the time of the assessment. Detected concentrations of metals in soil were below hazardous waste thresholds, with the exception of lead. However, the soil sample with elevated lead subsequently underwent the California Waste Extraction Test which indicated that soluble lead was below hazardous waste criteria.

PCE, TCE, and other VOCs were detected at concentrations exceeding screening levels for soil vapor in place at the time of the assessment. Ninyo & Moore concluded that rebound had occurred in soil vapor since the completion of remedial activities at the Project site. Ninyo & Moore recommended that excavated soil containing petroleum hydrocarbons be removed and disposed or recycled as petroleum contaminated or non-hazardous waste, or be reused onsite (Ninyo & Moore 2009). A copy of the site investigation report is provided in Appendix G.

LARWQCB Correspondence (May 2011)

In May 2011, LARWQCB requested a technical report due to the reportedly extensive use of Cr(VI) at the Project site from the 1960s through the 1990s and lack of adequate sub-surface assessment. LARWQCB indicated that a previously issued Certificate of Completion was no longer binding due to new information they had received regarding Cr(VI) concentrations detected in soil during a 2009 investigation conducted on behalf of Caltrans and a lack of adequate soil sampling for Cr(VI) in soils deeper than 5 feet below grade. However, in August 2015 LARWQCB issued correspondence clarifying that the Certificate of Completion remained in effect for VOCs, and that CR(VI) would be added to the Certificate of Completion if additional assessment yielded a non-detect finding at depth. Subsequent assessment, discussed further below, did, in fact, show that CR(VI) was not detected above laboratory reporting limits at 40 feet below grade. Copies of the May 2011 and August 2015 letters are provided in Appendix G.

Additional Assessment (2012-2018)

In 2012, Geosyntec conducted an additional investigation at the locations of five former clarifiers. Cr(VI) was detected at concentrations exceeding the current US EPA RSL for residential soil. In addition, cobalt was detected at a concentration exceeding the current residential RSL in one soil sample (Geosyntec, 2012). A copy of the report is provided in Appendix G.

In 2016, Leighton conducted a soil gas survey and soil investigation at the Project site. The soil gas survey included a grid network of soil gas samples as well as eight biased locations where VOCs were historically identified. Elevated concentrations of PCE, TCE, and 1,1,1-TCA were detected, with the highest concentrations in areas where SVE was implemented in the 1990s. Leighton concluded that the presence of an underground parking structure equipped with required ventilation systems would mitigate potential vapor intrusion, but that a health risk assessment would be required to fully evaluate the recommendation (Leighton 2016). A copy of the soil gas survey and soil investigation report is appended to the SCMP, provided in Appendix G of this report.

Geosyntec advanced one soil boring to assess the vertical extent of elevated Cr(VI) in June, 2016. Although Cr(VI) was detected at concentrations exceeding the residential RSL up to 35 feet bgs, the results did not exceed 10 times the soluble limit threshold concentration, which is indicative of a contaminant's leaching potential and subsequent migration to groundwater. Furthermore, Cr(VI) was not detected above the laboratory reporting limit in the soil sample collected at 40 feet bgs (Geosyntec 2016). A copy of the site assessment report is provided in Appendix G. In a letter dated August 25, 2015, the LARWQCB indicated that if an additional boring yielded a non-detect finding for Cr(VI) at depth, the LARWQCB would consider the site adequately assessed with regard to Cr(VI). A copy of the LARWQCB letter is provided in Appendix G. At this time, the LARWQCB has not issued a Certificate of Completion for Cr(VI) in soil at the Project site.

Geosyntec conducted an additional groundwater assessment in 2017. The assessment included an evaluation of previously collected onsite soil data and a review of regional groundwater data associated with the San Fernando Valley (SFV) Superfund site. According to the report, the Project site lies above the lateral edges of the chlorinated solvent plume, and monitoring wells associated with the Superfund site may have previously been located onsite, but are presumed to have been abandoned. In addition, a small, isolated zone of total chromium impacts is mapped beneath the Project site. Based on the results of the vadose zone fate and transport modeling, Geosyntec determined that residual concentrations of constituents in soil do not pose a risk of migrating to groundwater in sufficient quantities to result in exceedance of groundwater MCLs (Geosyntec 2017a). A copy of the groundwater assessment report is provided in Appendix G.

In May 2017, Geosyntec conducted a human health risk assessment (HHRA) for residual concentrations of chemicals detected in soil and soil vapor samples collected at the Project site. Health risks were evaluated for both residential and commercial scenarios using the results of assessments conducted by Geosyntec in 2012 and by Leighton in 2016. Geosyntec determined that earlier investigations would not necessarily be representative of current site conditions, therefore analytical results from previous assessments were not considered. Chemicals of potential concern initially evaluated for health risk in the HHRA included TPH and a variety of metals and VOCs. Onsite receptors included future residents and commercial workers, and construction workers during redevelopment activities. Exposure pathways included indoor air inhalation of VOCs from soil vapor, outdoor fugitive dust and vapor inhalation and direct contact (dermal contact or incidental ingestion).

TPH as oil range organics (TPH-ORO) and diesel range organics (TPH-DRO) detected in soil were evaluated against the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Tier 1 Environmental Screening Levels (ESLs) for residential land use. Detected concentrations of TPH-ORO were below the SFBRWQCB ESL. The 95 percent upper confidence limit (95UCL) and the average TPH-DRO concentrations were well below the ESL. Therefore TPH compounds were not determined to be COPCs and were not further evaluated by Geosyntec in the HHRA.

Geosyntec derived risk-based concentrations (RBC) for future residents, commercial workers, and construction workers for COPCs previously detected in soil or soil vapor. Risk characterization results indicated that Cr(VI), PCE and TCE were present in soil at concentrations exceeding the target cancer risk of $1.0x10^{-6}$ for future residents. Cr(VI) exceeded the target cancer risk concentration in three soil samples. PCE exceeded the target risk in three soil samples, and TCE exceeded in one soil sample, however the 95UCL for each were below their respective RBC of 0.86 mg/kg and 2.0 mg/kg, respectively. Only copper exceeded the target hazard index of 1 in soil; however, the 95UCL for copper was below the RBC of 3,100 milligrams per kilogram (mg/kg) for residential soil. Lead was evaluated against the DTSC-SL for residential soil of 80 mg/kg. For commercial and construction workers the cumulative cancer risk was below the target risk of $1x10^{-5}$ at all sample locations for all COPCs. The cumulative hazard index was below the target hazard index for future commercial workers for COPCs at all locations; however, the target hazard was exceeded by cadmium at one location, with the 95UCL below the RBC. Lead exceeded the DTSC-SL for residential soil in two soil samples and exceeded the commercial soil DTSC-SLs in one sample; however, the 95UCL was below the DTSC-SL for both scenarios.

Evaluation of soil vapor risk to indoor air for future residents in a slab-on-grade scenario indicated that the cumulative cancer risk exceeded the target risk at 10 sample locations, with PCE exceeding at nine locations and TCE exceeding at only one location. The cumulative hazard risk exceeded the target risk in one location, with PCE the only COPC having a hazard index greater than 1. For the second floor exposure scenario for future residents, the cumulative target cancer risk was exceed in two sample locations, with PCE the only COPC exceeding the target cancer risk. Note that the indoor air risk characterizations did not include any engineering controls such as vapor barriers or ventilation in underground structures.

Based on the findings of the HHRA, Geosyntec concluded that, although cancer risk and hazard indices exceeded the target risk levels at several locations, the 95UCLs were below risk-based concentrations and therefore the risks were not widespread but isolated to specific locations. Given planned future mixed residential and commercial land uses, residual concentrations of COPCs, including VOCs and Cr(VI), would not pose a significant health concern across the Project site (Geosyntec 2017b). A copy of the HHRA is provided in Appendix G.

In October and November 2017, Geosyntec conducted additional soil and soil vapor investigations and concluded that there had been significant rebound of VOCs in soil vapor at the central portions of the Project site, where former Buildings 11 and 12 had been located, following completion of remedial activities in 2000. In addition, elevated concentrations of select metals were identified in the northwest-central portion of the Project site, however Geosyntec asserted that concentrations of Cr(VI) detected in soil did not suggest that the metal impacts at the Project site had contributed to the regional hexavalent chromium groundwater plume. Elevated metals concentrations in soil appeared to be localized and would be addressed during Project site redevelopment activities. Geosyntec noted that VOC analytical results from the November 2017 investigation and previous investigations appeared to provide sufficient information to define the lateral and vertical extent of VOCs in soil vapor (Geosyntec 2018b). A copy of the additional soil and soil vapor investigation report is provided in Appendix G.

In January 2018, Geosyntec issued an Addendum to the HHRA dated May 2017. Based on data collected during the October and November 2017 assessments, the cumulative cancer risk estimates were below the target risk of $1x10^{-6}$ for future resident soil exposure, and the cumulative hazard index for soil was below the target hazard of 1. Soil vapor risk for a slab-on-grade residential scenario exceeded the target cancer risk at three locations and exceeded the target hazard index at one location. Soil vapor risk for second-floor residential scenarios exceeded the target cancer risk of $1x10^{-6}$ for future residential scenarios in one sample and the cumulative hazard index was below the target hazard of 1. PCE was the primary driver for target cancer and hazard index exceedances. For future construction workers, the cumulative cancer risk and hazard index were below the target goals. Geosyntec again concluded that residual concentrations of COPCs remaining in the subsurface would not pose a significant health concern across the Project site. However, select locations have COPC concentrations that have the potential to impact human health; therefore, Geosyntec recommended that they be considered further during development planning (Geosyntec, 2018a). A copy of the Addendum is provided in Appendix G.

In June 2018, Blackstone conducted an additional Phase I ESA. At the time of the site reconnaissance, building foundations remained onsite, however transformers had been removed and no surficial staining was observed. In addition, floor tiles were observed on the remnant building foundations. Based on the construction date of the former site buildings, as well as their visual survey, Blackstone concluded that the tiles may contain asbestos. Therefore, Blackstone recommended that all potential asbestos containing materials (ACM) be removed prior to demolition. Clarifiers, floor drains, sewage pipes, trench drains, and evidence of past in-ground equipment or wastewater management were also observed throughout the Project site (Blackstone 2018). A copy of Blackstone's Phase I ESA is provided in Appendix G.

CLRRA Agreement & Response Plan (2018-2019)

In December 2018 SJ4 Burbank, LLC, the future property owner, entered into a CLRRA Agreement with the LARWQCB, the designated administering agency for assessment and remediation of the site under the Unified Agency Review of Hazardous Materials Release Sites law. According to the Agreement, LARWQCB has determined that a response action is necessary to address an unreasonable risk from hazardous materials at the site. The CLRRA Agreement further notes that the LARWQCB has requested additional limited off-Site assessment work. Therefore, SJ4 will submit a workplan for the installation of a groundwater monitoring well and nested soil vapor probes following acquisition of the property and final approval of the Response Plan by the LARWQCB. The Response Plan will be implemented following approval by the LARWQCB and acquisition of the Project site by SJ4 Burbank, LLC, and the Response Plan "will provide that implementation of the plan will place the site in a condition that allows it to be used for its reasonably anticipated future land use without unreasonable risk to human health and safety and the environment." A copy of the CLRRA agreement is provided in Appendix G.

In February 2019, the LARWQCB issued a comment letter for the revised Draft Response Plan submitted by Geosyntec on December 14, 2018. The LARWQCB indicated that the proposed engineering controls set forth in the RP should render the property safe for its intended uses, provided that all remedial measures the LARWQCB deems necessary are implemented. Additional LARWQCB requirements set forth in the February 2019 letter are discussed in the Mitigation Measures section below. A copy of the February 2019 LARWQCB letter is provided in Appendix G.

Summary of Hazardous Materials

Based on review of available and pertinent environmental documents, hazardous materials present resulting from historical operations and regional contamination that warrant discussion includes the following:

- Copper, lead, Cr(VI), and PCE in shallow soil
- PCE and TCE in soil vapor
- Potential asbestos-containing materials
- VOCs and Cr(VI) in groundwater (San Fernando Valley Area 2 (Crystal Springs) Superfund Site)
- Abandoned ExxonMobil crude oil pipeline

4.6.2 Impact Analysis

a. Methodology and Significance Thresholds

The methodology used in this assessment includes review of previous environmental reports for the Project site and other readily available information to assess the potential presence of hazards and contamination sources at the Project site. Based on Appendix G of the CEQA Guidelines, a significant effect would occur if the Project would result in the following significance thresholds:

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 0.25 mile of an existing or proposed school;
d. Be located on a site which is included on a list of hazardous material 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;
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 for people residing or working in the project area;
f. For a project in the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the area;
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

As discussed in the Initial Study (Appendix A), the Project would not involve the long-term use, transport, or storage of large quantities of hazardous materials. Compliance with applicable regulations would result in impacts associated with the use, transport, and storage of hazardous materials to be less than significant and therefore are not discussed further in this section. The Project site is also located outside of the Airport Influence Area and runway protection zones of the Hollywood Burbank Airport. Therefore, impacts related to airports and private airstrips are not discussed further in this section. The Initial Study also found that the Project would not alter emergency response or evacuation plans and is not located in a wildland fire hazard area. Thus, no impacts to emergency response and evacuation plans or relating to wildland fires would occur and no further analysis of these issues are warranted. Therefore, the impact analysis herein is focused on thresholds b, c and d.

b. Project Impacts and Mitigation Measures

Threshold 2:	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?
Threshold 4:	Would the Project be located on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or environment?

Impact HAZ-1 THE PROJECT SITE HAS CONTAMINATED SOIL, SOIL VAPOR, AND GROUNDWATER, AND IS INCLUDED ON A LIST OF HAZARDOUS MATERIALS SITES ON A GOVERNMENT DATABASE. IN ADDITION, AN UNMARKED ABANDONED CRUDE OIL PIPELINE IS PRESENT AT THE PROJECT SITE, AND TILES REMAINING ON CONCRETE PADS ARE SUSPECTED TO CONTAIN ASBESTOS. WITH IMPLEMENTATION OF THE PROPOSED RESPONSE PLAN AND SOIL CONTINGENCY AND MANAGEMENT PLAN, AS WELL AS IMPLEMENTATION OF MITIGATION MEASURES, POTENTIAL IMPACTS RELATED TO CONTAMINATED SOILS AND SOIL VAPOR AND REMOVAL OF THE ON-SITE OIL PIPELINE, WOULD BE LESS THAN SIGNIFICANT. IMPLEMENTATION OF MITIGATION WOULD ALSO BE REQUIRED TO REDUCE POTENTIAL IMPACTS ASSOCIATED WITH ASBESTOS REMOVAL TO A LESS THAN SIGNIFICANT LEVEL.

Hazardous materials impacts are normally a result of project-related activities disturbing or otherwise encountering such materials in subsurface soils or groundwater during site grading or dewatering.

A Response Plan (RP) and a Soil Contingency and Management Plan (SCMP) have been developed and submitted to the LARWQCB for concurrence and approval. Although the plans have not received final approval from LARWQCB as of the date of this report, as discussed in Section 2, *Project Description*, Hazards Project Design Features (PDF) 2 through 4 are included as part of the Project to address contamination in shallow soil and shallow and deep soil vapor. Implementation of these PDFs, under the direction of the LARWQCB and in accordance with applicable local, State, and federal regulations, would reduce potential impacts associated with soil and soil vapor contamination and an unmarked oil pipeline to a less than significant level. The following discussion provides more details regarding the remedial actions that will be implemented under the oversight of the LARWQCB:

Project Design Features

Hazards PDF 1 – Shallow Soil Remediation

To remediate elevated metals and VOCs, shallow soil will be excavated and properly disposed offsite. The SCMP developed by Leighton (2019) will be implemented to address known and previously unidentified shallow soils impacted by the COPCs referenced in the RP.

The proposed redevelopment will include excavations for one or two-level podium style parking. Excavations will extend up to varying depths across the Project site. Leighton has estimated that approximately 31,852 cubic yards of metal-impacted soil located beneath existing pavement/building slabs in the northwestern central portion of the Project site will require excavation and offsite disposal at a permitted landfill. Excavation of any contaminant-impacted soils in these areas will further reduce threats to groundwater and potential risk to human health. Notably, Cr(VI) contamination in soil identified at specific locations in the HHRA will be removed during excavation activities.

US EPA Residential RSLs have been approved by the LARWQCB for use as cleanup goals for COPCs onsite, with the exception of arsenic. The cleanup goal for arsenic in soil will be 12 mg/kg, established by the DTSC in *Determination of a Southern California Regional Background Arsenic Concentration in Soil* (2008). If concentrations of COPCs exceed US EPA RSLs and/or hazardous waste criteria, the remedial excavation may be extended.

The profiling of metal-impacted excavated soil will determine whether the soil requires disposal as a non-hazardous waste or a California hazardous waste. Soil excavated from areas of known impacts will be stockpiled and profiled in accordance with the requirements of the selected disposal facility. Leighton indicated that chlorinated VOCs (primarily PCE and TCE) present in shallow soils in this area are considered relatively low and would not prevent soil disposal as a non-hazardous waste.

Prior to the start of excavation, SJ4 will obtain a permit from SCAQMD under Rule 1166. Monitoring using a photoionization detector (PID) or organic vapor analyzer (OVA) will occur every 15 minutes and results recorded during all earth-moving activities. If VOCs are detected at concentrations greater than 50 parts per million by volume (ppmv), soil will be sprayed with water or vapor suppressant and stockpiles shall be covered with plastic sheeting. If PID readings exceed 1,000 ppmv the excavation must stop, the affected area must be sprayed, and the SCAQMD must be immediately notified. Excavated soil containing VOCs at concentrations greater than 1,000 ppmv must be immediately placed in an AQMD-approved sealed container or direct-loaded into trucks. The requirements of the Rule 1166 permit will be adhered to for the duration of the excavation activities.

Under SCAQMD Rule 1466 PM_{10} monitoring will be implemented during all earth moving activities to minimize fugitive dust emissions potentially containing toxic air contaminants. Monitoring will consist of taking continuous direct-reading measurements of particulate matter less than 10 micrometers in diameter. Monitoring equipment will be placed on the upwind and downwind sides of the Project site and will be set to record particulate readings every 10 minutes. If the PM_{10} concentration averaged over two hours exceeds 25 micrograms per cubic meter, the SJ4 contractor shall cease earth-moving activities, apply dust suppressant, or implement other dust control measures until the PM10 concentration is equal to or less than 25 micrograms per cubic meter averaged over 30 minutes.

Observations will be conducted to identify any previously unknown contamination. Soil will be visually monitored during concrete removal and excavation activities by Leighton for the presence of staining and for elevated VOCs using a PID. Soil samples will be collected if evidence of potential contamination is observed. Excavated soil will be profiled for waste disposal.

Confirmation samples will be collected from the sidewalls and floors of the excavations. The sampling frequency will depend on the size of the excavation. In general, samples will be collected from the mid-point of each of the walls and floor, or every 25 linear feet of exposed sidewall at 5-foot depth increments. The floors of each excavation will be sampled at a rate of approximately one sample per 625 square feet. Samples will be analyzed for COPCs and results will be compared to US EPA Residential RSLs. If additional excavation is required beyond the base of the grading plan to achieve the RSLs, the excavated areas will be backfilled with imported clean soil.

US EPA Residential RSLs (US EPA, 2018) have been approved by the LARWQCB for use as cleanup goals for COPCs onsite, with the exception of arsenic. The cleanup goal for arsenic in soil will be 12 mg/kg, established by the DTSC in *Determination of a Southern California Regional Background Arsenic Concentration in Soil* (2008). If concentrations of COPCs exceed US EPA RSLs and/or hazardous waste criteria, the remedial excavation may be extended.

Excavation and characterization of identified and previously unidentified potentially contaminated soil will be conducted under the direction of LARWQCB. If previously unidentified contamination is encountered with a volume greater than a 55-gallon drum, the LARWQCB project manager will be contacted and consulted for proper delineation and removal. A summary report will be prepared following the completion of excavation activities.

If any historical underground features are encountered, including clarifiers, underground storage tanks (USTs), and associated piping, they will be removed under permit and oversight of the appropriate regulatory agency.

If stained soil is observed in the locations of the former transformers soil samples will be collected and analyzed for PCBs. If PCBs are detected, proper management and disposal of the PCB-affected soil will be performed. If any oil-stained concrete remains, the concrete will be resampled for the presence of PCBs and if necessary, segregated, profiled, and properly disposed.

Impacts associated with shallow contaminated soil and associated air quality or fugitive dust emissions during excavation, grading, stockpiling or transport of soils will be reduced to less than significant if the SCMP is adhered to and excavation, characterization, and disposal of contaminated soil are conducted under the oversight of the LARWQCB and in accordance with applicable local, State, and Federal regulations, including SCAQMD Rules 402, 403, 1166 and 1466. Furthermore, implementation of these measures is anticipated to mitigate the potential for exposure to offsite commercial or residential receptors, including during transport of excavated soil to disposal facilities.

Hazards PDF 2 – Shallow Soil Vapor

Engineering controls will be installed beneath the building foundations to prevent the migration of VOCs in shallow soil vapor into the proposed buildings. Engineering controls proposed in Geosyntec's Response Plan include the following:

Vapor Barrier and Venting System – Vapor barriers and venting systems will be installed as engineering controls beneath foundations of at-grade parking structures located beneath residences and beneath and around below-grade structures. The locations of the vapor barrier systems are illustrated on Drawings 2 through 4 of the RP. The vapor barrier systems beneath foundations will consist of, from top to bottom, a concrete slab underlain by a minimum 30-mil vapor barrier, followed by a cushion geotextile and/or 2 inches of sand to prevent puncture, followed by a vapor collection layer consisting of a minimum of 4-inch aggregate or geocomposite. Perforated venting pipes will be installed within the aggregate, or a strip composite venting layer will be placed immediately above the subgrade. The horizontal pipes will be connected to vertical solid vent pipes which will extend through the building to a minimum of 10 feet above grade and a minimum of 10 feet from any air inlet or operable door or window. A monitoring point will be installed within each vent riser.

The system will initially operate passively, and wind-driven turbines will be added to select vent risers to enhance venting. The venting system shall be equipped with blowers, and could therefore become an active system, if the indoor air or sub-slab VOC concentrations increase and additional engineering controls are deemed necessary or required by the LARWQCB.

The walls of below-grade structures will have a minimum 30-mil vapor barrier resistant to COPCs between the concrete walls and the subgrade soil. Cushion geotextiles and/or 2-inches of sand will be placed between the vapor barrier and surrounding soil to prevent puncture.

At-grade occupied, enclosed structures may consist of lobbies, elevators, or commercial space. Engineering controls for at-grade occupied, enclosed structures will include aerated floors such as Cupolex®. The aerated floor system will consist of, from top to bottom, a concrete slab, aerated forms, and prepared subgrade. The void space beneath the structures will be connected to vent pipes. Vent pipes will ventilate a minimum of 10 feet above grade and a minimum of 10 feet from any air inlet and/or operable door or window. A minimum of 2 ventilation pipes will be provided per enclosed continuous structure. A monitoring point will be installed within each vent riser.

At-grade, open parking garages will be constructed with a podium-style design incorporating natural ventilation meeting the requirements of 24 CCR Chapter 4 Section 406.5.2. The exterior side of the structure will have uniformly distributed openings on two or more sides that will not be less than 20 percent of the total perimeter wall area of the ground-level tier. The total length of the openings will not be less than 40 percent of the ground-level tier. Interior walls will have uniformly-spaced openings which will be a minimum 20 percent open, however size of openings may be modified if HVAC controls are implemented in the structure to provide enhanced ventilation.

Operation, Maintenance, and Monitoring

An Operation, Maintenance, and Monitoring (OMM) plan will be developed and submitted to the LARWQCB concurrently with the final Design Report detailing elements of the remedial design. The OMM plan will detail the methods for monitoring the vapor barrier and venting system and will provide monitoring frequencies and maintenance procedures for the system components. Furthermore, the OMM plan will include details of post construction indoor air monitoring for COPCs addressed in the RP in a manner that will comply with LARWQCB requirements and applicable State laws and guidance for the evaluation and mitigation of subsurface vapor intrusion to indoor air.

Further details regarding the vapor barrier and venting system details are provided in Section 7 of the RP prepared by Geosyntec. The engineering controls will be recorded as part of an administrative deed restriction for the Project site. The deed restriction will be provided to the LARWQCB when finalized.

According to the DTSC's *Vapor Intrusion Mitigation Advisory*, 2011, subslab venting is one of the most commonly accepted mitigation techniques and has a successful track record of performance. Utilization of a subslab liner aids in venting the sub-slab soil gas via collecting pipes rather than upward into the building and provides protection in the event that the blower fails on a depressurization system. The advisory further states that the risk from vapor intrusion may be greatly reduced through the use of podium-style buildings. Impacts associated with residual VOCs in shallow soil vapor will be reduced to less than significant provided that the following is implemented:

- The Response Plan is approved by and implemented under the direction of the LARWQCB.
- A vapor barrier and venting system, along with aerated flooring beneath certain at-grade occupied areas are implemented in accordance with the RP.
- The OMM plan is followed, including post-construction indoor air monitoring.

Hazards PDF 3 – Deep Soil and Soil Vapor Remediation

An SVE system will be operated to remove VOCs in deep soil and soil vapor to the extent feasible and practicable. SVE will be implemented for the remediation of deep soil and soil vapor to remove mass and reduce the potential for migration of VOCs to underlying groundwater to protect current and potential beneficial uses. It should be noted, however, that offsite sources of contamination continue to affect groundwater in the vicinity of the Project site. Therefore, impacts to groundwater will be reduced to the extent feasible and practicable and may not be quantifiable, given the potential continued contamination of the aquifer from offsite sources.

Components of the SVE system will be installed following excavation and rough grading at the Project site. The system will consist of 16 new SVE wells connected to a skid-mounted SVE package system equipped with granular activated carbon vessels. The SVE system will be installed on the upper level of the parking structure. Soil vapor probes will be installed in the vadose zone at various locations throughout the Project site, and subslab probes will be installed in the parking structure. Eight previously installed deep nested soil vapor probes may also be incorporated into the monitoring network.

Further details regarding location, installation, operation, and monitoring of the SVE system are provided in Section 6.3 of the RP. Detailed design plans for the remediation system were not provided in the RP. Once design plans are finalized they will be submitted to the LARWQCB for review and approval.

According to the DTSC's *Proven Technologies and Remedies Guidance – Remediation of Chlorinated VOCs in Vadose Zone Soil* (2010), SVE is the most frequently selected remedial alternative for chlorinated VOCs, such as PCE and TCE, in vadose zone soil. The effectiveness of SVE was determined by DTSC based on engineering and scientific analysis of performance data from past State and Federal cleanups and review of the administrative records and procedures used to implement the technologies.

Impacts associated with potential vapor migration to indoor air by residual VOCs in deep soil and soil vapor will be reduced to less than significant, provided that the following occurs:

SVE is implemented under the direction of the LARWQCB and is conducted in conjunction with engineering controls for shallow soil vapor.

Hazards PDF 4 – Abandoned Oil Pipeline

The abandoned oil pipeline is reportedly owned by ExxonMobil and traverses the southeastern portion of the property. According to the SCMP, ExxonMobil will prepare a workplan and will be responsible for the proper removal of the pipeline. The pipeline will be removed under the oversight of SJ4's environmental consultant in accordance with the workplan, as approved by the LARWQCB.

Impacts associated with the abandoned ExxonMobil pipeline will be reduced to less than significant provided that the following is implemented:

The abandoned oil pipeline is properly removed in accordance with all applicable local, State, and Federal regulations, in accordance with a workplan approved by the LARWQCB, and under the oversight of SJ4's environmental consultant; and

Any previously unidentified releases from the abandoned pipeline will be handled in accordance with the SCMP and/or an LARWQCB-approved workplan for the pipeline removal.

Although the Project site also lies within the boundaries of the San Fernando Area 2 (Crystal Springs) Superfund Site, remediation and engineering controls described above for soil vapor would reduce impacts to the future development to a less than significant level by reducing concentrations of COPCs to levels that no longer represent a health risk for the intended land use and/or preventing migration of VOCs into indoor air at concentrations exceeding acceptable health risk criteria.

On February 13, 2019, the LARWQCB issued a comment letter on the draft RP. The LARWQCB comment letter indicated that additional information was needed before the LARWQCB could issue a determination that proper completion of the Response Plan will constitute "appropriate care" for the purposes of HSC Section 25395.67 (a). The following revisions have been requested by LARWQCB, which will need to be incorporated into an updated Response Plan:

1. Any revisions to the RP identified in the LARWQCB comment letter dated February 13, 2019, shall incorporate and include provisions for oversight and approval of the completed response actions, if necessary, to satisfy the requirements set forth in HSC Section 25395.67(a)(3).
2. The vertical extent of the shallow soil profile must be clearly defined in Section 4.1-Remedial Action Objectives of the RP and in the SCMP. If the redevelopment plan proposes multiple parcels or subdivided areas for the Site, dimensions need to be specified and the depth of shallow soil within each parcel or subdivided area must be indicated. Drawings illustrating the dimensions and boundary of the assigned parcels or subdivided areas shall also be prepared and submitted to the LARWQCB for review.
3. Cross sections showing stratigraphy and contaminant distribution in the shallow and deep vadose zones shall be included in the RP. The cross sections shall illustrate the vertical extent of predefined shallow and deep soil profiles and the boundary of the proposed excavation lines (i.e. excavation depths) in shallow soils.
4. For the protection of future residents, the boundary of the vapor barrier and sub-slab ventilation illustrated on the engineering controls drawings shall not be limited to below-grade structures but extended to provide coverage for apartment units and parking structures located in the most impacted areas where SVE wells are proposed to be installed. Section 7 of the Plan describing the implementation of the proposed engineering controls and associated engineering control drawings shall be revised accordingly.
5. VOCs in shallow soil vapor shall be mitigated to levels that are protective of human health for the proposed residential and commercial uses. The proposed engineering controls for soil vapor monitoring described in Section 7.3.4 (of the RP) shall be revised to include the implementation of soil vapor monitoring networks to address shallow soil vapor impacts across the entire site that may pose potential vapor intrusion risks.

6. Remediation of VOCs in deep soils and soil vapors are subject to performance-based remediation goals. However, the mass removal of VOCs in deep soils shall continue until influent concentrations from the proposed SVE treatment reach low and sustainable asymptotic levels that are protective of groundwater.

Implementation of Mitigation Measure HAZ-1a is required to address the LARWQCB's comments, which would reduce potential impacts to a less than significant level. In addition, tiles potentially containing asbestos were observed on remnant building foundations during the most recent Phase I ESA site inspection conducted by Blackstone. Therefore, implementation of Mitigation Measure HAZ-1b is required to address removal of potential ACMs.

Mitigation Measures

In addition to implementation of the RP, the following mitigation measures would be required to further address impacts to soil, soil vapor, and ACM-related impacts.

HAZ-1a Soil and Soil Vapor

The applicant shall incorporate all requirements in the design of the Project as set forth by the LARWQCB for issuance of building permits, which include the following measures:

1. The boundary of the vapor barrier and sub-slab ventilation shall extend beneath the entire building footprint.
2. VOC in shallow soil vapor shall be mitigated to levels that are protective of human health for the proposed residential and commercial uses.
3. Mass removal of VOCs in deep soil shall continue until influent concentrations from the proposed SVE treatment reach low and sustainable asymptotic levels that are protective of groundwater.

The vapor barrier membrane shall be a material that is designed to be resistant to the specific COPCs. Engineering controls for at-grade occupied, enclosed structures will consist of aerated floors such as Cupolex®. The aerated floor system will consist of, from top to bottom, a concrete slab, aerated forms, and prepared subgrade as set forth in the RP, which will further mitigate the potential for vapor intrusion.

HAZ-1b Operation Maintenance and Monitoring

The applicant shall conduct operation, maintenance, and monitoring of the vapor barrier and sub-slab ventilation system, which will include the following measures:

1. As required by the LARWQCB, proposed engineering controls shall be revised to include implementation of soil vapor monitoring networks to address shallow soil vapor impacts across the entire site where vapor intrusion risks may be present.
2. Following the completion of construction and before the buildings are occupied indoor air monitoring will be conducted. The monitoring should be limited to the COPCs and results should be compared to the DTSC-SL for PCE and EPA RSLs for TCE, or the applicable health risk-based screening levels in effect at the time of the indoor air assessment.
3. An OMM plan shall be developed for the vapor barrier system and approved by the LARWQCB. The plan shall include indoor air monitoring that would be conducted on a routine basis.

HAZ-1c Asbestos

Prior to demolition of any onsite structure, an asbestos survey shall be conducted and all identified ACMs shall be removed from site structures in accordance with applicable regulations. In the event that any suspected ACMs are discovered during construction activities, the materials shall be sampled and analyzed for asbestos content prior to any disturbance. Prior to the issuance of the demolition permit, the applicant shall provide a letter from a qualified asbestos abatement consultant that no ACMs are present in any onsite structures. If additional ACMs are found to be present, a qualified asbestos abatement consultant shall abate ACMs in compliance with the South Coast Air Quality Management District's Rule 1403 as well as all other State and federal rules and regulations.

Significance After Mitigation

The remediation plans included as part of the Project, along with the proposed mitigation measures, would reduce potential contamination impacts to a less than significant level.

Threshold 3:	Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

Impact HAZ-2 THE PROJECT SITE IS LOCATED WITHIN 0.25 MILE OF AN EXISTING SCHOOL. IMPLEMENTATION OF THE RP AND SCMP DURING PROJECT DEVELOPMENT WOULD REDUCE IMPACTS RELATED TO THE EMISSION OR HANDLING OF HAZARDOUS MATERIALS WITHIN 0.25 MILE OF AN EXISTING SCHOOL TO LESS THAN SIGNIFICANT.

Burbank High School is the educational facility closest to the Project site. The school is located approximately 0.25 mile northeast of the Project site. Although previous environmental site assessments identified evidence of contaminated soil, the RP and SCMP would be implemented during the construction phases, thereby reducing the generation of fugitive dust. Based on distance, ACMs present, if any, would not be expected to impact the school and the ACMs would be abated in accordance with applicable regulations. In addition, as discussed in the Initial Study, the transport of hazardous materials from the Project site would comply with all applicable regulations. Therefore, impacts related to the emission or handling of hazardous materials within 0.25 mile of an existing school would be less than significant and no mitigation is required.

Mitigation Measures

Mitigation measures would not be required.

c. Cumulative Impacts

Health risks associated with hazardous materials and soil/groundwater contamination are site-specific and do not generally interact with other planned and pending projects to produce cumulative effects. Similar to the Project, other planned and pending developments listed in Table 3-1 in Section 3, *Environmental Setting*, may encounter hazardous materials requiring remediation. However, the exposure of one project to health risks would not increase health risks for other projects or to the community generally. Moreover, remediation of contamination that would occur as necessary for individual projects would generally improve environmental conditions in the long-term. Therefore, significant cumulative impacts related to hazardous materials would not occur.

4.7 Hydrology and Water Quality

This section addresses impacts to the City's water quality and hydrological resources from implementation of the Project. Watershed, groundwater, and water quality information was obtained from the Burbank Water and Power (BWP) *2015 Urban Water Management Plan* (UWMP).

Various technical studies conducted at the Project site that are provided in this EIR as appendices, were used for preparation of this analysis. In February 2016, Geocon West, Inc. (Geocon West) prepared a geotechnical report that is provided as Appendix F (Geocon West 2016). In addition, Fuscoe Engineering prepared a hydrology report in November 2017 that evaluated pre- and post-construction runoff and storm drain capacity for the Project site (Fuscoe Engineering 2017). The Fuscoe Engineering report is provided as Appendix H. The following analysis is based in part on information and analysis contained in these reports.

4.7.1 Setting

a. Surface Water Resources

The Project site is located in the Los Angeles River Hydrologic Unit (HU), in the South Coast Hydrologic Region (HR). The Project site is located within the San Fernando Hydrologic Area (HA) and the Bull Canyon Hydrologic Subarea (HSA). The Los Angeles Regional Water Quality Control Board (RWQCB) governs basin planning and water quality within the Los Angeles HU (Fuscoe Engineering 2017).

The general region is a semi-arid, Mediterranean environment with mild winters, warm summers, and moderate rainfall, consistent with Southern California. The average monthly temperature ranges from approximately 54 to 76 degrees Fahrenheit (°F), with an annual average temperature of nearly 65°F. Records show that average annual rainfall is approximately 17.5 inches, with monthly averages ranging from zero to four inches. Most rainfall typically occurs during the period of January to March (BWP 2016).

The Project site consists of approximately eight acres of mostly paved land that does not contain any surface water features, streambeds, or wetlands. However, the Burbank Western Channel is located just west-southwest of the Project site. The Project site and the surrounding area are urbanized and runoff in the area generally occurs as sheet flow prior to being intercepted by the regional stormwater drainage system. Overall, Project site drainage is generally in a southwesterly direction toward North Front Street and the Magnolia Boulevard underpass, as directed by topography (Fuscoe Engineering 2017). Figure 4.7-1 shows the surface waters in the vicinity of the Project site.

The Project site receives no off-site surface run-on, but an existing stormwater drainage 42-inch diameter trunk line crosses the Project site. The trunk line runs along the extension of Cypress Avenue and ultimately discharges into the Los Angeles County Flood Control District (LACFCD) Burbank Western Channel. No existing on-site stormwater drainage facilities connect to the existing trunk line.

Figure 4.7-1 Surface Waters

Imagery provided by Google and its licensors © 2017.
Additonal data provided by U.S. Geological Survey, National Hydrography Geodatabase 2011.

b. Groundwater Resources

The Project site is underlain by the San Fernando Valley Groundwater Basin (San Fernando Basin). The San Fernando Basin is located in eastern Los Angeles County, and includes the water-bearing sediments beneath the San Fernando Valley, Tujunga Valley, Browns Canyon, and the alluvial areas surrounding the Verdugo Mountains near La Crescenta and Eagle Rock.

Figure 4.7-2 shows the boundaries of the San Fernando Basin in relation to the Project site. Water-bearing sediments include the lower Pleistocene Saugus Formation, Pleistocene, and Holocene-age alluvium. The valley is drained by the Los Angeles River and its tributaries (California Department of Water Resources [DWR] 2004).

Groundwater generally flows from the edges of the basin toward the middle of the basin, and then proceeds beneath the Los Angeles River Narrows into the Central Subbasin of the Coastal Plain of the Los Angeles Basin. The basin is recharged from various sources. Spreading of imported water and runoff occurs in the Pacoima, Tujunga, and Hansen Spreading Grounds (DWR 2004). Under the Pueblo Water Right, Los Angeles County has exclusive rights to extract and utilize the entire native safe yield of the San Fernando Basin. Four cities in Los Angeles County – Los Angeles, Burbank, Glendale, and San Fernando - each have rights to extract certain amounts of groundwater from the basin. Burbank is entitled to extract up to 20 percent of all delivered water, including recycled water, to the San Fernando Basin and its tributary hill and mountain areas. In recent years, groundwater levels have generally declined, likely due to increased urbanization, reduced artificial recharge, and continued extractions by cities of Los Angeles, Burbank, Glendale, and San Fernando (Upper Los Angeles River Area Watermaster n.d.).

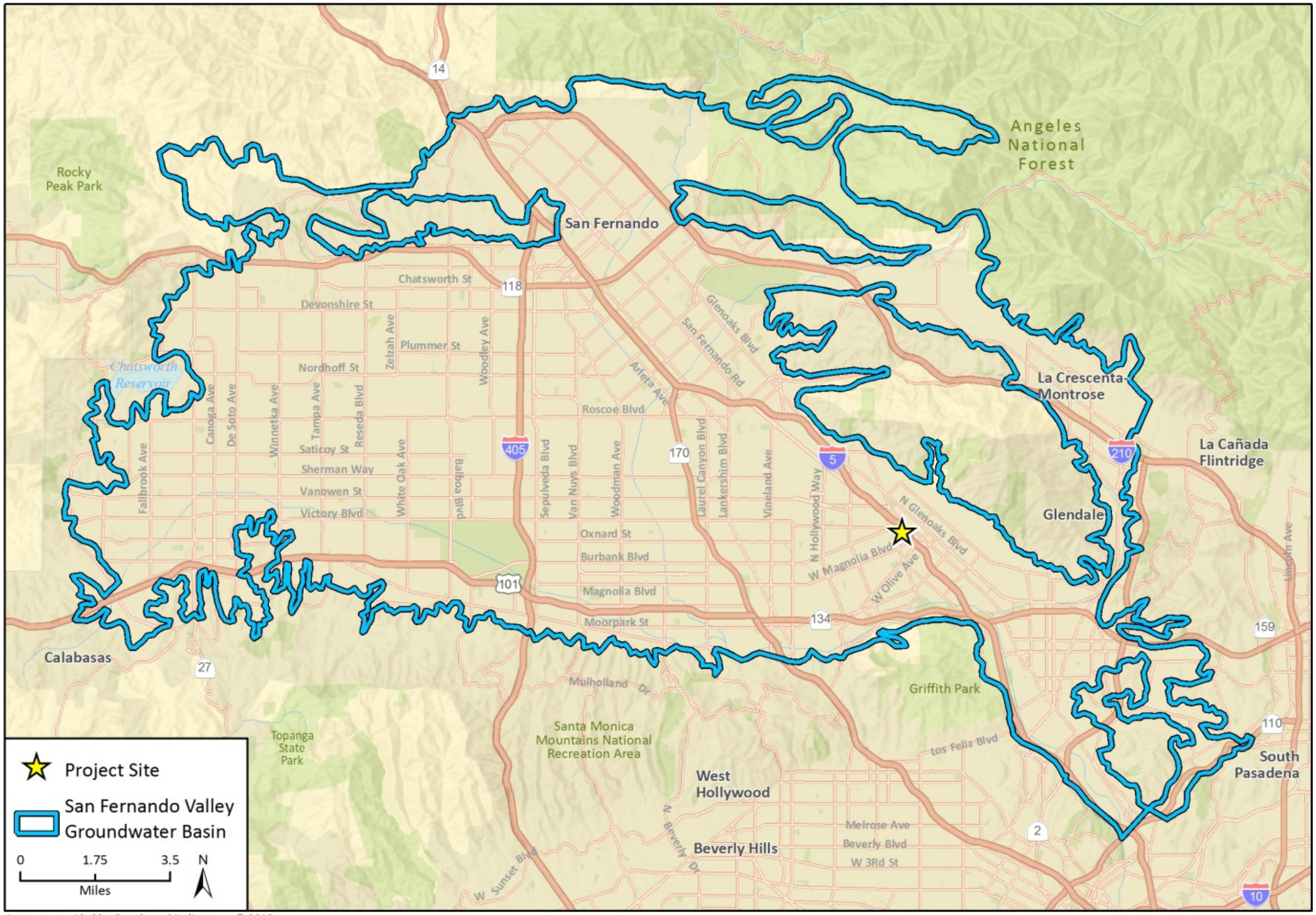
In the 1980s, groundwater retrieved from Burbank's eight production wells was found to have volatile organic compounds (VOC) contamination that prompted the need for treatment plants to be built. The City now operates two treatment plants for VOC removal. Concerns of nitrate, CrVI, 1, 4-Dioxane, nitrosamines, and uranium contamination may prompt the need for additional treatment processes to be built in the future (BWP 2016). Depth to groundwater on the Project site has ranged historically between 20 and 30 feet below ground surface (bgs) (California Division of Mines and Geology [CDMG] 1998). The 2016 Geocon West geotechnical report found no groundwater in borings to a depth of 61.5 feet bgs. As discussed in Section 9, *Hydrology and Water Quality*, of the Initial Study (Appendix A), the Project would not install a new groundwater pump and would not directly pump groundwater resources. Impacts to groundwater supplies from the Project would be less than significant and are not discussed further in the impact analysis below.

c. Water Quality

The primary sources of surface and groundwater pollution enter the water system via stormwater runoff from paved areas. This urban runoff can contain hydrocarbons, sediments, pesticides, herbicides, toxic metals, and coliform bacteria. Leaking septic tanks can cause similar types of contamination. Illegal waste dumping can introduce contaminants such as gasoline, pesticides, herbicides, and other harmful chemicals.

There are two major classes of pollutants: point source and non-point source. Point-source pollutants can be traced to their original source and are discharged directly from pipes or spills. Raw sewage discharging directly into a stream is an example of a point-source water pollutant. Non-point-source pollutants cannot be traced to a specific original source. Non-point-source pollution is caused by precipitation runoff collecting natural and human-made pollutants before depositing

Figure 4.7-2 San Fernando Valley Groundwater Basin



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Additional data provided by California Department of Water Resources(DWR) 2015.

Fig 12 San Fernando Valley Groundwater Basin them into various watersheds, including: lakes, rivers, wetlands, coastal waters, and groundwater. Non-point-source pollutants include, but are not limited to:

- Excess fertilizers, herbicides, and insecticides from agricultural lands and residential areas;
- Oil, grease, and toxic chemicals from urban runoff;
- Sediment from improperly managed construction sites, crop and forest lands, and eroding stream banks;
- Salt from irrigation practices; and
- Bacteria and nutrients from livestock, pet wastes, and faulty septic systems. (U.S. EPA 2017)

Surface water pollutants of primary concern in the vicinity of the Project site are summarized in Table 4.7-1.

In 2016, 55 percent of Burbank's drinking water supply came from groundwater pumped from the San Fernando Basin and treated at the Burbank Operable Unit (BOU) plant. The groundwater is treated to remove VOCs before entering the distribution system. The City's groundwater is considered most vulnerable to the known contaminant plume that most likely resulted from automobile repair shops, petroleum pipeline, metal plating, underground storage tanks, military installations, airport, gas stations, National Pollutant Discharge Elimination System (NPDES) permitted discharges, and plastics producers (BWP 2017).

Table 4.7-1 Surface Water Pollutants of Concern in Vicinity of Project Site

Water Body	Primary Pollutant of Concern
Burbank Western Channel	Copper Cyanide Lead Trash Selenium Indicator bacteria

Note: Pursuant to the Clean Water Act section 303(d), each state is required to submit to the US EPA a list identifying water bodies not meeting water quality standards. The water bodies listed in this table are on California's 2014/2016 303(d) list for the pollutants indicated.

Source: SWRCB 2017

As discussed in Section 9, *Hydrology and Water Quality*, of the Initial Study (Appendix A), the Project would be required to implement BMPs to reduce polluted runoff from the Project site by retaining and treating polluted runoff on-site, and integrate post-construction BMPs into the overall drainage system. Retaining and treating polluted runoff on-site and integrating post-construction BMPs into the overall drainage system would reduce the amount of runoff leaving the Project site. In addition, the Project would include Low Impact Development (LID) features that would retain stormwater runoff on-site by mimicking pre-development conditions on the Project site. A detailed drainage plan has been submitted to the City, which demonstrates that post-construction stormwater runoff will not exceed existing volumes. Project construction and erosion control practices would reduce the potential for adverse effect cause by excavation and general construction with respect to site drainage and runoff. Therefore, impacts would be less than significant and drainage pattern alternations and impacts are not discussed further in the impact analysis.

d. Flooding and Other Potential Hazards

As discussed in Section 9, *Hydrology and Water Quality*, of the Initial Study (Appendix A), the Project site is located in Federal Flood Zone X, outside of the 100-year flood hazard area (FEMA 2008). Zone X represents areas outside the 0.2 percent annual chance floodplain. Since the Project is not located within a 100-year flood hazard area, the Project would not place housing or structures that would impede or redirect flood flows.

The Project site is located in a potential inundation area for an earthquake-induced dam failure from Hansen Dam and Lopez Dam (Leighton 1990). However, these dams are continually monitored by various government agencies to guard against the threat of dam failure. Current design and construction practices and ongoing programs of review, modification, or total reconstruction of existing dams are intended to ensure that all dams are capable of withstanding the maximum considered earthquake for the site (Geocon 2016). Therefore, the potential for inundation at the Project site as a result of an earthquake-induced dam failure is considered low and is not discussed further. In addition, as discussed in the Initial Study, potential impacts associated with seiches, tsunamis, or mudflows would be less than significant and are not discussed further in the EIR.

e. Regulatory Setting

Federal Regulations

Clean Water Act (CWA)

Congress enacted the Clean Water Act (CWA), formerly the Federal Water Pollution Control Act of 1972, with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and non-point source discharges to surface water. Those discharges are regulated by NPDES permit process (CWA Section 402). NPDES permitting authority is administered by the California State Water Resources Control Board (SWRCB) and its nine RWQCBs. The Project site is in a watershed administered by the RWQCB Region 4 (Los Angeles Region).

Section 401 of the CWA requires that any activity that may result in discharges into a State water body must be certified by the RWQCB. This certification ensures that the proposed activity does not violate State and/or Federal water quality standards. The limits of non-tidal waters extend to the Ordinary High Water Mark, defined as the line on the shore established by the fluctuation of water and indicated by physical characteristics, such as natural line impressed on the bank, changes in the character of the soil, and presence of debris. The United States Army Corps of Engineers (USACE) may issue either individual, site-specific permits or general, nationwide permits for discharge into U.S. waters.

Clean Water Act Section 303(d)

Section 303(d) of the CWA (CWA, 33 USC 1250, et seq., at 1313(d)) requires states to identify “impaired” waterbodies as those which do not meet water quality standards. States are required to compile this information in a list and submit the list to the U.S. EPA for review and approval. This list is known as the Section 303(d) list of impaired waters. As part of this listing process, states are required to prioritize waters and watersheds for future development of total maximum daily loads (TMDL). The SWRCB and RWQCBs have ongoing efforts to monitor and assess water quality, to prepare the Section 303(d) list, and to develop TMDL requirements. Water bodies in the City’s watersheds near the Project site that are on California's 2014/2016 303(d) List are shown in Table 4.7-1 above.

National Pollutant Discharge Elimination System (NPDES)

The Federal government also administers the NPDES permit program, which regulates discharges into surface waters. The primary regulatory control relevant to the protection of water quality is the NPDES permit administered by the SWRCB. The SWRCB establishes requirements prescribing the quality of point sources of discharge and water quality objectives. These objectives are established based on the designated beneficial uses (e.g., water supply, recreation, and habitat) for a particular surface water body or groundwater basin. The NPDES permits are issued to point source dischargers of pollutants to surface waters pursuant to Water Code Chapter 5.5, which implements the Federal Clean Water Act. Examples include, but are not limited to, public wastewater treatment facilities, industries, power plants, and groundwater cleanup programs discharging to surface waters (SWRCB, Title 23, Chapter 9, Section 2200). The RWQCB establishes and regulates discharge limits under the NPDES permits.

Projects that will disturb more than one acre of land during construction are required to file a Notice of Intent (NOI) with the SWRCB to be covered under the NPDES Construction General Permit for discharges of stormwater associated with construction activity. The Project proponent must develop measures that are consistent with the Construction General Permit. Furthermore, a Stormwater Pollution Prevention Plan (SWPPP) must be developed and implemented for each site covered under the Construction General Permit. The SWPPP describes the BMPs the discharger will use to protect stormwater runoff and reduce potential impacts on surface water quality through the construction period. The SWPPP must contain the following:

- A visual monitoring program;
- A chemical monitoring program for nonvisible pollutants (to be implemented if a BMP failure occurs); and
- A sediment monitoring plan if the site discharges directly to a water body on the 303(d) list for sediment.

National Flood Insurance Program

The National Flood Insurance Act of 1968 established the National Flood Insurance Program, that is based on the minimal requirements for floodplain management and is designed to minimize flood damage within Special Flood Hazard Areas. FEMA is the agency that administers the National Flood Insurance Program. FEMA provides subsidized flood insurance to communities that comply with FEMA regulations that limit development in floodplains. FEMA also issues FIRM maps that identify areas of flood hazards within a community. Special Flood Hazard Areas are defined as areas that have a 1 percent chance of flooding within a given year, also referred to as the 100-year flood. As described above, the Project Site is located in Zone X, defined as an area that is outside the 500-year floodplain area and has a minimal hazard as shown on FIRM Flood Map Number 06037C1337F, dated September 26, 2008.

State Regulations

Porter-Cologne Water Quality Control Act

California's Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act) established the SWRCB and divided the state into nine regional basins, each with a RWQCB. The Project is located within the jurisdiction of the LARWQCB. The SWRCB is the primary state agency with responsibility to protect surface water and groundwater quality. The Porter-Cologne Act authorizes the SWRCB to draft policies regarding water quality in accordance with CWA Section 303. In addition, the Porter-Cologne Act authorizes the SWRCB to issue waste discharge requirements for projects that would discharge to state waters. These requirements regulate discharges of waste to surface and groundwater, regulate waste disposal sites, and require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

The Porter-Cologne Act requires the SWRCB or the RWQCBs to adopt water quality control plans (basin plans) and policies for the protection of water quality. The Basin Plan must conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State Water Policy. The Basin Plan must:

- Identify beneficial uses for the water to be protected,
- Establish water quality objectives for the reasonable protection of the beneficial uses, and
- Establish an implementation program for achieving the water quality objectives.

Basin plans also provide the technical basis for determining waste discharge requirements, taking enforcement actions, and evaluating clean water grant proposals. Basin plans are updated and reviewed every 3 years in accordance with Article 3 of Porter-Cologne Act and Clean Water Act Section 303(c).

California Toxics Rule

The California Toxics Rule is an USEPA-issued federal regulation that provides water quality criteria for potentially toxic constituents in California surface waters with designated uses related to human health or aquatic life. The rule fills a gap in California water quality standards that was created in 1994 when a state court overturned the state's water quality control plans containing water quality criteria for priority toxic pollutants. These federal criteria are legally applicable in the State of California for inland surface waters, enclosed bays, and estuaries for all purposes and programs under the CWA. The California Toxics Rule establishes two types of aquatic life criteria:

- Acute criteria represent the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without harmful effects; and
- Chronic criteria equal the highest concentration to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects.
- Due to the intermittent nature of stormwater runoff (especially in Southern California), the acute criteria are considered to be more applicable to stormwater conditions than chronic criteria.

State Antidegradation Policy

Under the State Antidegradation Policy whenever the existing quality of waters is better than what is needed to protect present and future beneficial uses, such existing quality must be maintained.

This state policy has been adopted as a water quality objective in all the state's Basin Plans. The state policy establishes a two-step process to determine if discharges with the potential to degrade the water quality of surface or groundwater will be allowed.

The first step requires that, where a discharge would degrade high-quality water, the discharge may be allowed only if any change in water quality would:

- Be consistent with the maximum benefit to the people of the state;
- Not reasonably affect present and anticipated beneficial uses of such water; and
- Result in water quality that is not less than that prescribed in state policies (i.e., Basin Plans).

The second step states that any activity resulting in discharge to high-quality waters is required to use the best practicable treatment or control of the discharge necessary in order to avoid the occurrence of pollution or nuisance and to maintain the "highest water quality consistent with the maximum benefit to the people of the state." The state policy applies to both surface and groundwater, as well as to both existing and potential beneficial uses of the applicable waters.

In 1999, the SWRCB issued and subsequently amended the General Construction Stormwater Permit that governs discharges from construction sites that disturb 1 acre or more of surface area. Again, on September 2, 2009, the SWRCB adopted a new General Construction Permit that substantially alters the approach taken to regulate construction discharges through (1) requiring the determination of risk levels posed by a project's construction discharges to water quality and (2) establishing numerical water quality thresholds that trigger permit violations. These new permit regulations took effect on July 1, 2010.

California Code of Regulations – Recycled Water Regulations (Titles 22 and 17)

Titles 22 and 17 of the California Code of Regulations (CCR) include regulations for the various uses of recycled water within the state. According to the CCR, recycled water used for the following purposes shall be at least disinfected secondary-23 recycled water: (1) industrial boiler feed, (2) nonstructural firefighting, (3) backfill consolidation around nonpotable piping, (4) soil compaction, (5) mixing concrete, (6) dust control on roads and streets, (7) cleaning roads, sidewalks and outdoor work areas, and (8) industrial process water that will not come into contact with workers. The CCR also requires that spray, mist, or runoff of recycled water does not enter dwellings, designated outdoor eating areas, or food handling facilities. Drinking water fountains must also be protected against contact with recycled water spray, mist, or runoff. No irrigation with, or impoundment of, disinfected secondary-2.2 or disinfected secondary-2.3 recycled water can take place within 100 feet of any domestic water supply well.

Municipal Regional Stormwater NPDES Permit

On November 8, 2012, the RWQCB adopted Order R4-2012-0175 (Waste Discharge Requirements for Municipal Separate Storm Sewer System) (MS4) Discharges within Coastal Watersheds of Los Angeles County (MS4 Permit). Order R4-2012-0175 became effective on December 28, 2013 and serves as the NPDES permit for coastal watershed stormwater and non-stormwater discharges originating from the Los Angeles County region. The permit covers the land areas in the Los Angeles County Flood Control jurisdiction, unincorporated areas of Los Angeles County, and 84 cities in the County. The City of Burbank is included in the MS4 Permit as a permittee under Order R4-2012-0175.

In coordination with permittees under MS4 Permit, RWQCB staff performs annual performance reviews and evaluations of the City's stormwater management program and NPDES compliance activities.

Local Regulations

City of Burbank Low Impact Development Ordinance

On June 16, 2015, the Burbank City Council adopted a LID Ordinance in compliance with the requirements of the MS4 Permit. The City uses the LID Ordinance to review and permit development and redevelopment projects that qualify under the triggering requirements of the ordinance. Qualifying development projects are directed 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. The intent of the LID ordinance is to retain stormwater runoff on site in a manner that is similar to predevelopment conditions.

Los Angeles County Department of Public Works Hydrology Manual

The Los Angeles County Department of Public Works Hydrology Manual (2006) contains the Standard Urban Stormwater Mitigation Plan (SUSMP) that applies to development and re-development projects in Los Angeles County. The SUSMP is described in detail below. The Hydrology Manual also includes TMDLs for pollutants per Section 303 of the Clean Water Act and BMPs for managing stormwater quality during construction. As the holder of the MS4 Permit, the RWQCB is responsible for enforcing these BMPs.

Los Angeles County Standard Urban Stormwater Mitigation Plan (SUSMP)

The SUSMP is a comprehensive stormwater quality program to manage urban stormwater and minimize pollution of the environment in Los Angeles County. The purpose of the SUSMP is to reduce the discharge of pollutants in stormwater by outlining BMPs that must be incorporated into the design plans of new development and redevelopment. The SUSMP requirements contain a list of minimum BMPs that must be employed to infiltrate or treat stormwater runoff, control peak flow discharge, and reduce the post-Project discharge of pollutants from stormwater conveyance systems. The SUSMP requirements define, based upon land use type, the types of practices that must be included and issues that must be addressed as appropriate to the development type and size. The SUSMP requirements apply to all development and redevelopment projects that fall into one of the following categories:

- Single-family hillside residences
- One acre or more of impervious surface area for industrial/commercial developments
- Automotive service facilities
- Retail gasoline outlets
- Restaurants
- Ten or more residential units
- Parking lots of 5,000 square feet or greater or with 25 or more spaces
- Projects located in or directly discharging to an Ecologically Sensitive Area

The SUSMP requirements are administered, implemented, and enforced through the Community Development Department Building and Safety Division and final review would be conducted by the Chief Building Official. During the review process, individual development project plans are reviewed for compliance with stormwater requirements.

Since the Project includes the creation and development of a commercial (317 hotel rooms; 1,067 sq. ft. of retail) and residential (573 apartment units) lot with more than 10,000 square feet or more of impervious surface area, a SUSMP is required to be prepared in accordance with the requirements of Order No. R4-2012-0175 and the Los Angeles County Hydrology Manual.

Water Quality Control Plan for the Los Angeles Region (Basin Plan)

The County of Los Angeles is under the jurisdiction of RWQCB Region 4 (Los Angeles Region). The RWQCB provides permits for projects that may affect surface waters and groundwater locally, and is responsible for preparing the Water Quality Control Plan for the Los Angeles Region (Basin Plan). The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality objectives. Water quality objectives, as defined by the CWA Section 13050(h), are the "limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses or the prevention of nuisance within a specific area." The State has developed TMDLs that are a calculation of the maximum amount of a pollutant that a water body can have and still meet water quality objectives established by the region.

Enhanced Watershed Management Program (EWMP) Plan

Conditions of the MS4 Permit require that all permittees develop a watershed management plan on an individual or joint basis that will address water quality issues in the permitee's jurisdictional area. The City of Burbank is a member of the Los Angeles River Watershed Management Group's EWMP. The EWMP submitted its Revised EWMP Plan to the RWQCB for review in January 2016 and the Plan was approved in April 2016. The EWMP Plan, along with a Coordinated Monitoring Plan, serves as a guiding document for implementing water quality improving infrastructure, policies, and programs.

City of Burbank General Plan 2035

On February 19, 2013, the City of Burbank approved the updated elements of the Burbank2035 General Plan except for the Housing Element that was adopted in January 2014. The General Plan is certified through 2035. The updates are intended to refine policies regarding long-term growth in the community through the year 2035 and to ensure that the General Plan reflects current state law.

Table 4.7-2 contains applicable General Plan Policies that relate to hydrology and water quality. Each General Plan Policy is organized by General Plan Element.

Table 4.7-2 Applicable Burbank 2035 General Plan Policies Relating to Hydrology and Water Quality

Policy	Description of Policy
Policy 2.6	Design new buildings to minimize the consumption of energy, water, and other natural resources. Develop incentives to retrofit existing buildings for a new reduction in energy consumption, water consumption, and stormwater runoff.
Policy 9.1	Meet the goal of a 20% reduction in municipal water use by 2020.
Policy 9.2	Provide public information regarding the importance of water conservation and avoiding wasteful water habits
Policy 9.3	Offer incentives for water conservation and explore other water conservation programs.
Policy 9.4	Pursue infrastructure improvements that would expand communitywide use of recycled water.
Policy 9.5	Require on-site drainage improvements using native vegetation to capture and clean stormwater runoff.
Policy 6.1	Inform applicants of flood risks and development requirements within the 100-year, 200-year, or 500-year floodplains or in other high-risk inundation areas.
Policy 6.3	Continue to maintain and upgrade the City-operated flood control system to ensure the system is capable of protecting existing and planned development.
Policy 6.4	Consult with Los Angeles County and other agencies to maintain and improve capacity of local and regional flood control systems.
Policy 6.5	Enforce regulations prohibiting the draining of rainwater into the sewer system.
Policy 6.6	Prepare and update a stormwater master plan to ensure proper maintenance and improvements to storm drainage facilities.
Policy 6.7	Employ strategies and design features to reduce the area of impervious surface in new development projects.

Source: Burbank2035 General Plan 2013

4.7.2 Impact Analysis

a. Methodology and Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, a hydrology and water quality impact is considered significant if the Project would:

1. Violate any water quality standards or waste discharge requirements;
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;

4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
5. 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;
6. Otherwise substantially degrade water quality;
7. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
8. Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
9. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; and/or
10. Expose people or structures to inundation by seiche, tsunami, or mudflow.

The Initial Study (Appendix A) determined that the Project could result in potentially significant impacts related to thresholds 1, 5, and 6. As such, these issues are analyzed in this section of the EIR. Because the Initial Study determined that impacts related to thresholds 2-4 and 7-10 would be less than significant, those issues are not studied further herein.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project violate any water quality standards or waste discharge requirements?
Threshold 6:	Would the project otherwise substantially degrade water quality?

Impact HWQ-1 THE PROJECT WOULD BE SUBJECT TO FEDERAL, STATE, AND LOCAL REQUIREMENTS FOR PROTECTING WATER QUALITY. COMPLIANCE WITH APPLICABLE REGULATIONS AND POLICIES WOULD PREVENT THE VIOLATION OF WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Grading and other construction activities associated with construction of the Project would have the potential to generate soil erosion and to increase sediment loads in stormwater runoff. Spills, leakage, or improper handling and storage of substances such as oils, fuels, chemicals, metals, and other substances from vehicles, equipment, and materials used during all construction phases could also cause pollutants to be present in stormwater runoff and impact water quality. During operation the Project site would be largely paved and impermeable; however, operation of the Project could degrade water quality through stormwater runoff. As discussed under *Regulatory Setting*, the Project would be subject to federal, State, and local standards and regulations protecting water quality and hydrological resources, including the CWA, NPDES, Los Angeles County MS4 Permit, Los Angeles County SUSMP, Los Angeles River Watershed Group's EWMP, City of Burbank LID Ordinance, and the applicable policies listed above in Table 4.7-2 from the Burbank 2035 General Plan. In addition, as further discussed below, the Project would require implementation of Best Management Practices (BMPs) to reduce polluted runoff from the Project site by retaining and treating polluted runoff on-site. Development of the Project would be required to comply with applicable regulations, standards, and policies that would prevent violations of water quality standards and waste discharge requirements. Regulations and policies that would apply to the Project's construction and operational activities are discussed below.

Construction

Grading, excavation, and other construction activities associated with the Project could adversely affect water quality due to erosion resulting from exposed soils and the generation of water pollutants, including trash, construction materials, and equipment fluids.

Although the Project would not involve alteration of a stream or river, grading could affect drainage conditions. Grading activities during construction would involve 90,000 cubic yards of soil excavation for the subterranean parking structure that would alter current drainage patterns. Alteration of drainage patterns during construction could generate erosion and sedimentation.

Because the Project site totals more than one acre, on-site construction activities would be subject to the NPDES Statewide General Construction Activity Stormwater permit. Construction site operators would be responsible for preparing and implementing a SWPPP that outlines project-specific BMPs to control erosion, sediment release, and otherwise reduce the potential for discharge of pollutants in stormwater. Typical BMPs applicable to the Project, include, but are not limited to:

- Utilizing temporary de-silting basins to ensure that surface water flows do not carry significant amounts of on-site soils and contaminants downstream;
- Conducting construction vehicle maintenance in staging areas where appropriate controls have been established to ensure that fuels, motor oil, coolant, and other hazardous materials are not deposited into areas where they may enter surface water and groundwater;
- Restricting the use of chemicals that may be transferred to surface waters by stormwater flows or leach to groundwater basins through water percolation into the soil;
- Requiring that permanent slopes and embankments be vegetated following final grading;
- Installation of silt fences, erosion control blankets;
- Proper handling and disposal of wastes; and
- Installation of anti-tracking pads at site exits to prevent off-site transport of soil materials.

Implementation of construction BMPs would minimize surficial erosion and transport of pollutants, and would ensure compliance with applicable NPDES requirements, thereby protecting water quality both on- and off-site. Therefore, impacts would be less than significant.

Operation

According to the Fuscoe Engineering Report, the existing Project site contains approximately 91 percent of impervious area. With implementation of the Project, the impervious area would decrease to approximately 88 percent, due to the addition of landscaped areas and the open space public plaza. Although the Project would result in a decrease of impervious surface area on the Project site, the Project would be required to comply with the Burbank LID standards that require new developments to retain 100 percent of the Storm Water Quality Design Volume (SWQDv) on-site, which is defined as the stormwater runoff from a 0.75-inch, 24-hour storm, or the 85th percentile storm, whichever is greater. In addition, the project design features (PDF) provided below includes requirements for Project design toward the goal of retaining stormwater runoff on-site by mimicking pre-development conditions.

According to Burbank LID Standards Manual, the Project is a "Planning Priority Project" because it would disturb over an acre and add more than 10,000 square feet of impervious surface area. As a Priority Project, the development must prepare a LID Plan to comply with the following:

- Retain stormwater runoff on-site for the SWQDv defined as the runoff from:
  - The 85th percentile 24-hour runoff event as determined from the Los Angeles County 85th percentile precipitation isohyetal map; or
  - The volume of runoff produced from a 0.75-inch, 24-hour rain event, whichever is greater.
- Minimize hydromodification impacts to natural drainage systems.
- When 100 percent on-site retention of the SWQDv is technically infeasible, partially or fully, the infeasibility shall be demonstrated in the submitted LID Plan.
- If partial or complete on-site retention is technically infeasible, the Project site may biofiltrate 1.5 times the portion of the remaining SWQDv that is not reliably retained on-site.
- The remaining SWQDv that cannot be retained or biofiltered on-site must be treated on-site to reduce pollutant loading.
- A multi-phased project may comply with the standards and requirements for all of its phases by: (i) designing a system acceptable to the Community Development Director or his/her designee to satisfy these standards and requirements for the entire site during the first phase, and (ii) implementing these standards and requirements for each phase of development of the site during the first phase or prior to commencement of construction of a later phase, to the extent necessary to treat the stormwater from such later phase.

All Planning Priority Projects must 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. Rainfall harvest and use is a system designed to capture runoff, typically from a roof, and provides temporary storage until the water can be used for irrigation or non-potable uses. The harvested water may also be used for potable water uses if the system includes disinfection treatment and is approved for such use by the local building department (City of Burbank 2015). In compliance with LID requirements, a detailed hydrologic and hydraulic report would be submitted to the City of Burbank Public Works Department prior to the issuance of a grading permit that quantifies both the Project water quality impacts and the LID requirements (i.e. quantify what will remain onsite vs. what will be conveyed offsite), with the primary goal to retain stormwater runoff on site in a manner that is similar to predevelopment conditions.

Compliance with federal, State, and local regulations would ensure that stormwater runoff is captured and treated on-site, thereby protecting water quality both on- and off-site. In addition, the Hydrology PDF 1 and Hydrology PDF 2 proposed by the applicant would address potential impacts associated with stormwater runoff and water quality through implementation of a Low Impact Development Plan and a Soil Management Plan. All PDFs would also be incorporated into the Development Agreement review process as Conditions of Approval. With adherence to all PDFs as well as the applicable local, State, and Federal requirements described herein, construction and operation if the Project would not violate water quality standards or waste discharge requirements, and impacts would be less than significant.

Project Design Features

Hydrology PDF 1 – Low Impact Development Plan

Per the requirements of the MS4 Permit, a Low Impact Development (LID) Plan has been developed by the Project applicant and will be submitted to the City of Burbank Community Development Director or his/her designee for approval. The LID Plan is required because the Project would result in an alteration to 50 percent or more of the impervious surfaces of a previously existing development that was not subject to post-construction stormwater quality control requirements. Therefore, the Project is classified as a "Planning Priority Project" per the Burbank Municipal Code (BMC) and must comply with requirements of BMC Section 9-3-413, which states all stormwater runoff generated at the Project site must be treated. The LID Plan is designed to control pollutants, pollutant loads, and runoff volumes to the maximum extent feasible by minimizing impervious surface areas and controlling runoff from impervious surfaces through infiltration, evapotranspiration, bioretention and/or rainfall harvest and use. Since infiltration of stormwater runoff onsite was determined to be infeasible due to groundwater contamination, the LID plan details how the Project will include Filterra systems sized to treat 1.5 times the 85th percentile, 24-hour rain event. In addition to treating stormwater runoff the LID Plan details source control BMPs that will be implemented onsite to reduce the potential for water quality degradation. These include storm drain messages and signing, locating trash away from roof drainage, minimization of run-on to the loading docks, and installation of irrigation that minimizes dry weather urban runoff. The Project must also protect slopes and channels and provide proof of ongoing BMP maintenance.

Hydrology PDF 2 – Soil Management Plan

The Project site was investigated for potential groundwater and soil contamination under the Well Investigation Program as part of the San Fernando Valley Groundwater Basin Superfund Site. The Project site lies within the Burbank Operable Unit. As a result of these past uses, there is a potential that construction activities could uncover previously contaminated soils. Thus, the project applicant has developed a Soil Management Plan (SMP) that outlines the framework for soils assessment, remediation, and removal actions to be undertaken if contaminated soils are encountered during construction activities. This plan will be provided to the City as part of the documents prior to issuance of building permits. As grading, excavation and trenching are performed, exposed soil would be monitored for stained or discolored soil, wet or saturated soils, or odors. If impacted soil is encountered, the soil would be analyzed to identify and characterize the impact and determine if soil remediation is required. Based on visual monitoring, "grab" soil samples would be collected at selected locations for headspace screening for volatile organic compounds using a calibrated Photoionization Detector (PID). Headspace PID readings that are elevated above those of non-impacted grab soil samples would be considered potentially contaminated.

Soil impacted by highly elevated concentrations of hexavalent chromium and/or total chromium may appear to be stained a yellow color, dissimilar to surrounding non-impacted soil. At a minimum, at least one soil sample would be collected for chemical analysis at or near the center of the suspected impact, ideally representative of the "worst case" condition. Soil samples would be analyzed by an appropriate State-certified laboratory using appropriate methods based on the parameters to be analyzed. The extent of lateral and vertical effects will be characterized where applicable. Likely excavation of impacted soil would be followed by segregated stockpiling or direct-loading, waste profiling, and off-site disposal or recycling which would be performed in accordance with applicable Federal, State, and local regulations.

Mitigation Measures

Table 4.8-1, LID Source Control Measures, identifies the source control measures taken from the County LID Manual that would be implemented on-site, per Hydrology PDF 1. Implementation of these measures into the Project design would reduce impacts from stormwater runoff volumes and stormwater pollutants. Hydrology PDF 2 would further reduce potential impacts associated with water quality degradation from the presence of existing soil contamination. Compliance with federal, State, and local requirements, as well as the PDFs provided above, would ensure that potential impacts associated with water quality and waste discharge would be less than significant and mitigation measures are not required.

Threshold 5:	Would the project 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?

Impact HWQ-2 UNDER THE PROPOSED PROJECT, PEAK DISCHARGE RATES FOR THE 25-YEAR AND 85TH PERCENTILE STORMS WOULD DECREASE DUE TO THE ADDITION OF LANDSCAPED AREAS ON THE PROJECT SITE. IN ADDITION, THE EXISTING CITY-OWNED STORMWATER DRAINAGE TRUNK LINE WOULD HAVE SUFFICIENT CAPACITY FOR STORMWATER DISCHARGE FROM THE PROPOSED PROJECT. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The Project site consists of a vacant lot with concrete slabs and mounds of soil. Due to the topography, stormwater flows in a north-to-south direction towards North Front Street and the Magnolia Boulevard underpass. The Project site currently contains a City-owned stormwater drainage trunk line that runs along the extension of Cypress Avenue. The storm drain is referenced by City plans as a 42-inch drain that ultimately discharges into the Burbank Western Channel (Fuscoe Engineering 2017; see Appendix H).

The Project would generally direct flows in the same direction to the southwestern portion of the site. The Project also includes two on-site storm drains along the easterly boundary of the Project site that would connect to the existing 42-inch City-owned storm drain in the southeastern portion of the Project site.

The Fuscoe Engineering hydrology report, provided in Appendix H, calculates the peak discharge rates and total discharge volumes for a 25-year storm and an 85th percentile storm under existing and proposed conditions. As shown in Table 4.7-3, under existing conditions, the peak discharge rates for the 25-year storm and the 85th percentile storm are 15.2 cubic feet per second (cfs) and 1.4 cfs, respectively. Under proposed conditions, the peak discharge rates for the 25-year storm and the 85th percentile storm would be 14.1 cfs and 1.2 cfs, respectively. The proposed Project would decrease the existing impervious area by introducing a public plaza green space and additional landscaped areas, which would in turn decrease the peak discharge rate. Further, implementation of the proposed Project would require the use of BMPs for controlling runoff such as, but not limited to:

- Bioretention
- Green roofs
- Biofiltration
- Vegetated swales
- Stormwater planters
- Permeable pavement

The Hydrology Report also calculates the 25-year discharge from the Project site under proposed conditions, combined with existing off-site stormwater flows to the 42-inch stormwater drainage trunk line in order to determine whether the existing trunk line would have sufficient capacity to convey the proposed Project's stormwater discharge. As shown in Table 4.7-3, the report concludes that the combined 25-year peak discharge would be 70.2 cfs, which is less than the estimated 42-inch storm drain trunk line capacity of 71 cfs.

Table 4.7-3 Peak Discharge Rates and Total Discharge Volumes under 25-Year and 85th Percentile Storms for Existing and Proposed Conditions

Scenario	Area (AC)	Q_{25} (cfs)	V_{25} (cu-ft)	Q_{85th} (cfs)	V_{85th} (cu-ft)
Existing Condition	6.77	15.2	128,824	1.4	22,199
Proposed Condition	6.77	14.1	125,539	1.2	21,556
Off-site (to Existing 42" RCP through Site)	25.00	56.1	497,509	5.2	85,142
Combined Proposed & Off-site (to Existing 42" RCP through Site)	31.77	70.2	623,048	6.4	106,698

AC = acres
Cfs = cubic feet per second
Cu-ft = cubic feet
RCP = Reinforced Concrete Pipe
Source: Fuscoe Engineering 2017

Based on the results of the Hydrology Report, development of the Project along with the proposed on-site drain system would result in a decrease of peak discharge rates for the 25-year storm and the 85th percentile storm. The report also concludes that the existing City-owned drainage trunk line would have sufficient capacity for the stormwater discharge from the proposed Project. In compliance with LID requirements, including as described in Hydrology PDF 1 above, a detailed hydrologic and hydraulic report would be submitted to the City of Burbank Public Works Department prior to the issuance of a grading permit that quantifies both the Project water quality impacts and the LID requirements (i.e., quantify what will remain onsite vs. what will be conveyed offsite), with the primary goal to retain stormwater runoff on site in a manner that is similar to predevelopment conditions. Thus, impacts related to the amount of stormwater runoff would be less than significant.

Mitigation Measures

Based on the aforementioned analysis, Project impacts would be less than significant and therefore, mitigation would not be required.

c. Cumulative Impacts

Planned and pending projects (shown in Table 3-1 in Section 3, Environmental Setting) would add 2,653 residential units (including single- and multi-family building types), 1,515 hotel rooms, 307,830 square feet of commercial and restaurant development, approximately one million square feet of industrial development, and approximately five million square feet of office space. Development of the Project, in conjunction with nearby developments, would incrementally increase impervious surface area in the local watershed, thereby potentially increasing the amount of surface water entering area drainages. However, in compliance with the Burbank LID Manual and the NPDES permits for SUSMP, individual projects would provide their own water detention infrastructure to reduce peak flows and avoid downstream flooding. Compliance with existing regulatory requirements on all new development would ensure that increases in peak runoff would not occur and would reduce cumulative impacts to a less than significant level. The intent of the LID ordinance is to retain stormwater runoff on-site by mimicking pre-development conditions. In addition, the Project would be in compliance will all existing regulatory requirements applicable to stormwater runoff, water quality, and waste discharge.

Cumulative development could increase the discharge of urban pollutants to surface waters and groundwater. Stormwater concentrations of oil, grease, heavy metals, and debris could increase as the amount of urban development increases in the watershed. However, all new development would be subject to the water quality requirements of the RWQCB, the County of Los Angeles, and the City of Burbank. This would address any potential adverse cumulative impacts resulting from individual new developments and reduce cumulative impacts to a less than significant level.

Because the Project would comply with existing regulatory requirements related to stormwater runoff, water quality, and waste discharge, as well as the implementation of the City's required LID features for stormwater and water quality, the Project's contribution to cumulative impacts to stormwater and water quality would not be cumulatively considerable.

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4.8 Land Use and Planning

This section analyzes the proposed project's consistency with applicable land use policies.

4.8.1 Setting

a. Regulatory Setting

The City of Burbank General Plan (Burbank2035), Burbank Center Plan (Specific Plan) and the City's Zoning Ordinance (Title 10 of the Burbank Municipal Code [BMC]) serve as the primary land use planning tools for the City.

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The Southern California Association of Governments (SCAG) is an association of local governments and agencies that serves as a Metropolitan Planning Organization (MPO), a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities. SCAG is responsible for developing long-range regional transportation plans, including the regional Sustainable Communities Strategy and associated growth forecasts, regional transportation improvement programs, regional housing needs allocations and a portion of the South Coast Air Quality management plans (SCAG 2018).

SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range regional transportation and land use network plan that looks ahead 20+ years and provides a vision of the region's future mobility and housing needs with economic, environmental and public health goals. The RTP/SCS identifies major challenges as well as potential opportunities associated with growth, transportation finances, the future of airports in the region, and pending transportation system deficiencies that could result from regional growth. SCAG adopted its current RTP/SCS in April 2016 (SCAG 2016). Major goals of the 2016-2040 RTP/SCS include:

1. Align the plan investments and policies with improving regional economic development and competitiveness.
2. Maximize mobility and accessibility for all people and goods in the region.
3. Ensure travel safety and reliability for all people and goods in the region.
4. Preserve and ensure a sustainable regional transportation system.
5. Maximize the productivity of our transportation system.
6. Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).
7. Actively encourage and create incentives for energy efficiency, where possible.
8. Encourage land use and growth patterns that facilitate transit and active transportation.
9. Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.

Burbank2035 General Plan

The Burbank2035 General Plan (adopted February 2013) provides a guide for land use decision-making in the City. The General Plan includes the following elements: Air Quality and Climate Change, Land Use, Mobility, Noise, Open Space and Conservation, Safety and Plan Realization. Additionally, the Housing Element was adopted in 2014. Together, the Land Use, Housing, and Mobility Elements are intended to ensure that adequate land, infrastructure services, and circulation routes are provided to accommodate existing and future development. (Burbank 2013)

Land Use Element

The Land Use Element also identifies the physical opportunities and constraints for development in the City, describes the future location, type, intensity, and design of land uses, and establishes the desired mix and relationship between land uses (City of Burbank 2013). Land use goals and policies seek to maintain a balance between small-town character, economic prosperity, and sustainability.

Housing Element

The Housing Element identifies strategies and programs that focus on preserving and improving housing and neighborhoods, providing adequate housing sites, assisting in the provision of affordable housing, removing governmental and other constraints to housing investment, and promoting fair and equal housing opportunities. The Housing Element consists of the following components: Analysis of the City’s demographic, household, and housing characteristics and related housing needs; review of potential market, governmental and infrastructure constraints to meeting Burbank’s identified housing needs; evaluation of residential sites, financial and administrative resources available to address the City’s housing goals; and a Housing Plan for addressing the City's identified housing needs, constraints and resources, including housing goals, policies and programs. Further discussion regarding the proposed Project’s consistency with respect to the Housing Element is provided in Section 4.10, *Population and Housing*.

Mobility Element

The Mobility Element defines the City’s transportation network, including streets, railways, transit routes, bike paths, and sidewalks. It also lays out future transportation services and routes designed to meet the demands of both existing and future development. Per the Mobility Element, the Project site is located in a Transit Center. Transit Center goals and policies encourage density, provide reduced parking incentives, and support land use connections to transit, walking and biking networks (City of Burbank 2013). Further discussion regarding the proposed Project’s consistency with respect to the Mobility Element is provided in Section 4.12, *Transportation and Traffic*.

Burbank Center Plan (Specific Plan)

The Burbank Center Specific Plan (Specific Plan) is an economic revitalization plan that addresses long range land use and transportation planning for Downtown Burbank. The Specific Plan is divided into three subareas (City Center, South San Fernando, and City Center West) and focuses on several opportunity sites that are currently vacant or underutilized and could serve as catalysts for future development.

The Project site is identified as Opportunity Site No. 8 in the Specific Plan. Additionally, the Project site is located in the City Center West area of the Specific Plan, which focuses on recycling of heavy industrial uses to mixed use developments with an emphasis on transit oriented development. This area is currently characterized by aging industrial facilities and strip commercial uses. The Project site is identified in the Specific Plan as being within a Regional Intermodal Transportation Center (RITC), which is the focal point of the convergence of regional and local transportation in Burbank (Burbank Center Plan1997).

City of Burbank Municipal Code (BMC) and Zoning Ordinance

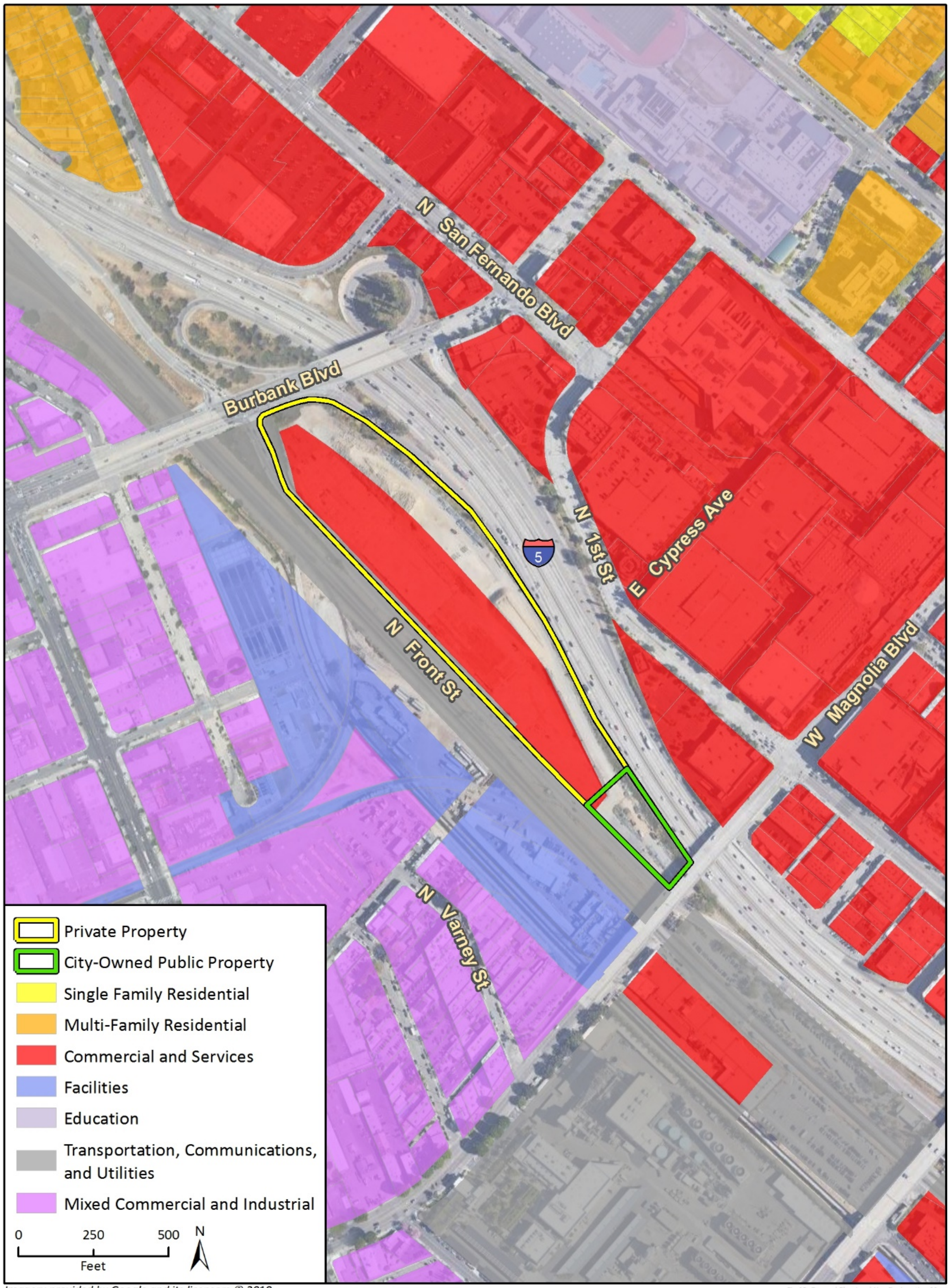
The BMC establishes regulations that implement the City's General Plan. Title 10, Zoning Regulations, contains regulations that control the uses of land, allowable building density; the locations, appearance, height and massing of structures; the open spaces associated with structures; dimensions of sites; and sets requirements for signage and on- and off-site parking (BMC 2018).

b. Existing Land Uses and Land Use Designations

The Project site is comprised of approximately eight acres located on the east side of North Front Street. Figure 2-2 in Section 2, *Project Description,* shows the location of the Project site in its neighborhood context. The Project site is in an industrial and commercial area that has been previously graded and currently contains mounds of soil and construction material being used by Caltrans as part of the I-5 Freeway Project. Figures 2-8a through 2-8d of Section 2 show existing conditions at the Project site.

The Project site has a General Plan land use designation of Downtown Commercial, and a Burbank Center Plan land use designation of Mixed Commercial/Office/ Industrial. The Project site is zoned Automobile Dealership (AD). Table 4.8-1 lists the allowable land uses and development standards for the applicable General Plan and Specific Plan designations and the AD zone. Figure 4.8-1 through Figure 4.8-3 show the land use, Specific Plan land use and zoning designations of the Project site and surrounding area, respectively.

Figure 4.8-1 Land Use Designations



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Additional data provided by County of Los Angeles 2016.

Figure 4.8-2 Specific Plan Land Use Designations

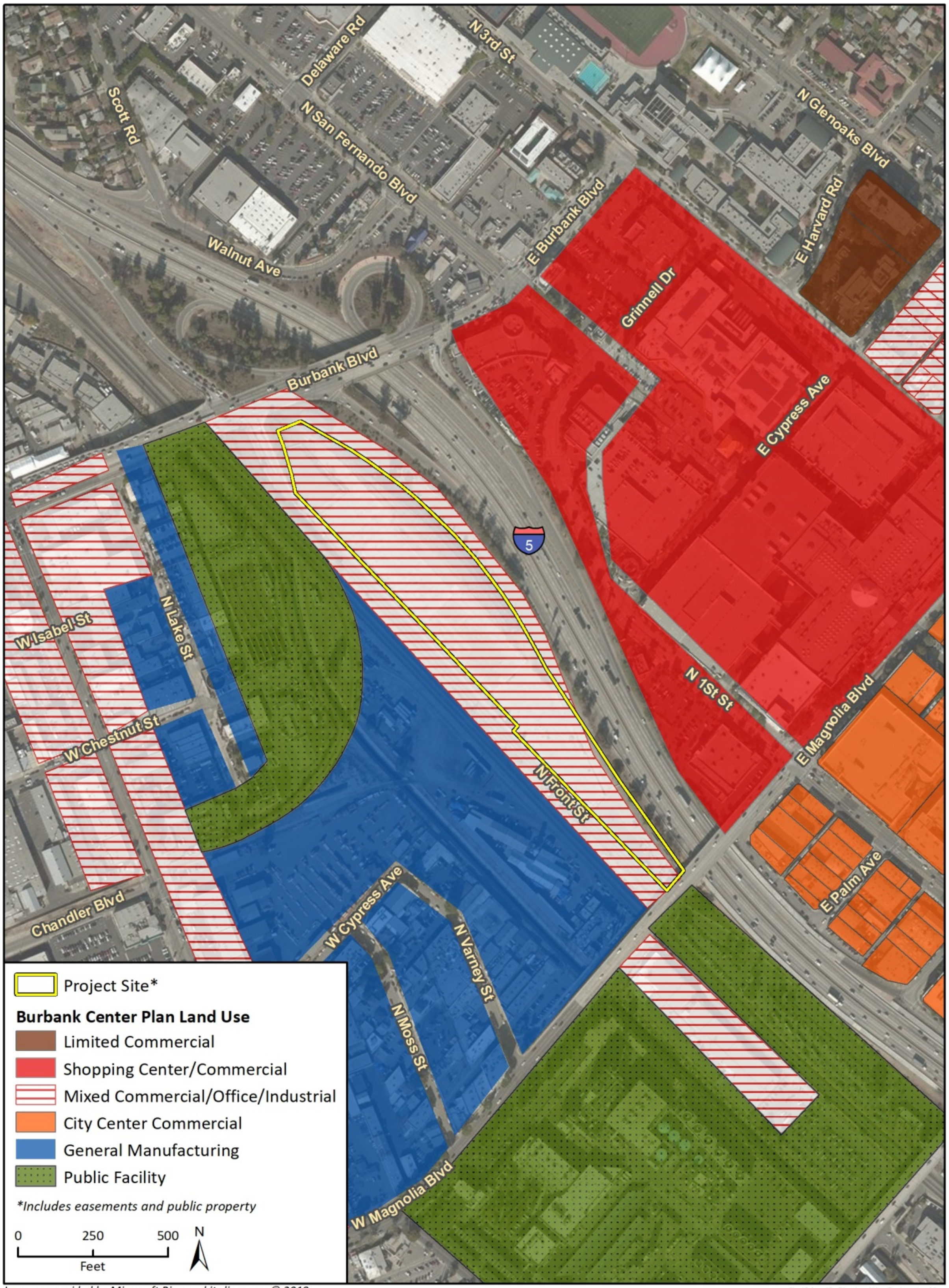

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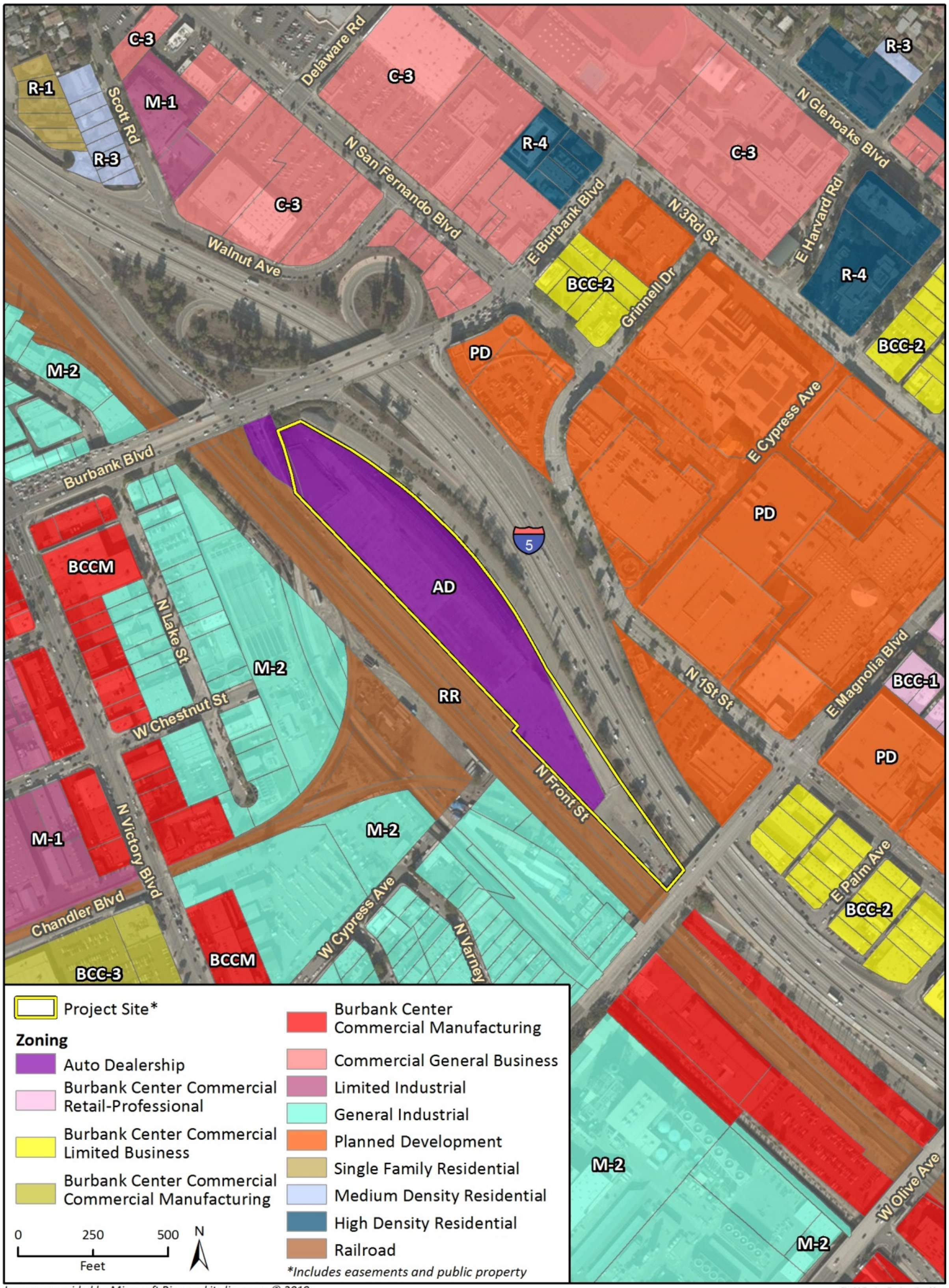
Figure 4.8-3 Zoning Designations



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Additional data provided by County of Los Angeles 2016.

Table 4.8-1 Existing Zoning and General Plan Requirements

	General Plan Land Use Designation	Specific Plan Land Use Designation	Zoning Designation
	Downtown Commercial	**Mixed Commercial/Office/Industrial**	**AD (Automobile Dealership)**
Purpose	Allows for commercial retail and office uses geared towards a downtown village concept, including an allowance for residential uses above commercial uses on the same property.	Retains the light industrial employment base while encouraging future development of mixed use commercial/office projects. Encourages the recycling of obsolete industrial properties and offers a mixed-use opportunity to facilitate economically successful development; with no residential land use allowed.	Provides an area devoted primarily to new car sales. The primary permitted use is the sale of new automobiles. Used car sales, automobile repair, incidental retail, and restaurants that serve the dealership are permitted as ancillary uses only; with no residential land uses allowed.
Height	Maximum height limit to be determined through a Conditional Use Permit	15 stories, or 205 feet, via Planned Development approval.	Maximum height limit to be determined by its distance from the closest lot line of any property zoned for residential uses. Project site is over 900 feet south of residential designation along Scott Road. Therefore, maximum height limit to be determined through a Conditional Use Permit
Floor Area Ratio[1] (FAR)/Density	Maximum 2.5 FAR/87 units per acre with discretionary approval	Maximum 2.5 FAR/87 units per acre with discretionary approval	Maximum 2.5 FAR for areas with a Downtown Commercial Land Use Designation

[1] Floor Area Ratio (FAR): The ratio of the floor area of the buildings on a lot to the total area of the lot (BMC 2018).

Source: City of Burbank 1997, 2013, 2018.

c. Surrounding Land Uses

The Project site is located immediately west of Downtown Burbank. The Burbank Metrolink Station is located southeast of the Project site, on the west side of North Front Street that serves as a major public transportation node in the City. Interstate 5 (I-5) separates the Project site from the northeast portion of Downtown Burbank. Surrounding uses and corresponding designations/zones are described below.

- **North:** Burbank Boulevard borders the Project site to the north. Burbank Boulevard is identified in the Mobility Element as a Major Arterial. Properties to the northwest generally consist of commercial and industrial uses and are zoned M-2 (General Industrial) and have a General Plan land use designation of North Victory Commercial/Industrial. Properties to the northeast of the Project site generally consist of commercial and retail uses. These properties are zoned NSFC (North San Fernando Commercial) and have a General Plan land use designation of Corridor Commercial.
- **South:** Magnolia Boulevard borders the southern end of the Project site. Magnolia Boulevard is identified as a Secondary Arterial in the Mobility Element. Properties to the south of the Project site generally include industrial uses. These properties are zoned M-2 and BCCM (Burbank Center Commercial Manufacturing) and have a General Plan land use designation of Institutional and Downtown Commercial.

- **East:** I-5 borders the Project site to the east. East of the I-5, properties consist of commercial and retail land uses and are zoned NSFC and PD (Planned Development), with a General Plan land use designation of Corridor Commercial.
- **West:** Industrial and commercial land uses are located west of the Project site. Residential areas are located a few blocks further west. The United Water Services treatment facility located on the Burbank Water and Power (BWP) power plant site is approximately 150 feet southwest of the Project site. Properties to the west of the Project site are zoned M-2 and have a General Plan land use designation of North Victory Commercial/ Industrial.

4.8.2 Impact Analysis

a. Methodology and Significance Thresholds

According to Appendix G of the CEQA Guidelines, the effects of the proposed project on land use are considered to be significant if the proposed project would:

1. Physically divide an established community;
2. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, clean air plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
3. Conflict with any applicable habitat conservation plan or natural community.

The Initial Study (see Appendix A) concludes that only the criterion 2 could potentially result in a significant impact. The proposed Project would not divide an established community, and there are no habitat conservation plans or natural community conservation plans applicable to the Project site. These impacts would be less than significant and are not discussed further in this EIR. Therefore, only impacts related to consistency with applicable land use plans are addressed in this section.

b. Project Impacts and Mitigation Measures

Threshold 2:	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect

Impact LU-1 THE PROJECT REQUIRES APPROVAL OF A SPECIFIC PLAN AMENDMENT TO THE BURBANK CENTER PLAN TO ALLOW HOUSING ON THE SITE, DEVELOPMENT REVIEW, PLANNED DEVELOPMENT, DEVELOPMENT AGREEMENT, AND A AND TENTATIVE TRACT MAP NO. 74896. WITH APPROVAL OF THESE DISCRETIONARY ACTIONS, THE PROPOSED PROJECT WOULD BE CONSISTENT WITH THE CITY'S GENERAL PLAN AND ZONING ORDINANCE. IMPACTS RELATED TO CONSISTENCY WITH PLANS, POLICIES, AND REGULATIONS WOULD THEREFORE BE LESS THAN SIGNIFICANT.

The Project would involve clearing and excavation of the Project site and construction of a mixed-use development that would include two residential buildings, one hotel building, a retail space, and associated parking structures. Table 2-1 of Section 2, *Project Description*, shows the characteristics of the Project.

The Project would include changing the underlying subarea of the Project site from City Center West to City Center/City Center Access to the Regional Intermodal Transportation Center (RITC) and changing the underlying land use designation of the project site from Mixed Commercial/Office/Industrial to City Center Commercial. The Project requires approval of a Specific Plan Amendment to the Burbank Center Plan to allow residential land uses on the site; Development Review; a Development Agreement; and a Tentative Tract Map No. 74896. BMC §10-1-19121, specifies that approval of a Planned Development will result in an amendment to the zoning map, changing the zoning designation from AD (Automobile Dealership) to PD (Planned Development) upon approval by the City Council. Also, the allowable Permitted/Conditionally Permitted uses and the various development standards shall be as specified in the Development Agreement and Planned Development. The Planned Development Agreement process would allow for one alcohol license for the Project.

Pursuant to the existing General Plan land use designation, the maximum allowable FAR is 2.5 and the allowable density is 87 units per acre. Consistent with the Specific Plan and Zoning Code, subject to the City Council approving an amendment the Specific Plan subarea change from mixed commercial/office/industrial to City Center Commercial access area to RITC and a PD zoning designation for the subject site, the residential component of the Project would be developed at a density of approximately 85 units per acre, while the retail/hotel portion of the Project would be developed with a FAR of 0.61.

The following analysis discusses the Project's consistency with applicable plans and regulations, including SCAG's 2016-2040 RTP/SCS, the City's General Plan, Burbank Center Plan, and the BMC.

2016-2040 RTP/SCS Consistency

As discussed above under *Regulatory Setting*, the goals of the 2016-2040 RTP/SCS that are applicable to the Project focus on mobility, accessibility, a strong economy, and sustainability. The RTP/SCS aims to balance future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. The 2016-2040 RTP/SCS is intended to help guide transportation and land use decisions and public investments (SCAG 2016).

The Project would involve the construction of a mixed-use transit-oriented development that would include three multi-story structures; two residential buildings and a hotel building (refer to the *Regulatory Setting* above for the goals of the RTP/SCS). The Project would include a retail gallery with a pedestrian link to Burbank Boulevard, at the northern portion of the Project site, and a publicly accessible, privately-maintained open space plaza with a pedestrian bridge and elevator to Magnolia Street on the southern portion of the Project site. The Project would be located approximately 0.25 mile west of Downtown Burbank and approximately 0.2 mile north of the Downtown Burbank Metrolink Station that would promote mobility and accessibility via a transit-oriented development. Additionally, the Project would provide bicycle parking and add a bike lane along Front Street to provide improved bicycle access for the Project, local residents, and employees. These amenity spaces and links to the adjacent Burbank Town Center would enhance pedestrian connections from the Project to Downtown Burbank. The Project would overall complement the surrounding residential, retail, and commercial uses near the Project site, which would benefit from increased pedestrian amenities and activity along Front Street by drawing new foot traffic and business patronage. Therefore, consistent with the goals identified in SCAG's 2040 RTP/SCS, the Project would protect the environment and health of residents by improving air quality and encouraging active transportation (e.g., bicycling and walking) and encourage land use and growth patterns that facilitate increased economic activity and greater access to public transit and active transportation.

General Plan Consistency

The following analysis discusses the Project's consistency with applicable goals and policies of the General Plan Land Use Element on a policy by policy basis. Approval of the Specific Plan and zoning map amendment by the City would be required for the Project to be consistent with the General Plan. Consistency of the Project with the Land Use Element and its corresponding goals and policies is analyzed in Table 4.8-2. As discussed above under *Regulatory Setting,* and in Section 4.10, *Population and Housing*, the Project would be consistent with the City's Housing Element. The Project would provide opportunities for new housing types that would include mixed-use residential development and would aid in addressing Burbank's changing housing needs. Further discussion regarding the Project's consistency with respect to the Mobility Element is provided in Section 4.12, *Transportation and Traffic*. Further discussion regarding the Project's consistency with respect to the Air Quality and Climate Change Element is discussed in Section 4.2, *Air Quality*, and Section 4.5, *Greenhouse Gasses.* Further discussion regarding the Project's consistency with respect to the Noise Element is provided in Section 4.9, *Noise*. Further discussion regarding the Project's consistency with the Community Design and Character Element and Open Space and Conservation Element are provided in Section 4.1, *Aesthetics*. Lastly, further discussion regarding the Project's consistency with respect to the applicable goals and polices of the Safety Element is provided in Section 4.4, *Geology and Soils*.

The Project is consistent with a majority of the policies associated with mixed-use and multi-family development in a commercial land use designation. The proposed podium parking facilities are also being designed to conceal the parking levels into the larger overall design of the residential and hotel structural architecture. In addition, the proposed sound wall along the Project site's easterly property line with the I-5 freeway and the fact that the site sits at a lower grade than the rest of the Downtown area east of the site will further hide the proposed podium levels of parking.

Table 4.8-2 Project Consistency with Applicable General Plan Goals and Policies

Goal/Policy	Project Consistency
Land Use Element	
Goal 1: Quality of Life: Burbank maintains a high quality of life by carefully balancing the needs of residents, businesses, and visitors.	
Policy 1.1: Accommodate a mix of residential and non-residential land uses in appropriate locations that support the diverse needs of Burbank residents, businesses, and visitors. Provide opportunities for living, commerce, employment, recreation, education, culture, entertainment, civic engagement, and socializing.	**Consistent** The Project would provide a transit-oriented mixed-use development in close proximity to Downtown Burbank and across from the Downtown Burbank Metrolink Station that would support the diverse needs of Burbank's residents, business and visitors. The Project would include residential, hotel and retail uses, and an open space area that would be available to the public. The amenities associated with the residential and hotel components of the Project would provide opportunities for employment, recreation, culture, entertainment, and socializing. Therefore, the proposed Project would be consistent with this policy.
Policy 1.2: With discretionary approval, allow for the density and intensity limits specified in Burbank2035 to be exceeded for transit-oriented development projects within transit centers as identified in the Mobility Element. The density and intensity limits may be exceeded by no more than 25%.	**Consistent** The Project is a transit-oriented development located near a transit center. The Project would have an overall FAR of 0.61. The maximum allowable FAR pursuant to the existing General Plan and Specific Plan land use designations and the zoning designation is 2.5 FAR with discretionary approval. The proposed Project would therefore would not exceed 25% the Project requires approvals for a Specific Plan Amendment, Development Review, Planned Development, Development Agreement, Tentative Tract Map No. 74896. Therefore, with approval of the requested discretionary actions, the Project would be consistent with this policy.
Policy 1.4: With discretionary approval, allow for the density and intensity limits to be exceeded, by no more than 25%, for exceptional projects that advance the goals and policies of Burbank2035.	**Consistent** As discussed above for Policy 1.2. With approval of the requested discretionary actions, the proposed Project would be consistent with Policy 1.2. The Project would advance the goals and polices of Burbank 2035 by developing a transit-oriented mixed-use hotel and residential project on an underutilized infill lot, in close proximity to Downtown Burbank and across from the Downtown Burbank Metrolink Station. As demonstrated in this table, the proposed Project would support the General Plan's land Use goals which focus on quality of life, sustainability, community design and character, public spaces and complete streets, housing, economic vitality, and community participation. Additionally, the mixed use, transit-oriented nature of the proposed Project would also support the goals and policies of the Housing Element and Mobility Element as demonstrated in Section 4.10, *Population and Housing* and Section 4.12. *Transportation and Traffic*, respectively.

Goal/Policy	Project Consistency
Policy 1.5: Carefully review and consider non-residential uses with the potential to degrade quality of life.	**Consistent** The Project site is partially fenced along Front Street and currently contains mounds of soil and construction materials throughout the site. Development of the Project would improve the visual character of the Project site in comparison to the existing conditions through the development of midrise residential and hotel structures with a upper floor amenities, and a cohesive architectural design that is composed well, with a balance of horizontal and vertical element, which when coupled with the repetition of building bays, row trees, and other major building and landscape elements is valuable for the achievement of rhythm and sense of place. Associated hotel amenities may include restaurants, café, bar, pool terrace, fitness center, meeting rooms, and lounge. The retail uses would include accessory retail and restaurant uses on the ground floor, and a 1,067-square foot retail gallery on Front Street near the intersection of Burbank Boulevard. Additionally, as discussed in Section 4.2, *Air Quality,* and Section 4.9, *Noise*, residents would not be exposed to hazards or excessive noise. Project design features including multi-pane windows, sound insulation, sound walls, buffer landscaping adjacent to the I-5 freeway, and orientation of a majority of the open spaces away from the I-5 would reduce residents' exposure to hazards and excessive noise. Therefore, as discussed under Policy 1.1, the proposed Project would not have the potential to degrade quality of life and would be consistent with this policy.
Policy 1.8: Ensure that development in Burbank is consistent with the land use designations presented in the Land Use Plan and shown on the Land Use Diagram, including individual policies applicable to each land use designation.	**Potentially Consistent** The Project site has a General Plan and Specific Plan land use designation of Downtown Commercial and Mixed Commercial/Office/ Industrial, respectively. The site is zoned Automobile Dealership (AD). The proposed Project requires approvals for a Specific Plan Amendment to the Burbank Center Plan to allow housing on the site; Development Review; Planned Development; Development Agreement; and a Tentative Tract Map No. 74896. BMC §10-1-19121 specifies that approval of a Planned Development will result in an amendment to the zoning map, changing the zoning designation from AD (Automobile Dealership) to PD (Planned Development). The allowable Permitted/Conditionally Permitted uses and the various development standards shall be as specified in the Development Agreement and Planned Development. Therefore, with approval of the requested discretionary actions, the proposed Project would be consistent with this policy.
Goal 2: Sustainability: Burbank is committed to building and maintaining a community that meets today's needs while providing a high quality of life for future generations. Development in Burbank respects the environment and conserves natural resources.	
Policy 2.1: Consider sustainability when making discretionary land use and transportation decisions, policies, regulations, and projects.	**Consistent** The Project would be designed to be the equivalent of the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) Certified Gold. Project design features and materials include sustainable products and locally sourced materials. The Project would include higher energy efficiency appliances, low-flow, and water-consuming facilities, and use of recycled water for irrigation. The Project would include energy efficient HVAC system and MERV filters, cool roofs, LED lighting, and high-performance glazing. Water efficient appliances and fixtures, drip irrigation, and drought tolerant landscaping would be included. Indoor environmental quality favors formaldehyde-free finishes, low-allergen materials, and use of products with minimum off-gassing or low volatile organic compounds (VOC's). Development under the Project would also comply with all applicable California Green Building Standards Code. Additionally, the mixed-use components of the proposed Project, the proposed bike lane, and proximity to the Downtown

Goal/Policy	**Project Consistency**
	Burbank Metrolink Station, would promote transit-oriented development and pedestrian connections to Downtown Burbank. Therefore, the Project would be consistent with this policy.
Policy 2.3: Require that new development pay its fair share for infrastructure improvements. Ensure that needed infrastructure and services are available prior to or at project completion.	**Consistent** As discussed in Section 4.13, *Utilities*, to the extent that improvements to infrastructure are required for implementation of the proposed Project (i.e., sewer and water connections), the Project applicant would be required to pay applicable development impact and public utility fees and comply with applicable regulations pursuant to the BMC to the satisfaction of the City Building Official and the City Engineer. The Project would therefore be consistent with this policy.
Policy 2.4: Provide public facilities and services in the most equitable and efficient manner possible.	**Consistent** As discussed in Section 4.11, *Public Services*, to the extent that the Project would require use of public services and facilities (i.e., schools, libraries, police and fire), and improvements to public facilities are required for implementation of the Project, the Project applicant would be required to pay applicable developer impact and developer school fees and comply with all applicable regulations pursuant to the BMC. The Project would therefore be consistent with this policy.
Policy 2.5: Require the use of sustainable construction practices, building infrastructure, and materials in new construction and substantial remodels of existing buildings.	**Consistent** Refer to the consistency analysis under Policy 2.1. The Project would implement sustainable construction practices and materials and therefore would be consistent with this policy.
Policy 2.6: Design new buildings to minimize the consumption of energy, water, and other natural resources. Develop incentives to retrofit existing buildings for a net reduction in energy consumption, water consumption, and stormwater runoff.	**Consistent** As discussed under the consistency analysis for Policy 2.1, Section 4.13, *Utilities*, Subsection *Water*, and Section 5.3, *Energy*, the Project would utilize sustainable construction practices and would be design to comply with City green building codes as well as regulations that facilitate LEED Gold certification and therefore, would be consistent with this policy.
Goal 3: Community Design and Character: Burbank's well-designed neighborhoods and buildings and enhanced streets and public spaces contribute to a strong sense of place and "small town" feeling reflective of the past.	
Policy 3.1: Recognize neighborhoods and districts as the building blocks of the community.	**Consistent** The Specific Plan identifies the Project site as an opportunity site that is currently vacant and underutilized, which if developed as proposed, could serve as a catalyst to facilitate future transit-oriented development in and around the Downtown area and Downtown Burbank Metrolink Station consistent with the Burbank Center Plan. The Project site is identified as Opportunity Site No. 8 in the Specific Plan. Construction of the Project would convert an underutilized infill site into a mixed-use development in close proximity to Downtown Burbank and the Downtown Burbank Metrolink Station. Additionally, the Project would include a publicly accessible, privately maintained plaza, and a pedestrian bridge and elevator that connects the Project site to Magnolia Boulevard as well as Downtown Burbank. In addition, the project would include a link from the retail space and residential development onto Front Street and would provide future resident access to Burbank Boulevard and Downtown Burbank. Therefore, the proposed Project would contribute to the Downtown Burbank community and therefore would be consistent with this policy.

Goal/Policy	Project Consistency
Policy 3.2: Preserve unique neighborhoods and use specific plans to distinguish neighborhoods and districts by character and appearance and address physical and visual distinction, architecture, edge and entry treatment, landscape, streetscape, and other elements.	**Consistent** The Project would include a change the underlying subarea of the Project site from City Center West to City Center/City Center Access to the RITC. The Project would advance the goals and polices of City Center/City Center Access to the RITC by developing a transit-oriented mixed-use hotel and residential project on an underutilized infill lot, in close proximity to Downtown Burbank and across from the Downtown Burbank Metrolink Station. As demonstrated in this table, the proposed Project would support the Specific Plan's land Use goals that encourage mixed use development with residential on the upper floors and architecture that promotes pedestrian involvement and is pedestrian friendly. This change will result in the Project site being in greater compliance with the General Plan Designation of Downtown Commercial. Therefore, with approval of the requested discretionary actions, the proposed Project would be consistent with this policy.
Policy 3.3: Maintain a healthy balance between Burbank's urban setting and its suburban roots by avoiding urban-scale residential densities and intensities in inappropriate locations, and recognizing advantages of denser development at appropriate locations.	**Consistent** The proposed Project would provide a mixed-use development in the Downtown area that would support the diverse needs of Burbank's residents, business and visitors. Construction of the proposed Project would convert a vacant infill site into a mixed-use development that includes residential, commercial and hotel uses, in proximity to Downtown Burbank and the Downtown Burbank Metrolink Station. Therefore, the Project would be located in an appropriate location and would be consistent with this policy.
Policy 3.4: Avoid abrupt changes in density, intensity, scale, and height and provide gradual transitions between different development types.	**Consistent** According to the Burbank Center Plan, the subarea "should be generally developed with mixed use low-to mid-rise commercial, office, and residential structures" (City of Burbank 1997). The Project would provide a transit-oriented mixed-use development in close proximity to Downtown Burbank that consists of commercial and residential buildings that vary in density and height, including the 20-story Holiday Inn Hotel and the 17-story Primerica office building. The Project's proposed seven- and eight-story buildings would complement the surrounding residential, retail, and commercial uses near the Project site, which would benefit from increased pedestrian amenities and activity along Front Street by drawing new foot traffic and business patronage. Therefore, the Project would not conflict with this policy.
Policy 3.5: Ensure that architecture and site design are high quality, creative, complementary to Burbank's character, and compatible with surrounding development and public spaces.	**Consistent** The Project's residential, hotel, and commercial uses would generally be consistent with the density, intensity, scale, height and character of the surrounding area of Downtown Burbank area, including the 20-story Holiday Inn Hotel and the five- to eight-story buildings that currently exist in the downtown area, which including senior housing, hotels, and office buildings. The Project's proposed seven- and eight-story buildings would complement the surrounding residential, retail, and commercial uses near the Project site that would benefit from increased pedestrian amenities and activity along Front Street by drawing new foot traffic and business patronage. Additionally, the proposed Project would include the use of contemporary materials such as, but no limited to, green screens, smooth stucco, aluminum screening, accent lighting, storefront insulated glazing, dark wood siding and metal louver panels. Therefore, the proposed Project would be consistent with this policy.

Goal/Policy	Project Consistency
Policy 3.6: Carefully regulate signs to ensure that their size and location are attractive, are appropriate for the site, and appropriately balance visibility needs with community character and aesthetics.	**Consistent** The Applicant would adhere to all regulations applicable to the size and location of signage for the Project, to the satisfaction of the City of Burbank, to ensure that signage appropriately balances visibility needs with community character and aesthetics. The proposed Project would therefore be consistent with this policy. The Project would incorporate Land Use PDF 1 (Master Sigh Program), below. Prior to issuance of any building permit for Phase 1, the Developer shall submit a comprehensive Master Sign program to the Community Development Director for review and approval at the time of submittal for Plan Check review. The master sign program shall indicate maximum allowable signage permitted per street frontage, signage type(s) and locations proposed, and identify any special characteristics associated with proposed signs. The master sign program is subject to approval by the CDD Director or his/her designee.
Policy 3.7: Ensure that lots and buildings appropriately interact with and address public streets.	**Consistent** The primary entries for the hotel, retail, and apartments would be provided along Front Street. The proposed Project would include widening Front Street to include, travel lanes, a turn lane and a bike lane. Additionally, the Project would include a publicly accessible, privately maintained plaza and an elevator and staircase that facilitates a pedestrian connection from the Project site to Magnolia Boulevard and Downtown Burbank on the southern portion of the Project site. In addition, the Project would include a pedestrian bridge from the retail space and residential development onto Front Street and would provide future resident access to Burbank Boulevard and Downtown Burbank. Therefore, the proposed Project would be consistent with this policy.
Policy 3.11: Carefully consider the evolution of community character over time. Evaluate projects with regard to their impact on historic character, their role in shaping the desired future community character, and how future generations will view today's Burbank.	**Consistent** As discussed under Policy 1.5, the Project site is partially fenced along Front Street and currently contains mounds of soil and construction materials throughout the site. The Project would include the construction of a contemporary mixed-use transit oriented development that would include two residential buildings and a hotel. Development of the Project would improve the visual character of the Project site in comparison to the existing conditions. In addition, the proposed mix of land uses and heights of the buildings would be consistent with the surrounding developments found in Downtown Burbank and consistent with the applicable goals and polices of the Burbank2035 General Plan, as discussed in this table. Therefore, the Project would be consistent with this policy.
Policy 3.12: Require that new development tie into the city's grid street pattern.	**Consistent** As discussed above in Policy 3.7, the Project would tie into and enhance the existing street network. Primary entries for the hotel, retail, and apartments would be provided along Front Street. The Project would include widening Front Street to include vehicular travel lanes, a turn lane and a bike lane. Additionally, the Project would include a publicly accessible, privately maintained plaza and elevator with staircase that connects the Project site to Magnolia Boulevard and Downtown Burbank. In addition, the project would include a pedestrian bridge from the retail space and residential development onto Front Street and would provide future resident access to Burbank Boulevard and Downtown Burbank. Therefore, the Project would be consistent with this policy.

Goal/Policy	Project Consistency
Goal 4: Public Spaces and Complete Streets: Burbank has attractive and inviting public spaces and complete streets that enhance the image and character of the community.	
Policy 4.1: Develop complete streets that create functional places meeting the needs of pedestrians, bicyclists, wheelchair users, equestrians, and motorists.	**Consistent** The Project would provide bicycle parking and add a bike lane along Front Street to provide improved bicycle access for local residents and visitors, residents and employees associated with the Project. Additionally, the Project would include a publicly accessible, privately maintained plaza and elevator and staircase that connects to Magnolia Boulevard and Downtown Burbank. In addition, the project would include a pedestrian bridge from the retail space and residential development onto Front Street and would provide future resident access to Burbank Boulevard and Downtown Burbank. Therefore, the Project would be consistent with this policy.
Policy 4.2: Identify opportunities for publicly accessible open spaces to be provided in conjunction with both public and private development projects.	**Consistent** The Project would include approximately 87,050 square feet of common open space (including a 27,800 publicly accessible plaza). The Project would include a publicly accessible, privately maintained plaza and an elevator and staircase that connects pedestrians to the Project site, to Magnolia Boulevard and to Downtown Burbank. Therefore, the Project would be consistent with this policy.
Policy 4.3: Use street trees, landscaping, street furniture, public art, and other aesthetic elements to enhance the appearance and identity of neighborhoods and public spaces.	**Consistent** The Project would include approximately 87,050 square feet of common open space. The Project would also include a publicly accessible, privately maintained plaza and elevator and staircase that connects the Project site to Magnolia Boulevard and to Downtown Burbank. The plaza would be approximately 27,800 square feet. The Project would include planters with landscaping and, public art installations, street furniture including benches, and street trees to enhance the aesthetic of outdoor areas. Therefore, the Project would be consistent with this policy.
Policy 4.4: Require public art as part of new development projects and public infrastructure. Incorporate public art within existing projects.	**Consistent** The Project applicant would adhere to all regulations pursuant to the BMC and Burbank2035 General Plan that are applicable to the installation of public art. Therefore, the Project would be consistent with this policy.
Policy 4.5: Require that pedestrian-oriented areas include amenities such as sidewalks of adequate width, benches, street trees and landscaping, decorative paving, public art, kiosks, and restrooms.	**Consistent** The Project would include approximately 87,050 square feet of common open space (including a 27,800 publicly accessible plaza). Additionally, the Project would provide bicycle parking and add a bike lane along Front Street to provide improved bicycle access for Project, local residents, and employees. The Project would include a publicly accessible, privately maintained plaza and elevator with staircase that connects to Magnolia Boulevard and beyond to Downtown Burbank. The Project would include planters with landscaping, shade trees, public art installations, perimeter walls and fencing, and street furniture, including benches and street trees to enhance the aesthetic of outdoor areas. Therefore, the Project would be consistent with this policy.

Goal/Policy	Project Consistency
Policy 4.6: Provide adequate open space and amenities in residential projects that encourage residents to gather and that supplement public open spaces.	**Consistent** In addition to common and private open space, associated residential common areas may include a rooftop terraces, business center/internet café, coffee bar, demonstration kitchen, billiards table, resident lounge, fitness center with indoor exercise studio, resort-style pools with cabanas, Jacuzzis, public plaza and bike trail access, pet grooming station, pet park, concierge services, and bike storage. Associated hotel amenities may include restaurants, café, bar, pool terrace, fitness center, meeting rooms, and lounge. The retail uses would include accessory retail and restaurant uses on the ground floor of the hotel, and a 1,067-square foot retail gallery on Front Street near the intersection of Burbank Boulevard. Therefore, the Project would be consistent with this policy.
Policy 4.8: Locate parking lots and structures behind buildings or underground. Do not design parking lots and structures to face streets or sidewalks at ground level. Use alternatives to surface parking lots to reduce the amount of land devoted to parking.	**Not Consistent** The Project would include one subterranean level for parking at the southern half of the Project site beneath a portion of the southern residential building and also beneath the hotel. One to two levels of parking would be between grade and the residential units in both residential buildings, and a seven-story parking structure would be built between the residential buildings. A four-story parking structure would also be incorporated adjacent to the hotel, between the hotel and the southern residential building, for hotel parking. While portions of the above parking structures would be visible from Front Street, the parking structures would be integrated into the design of the buildings, to the extent feasible, using materials such as green screens, perforated metal and cement board frames. Nonetheless, the Project would be inconsistent with this policy.
Policy 4.9: Improve parking lot aesthetics and reduce the urban heat island effect by providing ample shade, low-water landscaping, and trees.	**Consistent** As discussed in Policy 4.8, the Project would include one subterranean level for parking at the southern half of the Project site beneath a portion of the southern residential building and two levels of subterranean parking beneath the hotel. One to two levels of parking would be between grade and the residential units in both residential buildings and a seven-story parking structure would be built between the residential buildings. A four-story parking structure would also be incorporated into the hotel, adjacent to the southern residential building, for hotel parking. The parking structures would be integrated into the design of the buildings, to the extent feasible, using materials such as green screens, planters and landscaping, perforated metal and cement board frames. Additionally, the Project would include drip irrigation and drought tolerant landscaping. Therefore, the Project would be consistent with this policy.
Policy 4.10: Require new development projects to provide adequate low-water landscaping.	**Consistent** The Project would include drip irrigation and drought tolerant landscaping as well as the use of recycled water for landscape irrigation purposes. Therefore, the Project would be consistent with this policy.

Goal/Policy	Project Consistency
Policy 4.11: Ensure that public infrastructure meets high-quality urban design and architecture standards. Remove, relocate, or improve the appearance of existing infrastructure elements that are unsightly or visually disruptive.	**Consistent** The Project Site is located on an underutilized infill lot adjacent to Downtown Burbank that has been identified as an Opportunity Site No.8 to facilitate responsible development, which expands the concept of building a better Downtown neighborhood for existing and future residents. The Project site currently contains mounds of soil and construction materials. The Project would include the construction of a contemporary mixed-use development that would include residential, retail and hotel uses. Development of the Project would improve the visual character of the Project site in comparison to the existing conditions through the development of midrise residential and hotel structures with a upper floor amenities, and a cohesive architectural design that is composed well, with a balance of horizontal and vertical element, which when coupled with the repetition of building bays, row trees, and other major building and landscape elements is valuable for the achievement of rhythm and sense of place. Therefore, the Project would be consistent with this policy.
Goal 5: Housing: Burbank provides housing options for people and families with diverse needs and resources.	
Policy 5.1: Provide for a variety of residential neighborhoods with varying densities and housing types.	**Consistent** The proposed Project would include two multi-family residential buildings with 573 dwelling units. Dwelling units would include a mix of studios, one-bedroom, two-bedroom and three-bedroom units. Therefore, the Project would be consistent with this policy.
Policy 5.2: Encourage areas of mixed-density and mixed-housing types in commercial corridors to allow people with diverse housing needs to live and interact in the same neighborhood.	**Consistent** As discussed under Policy 5.1, the Project would provide a mixed-use development adjacent to Downtown Burbank. The Project would include two multi-family residential buildings and a hotel. The residential component of the Project would include 573 dwelling units with a mix of studios, one-bedroom, two-bedroom and three-bedroom units. Therefore, the Project would be consistent with this policy.
Policy 5.3: Provide more diverse housing opportunities, increase home ownership opportunities, and support affordable housing by encouraging alternative and innovative forms of housing.	**Consistent** The Project would include two multi-family residential buildings with 573 apartment units. Dwelling units would include a mix of studios, one-bedroom, two-bedroom and three-bedroom units, and will provide for a mix of housing affordable to moderate and above moderate income households. The housing mix includes up to 12 percent of the apartment units as deed restricted units that are maintained affordable to moderate income households for a period of no less than fifty-five years. Therefore, the Project would be consistent with this policy.
Policy 5.4: Allow residential units in traditionally non-residential areas and support adaptive reuse of non-residential buildings for residential and live-work units in Downtown Burbank and other appropriate locations.	**Consistent** The Project would convert a currently vacant and underutilized infill site into a mixed-use development that would include residential, retail and hotel uses, in proximity to Downtown Burbank and the Downtown Burbank Metrolink Station. The residential component of the Project would include 573 dwelling units. Dwelling units would include a mix of studios, one-bedroom, two-bedroom and three-bedroom units. The housing mix includes up to 12 percent of the apartment units as deed restricted units that are maintained affordable to moderate income households for a period of no less than fifty-five years. Therefore, the Project would be consistent with this policy.

Goal/Policy	Project Consistency
Policy 5.5: Provide options for more people to live near work and public transit by allowing higher residential densities in employment centers such as Downtown Burbank and the Media District.	**Consistent** The Project would be located in close proximity to Downtown Burbank and the Downtown Burbank Metrolink Station. The mixed-use residential, hotel and retail components of the proposed Project, and proximity to the Downtown Burbank Metrolink Station, would promote transit-oriented development. Additionally, the Project would provide bicycle parking and would add a bike lane along Front Street to provide improved bicycle access for Project and area residents and employees. The Project will construct a plaza and elevator and staircase that connects to Magnolia Street and separately a pedestrian bridge will connect a proposed retail gallery at Burbank Boulevard that would provide connections to the adjacent Burbank Town Center and enhance pedestrian connections to Downtown. Therefore, the Project would be consistent with this policy.
Goal 6: Economic Vitality and Diversity: Burbank has a healthy and diverse economy and provides for a full range of retail, commercial, office, and industrial uses. Businesses contribute to community character and economic vitality by supporting neighborhood, community, and regional needs and providing diverse employment options.	
Policy 6.2: Recognize and maintain Downtown Burbank as the city's central business district, providing a mix of commercial, civic, cultural, recreational, educational, entertainment, and residential uses.	**Consistent** The Project would convert a vacant infill lot into a mixed-use residential and commercial development adjacent to Downtown Burbank with hotel and publicly accessible open spaces. The Project would include common outdoor space and amenities, including a public plaza that would be open to local residents and visitors. Therefore, the Project is consistent with this policy.
Policy 6.6: Require new large commercial and office projects to provide services, proportionate to their size, that benefit employees, including child care, fitness facilities, rail and bus transit facilities, and personal services.	**Consistent** Amenities associated with the residential component of the development would include such features as business center/internet café, coffee bar, fitness center, resort-style pools and bike trail access. Associated hotel amenities would include such features as restaurants, café, bar, pool terrace and meeting rooms. Retail uses would include accessory retail and restaurant uses on the ground floor, and a 1,067-square foot retail gallery. The Project would be located in close proximity to Downtown Burbank and the Downtown Burbank Metrolink Station. The mixed-use components of the Project, and proximity to the Downtown Burbank Metrolink Station, would promote transit-oriented development. Additionally, the Project would provide bicycle parking and would add a bike lane along Front Street to provide improved bicycle access for Project and area residents and employees. The Project would provide connections to the adjacent Burbank Town Center to enhance pedestrian connections to Downtown. Therefore, the Project would be consistent with this policy.

<table>
<tr><th>Goal/Policy</th><th>Project Consistency</th></tr>
<tr><td colspan="2">Goal 7: Community Participation: Burbank encourages community engagement and provides a wide range of opportunities to participate in the planning process.</td></tr>
<tr><td>Policy 7.1: Ensure that Burbank2035 remains relevant by involving the public in planning decisions and by closely monitoring implementation of the plan.</td><td rowspan="5">Consistent
The City of Burbank distributed a Notice of Preparation (NOP) of the EIR for a 30-day agency and public review period starting on April 3, 2018 and ending on May 2, 2018. In addition, the City held an EIR Scoping Meeting on April 10, 2018 from 6:00 PM to 8:00 PM. The meeting was aimed at providing information about the Project to members of public agencies, interested stakeholders and residents/community members. The meeting was held at the City of Burbank's Community Services Building at 150 North Third Street, Room 104. No comments were received at the scoping meeting. The City received letters from eight agencies in response to the NOP during the public review period. The NOP is presented in Appendix A of this EIR, along with the Initial Study that was prepared for the Project and the NOP responses received. Table 1-1 in Section 1, Introduction, summarizes the content of the letters and verbal comments and where the issues raised are addressed in the EIR.
Upon public release of this Draft EIR the City of Burbank has filed a Notice of Completion (NOC) with the State Clearinghouse. The NOC will be posted in the County Clerk's office for 30 days and a copy of the NOC will be sent to anyone requesting it. Additionally, public notice of the availability of the Draft EIR will be provided through publication in The Burbank Header); posting on and off the Project site; and direct mailing to owners and occupants of contiguous properties within a 1,000 feet of the Project site. The public review period for the Draft EIR is 45 days. The Final EIR will include: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments. For further discussion regarding the environmental review process and opportunities for public participation, refer to Section I, Introduction, of this Draft EIR. Therefore, the environmental review process for the Project has complied and will comply with the public participation requirements under CEQA and for consistency with these policies.</td></tr>
<tr><td>Policy 7.2: Provide clear, easily understandable, and accessible information to promote community involvement in the planning process.</td></tr>
<tr><td>Policy 7.3: Consistently seek direct public involvement in the planning process for new projects and plans, as well as for everyday planning matters.</td></tr>
<tr><td>Policy 7.4: Hold community meetings, workshops, charrettes, etc., and provide other opportunities for input on different days and times and at various locations throughout the city to maximize opportunity for public input.</td></tr>
<tr><td>Policy 7.5: Continually expand the use of technology to disseminate planning information and solicit input from the public. Use technology and other methods to provide opportunities for the planning process to become less formal and more inclusive.</td></tr>
</table>

Source: Burbank 2035 General Plan

Specific Plan Consistency

The following analysis discusses the Project's consistency with applicable policies of the Burbank Center Plan for the City Center Commercial adjacent to the RITC land use designation and subsequent designation in the City's Zoning Map as a Planned Development (PD) zone. Approval of the Specific Plan amendment by the City Council would be required for the Project to be consistent with the Specific Plan land use policies, therefore the finding of "potentially consistent" is appropriate when a Specific Plan and zoning map amendment is required. Consistency of the Project with the Specific Plan and its corresponding policies is analyzed in Table 4.8-3.

Table 4.8-3 Project Consistency with Applicable Specific Plan Policies

Mixed Commercial/ Office/Residential Land Use Policies	Project Consistency
Encourage mixed use development with residential on the upper floors.	**Potentially Consistent** The Project would provide a transit-oriented development consisting of a mixed use project that includes residential, hotel, and retail uses.
Maintain and enhance the pedestrian circulation system linking retail uses to parking and offices through paseos and pedestrian oriented streets.	**Potentially Consistent** The Project would include a publicly accessible, privately maintained plaza and elevator and staircase that connects to Magnolia Boulevard and Downtown Burbank. In addition, the project would include a pedestrian bridge linking the proposed retail space and residential development onto Front Street and would provide future resident access to Burbank Boulevard; collectively these pedestrian accessible connections would provide two ways of accessing the site and Downtown Burbank.
Encourage architecture that promotes pedestrian involvement and is pedestrian friendly.	**Potentially Consistent** The Project would include a publicly accessible, privately maintained plaza and elevator and staircase that connects to Magnolia Boulevard and Downtown Burbank. In addition, the project would include a pedestrian bridge linking the proposed retail space and residential development onto Front Street and would provide future resident access to Burbank Boulevard and Downtown Burbank.
Create visual identity through the use of public space and special design considerations.	**Potentially Consistent** The Project's proposed seven- and eight-story buildings would complement the surrounding residential, retail, and commercial uses near the Project site. The Project would include public open space plaza area, pedestrian connections to Front Street, Burbank Boulevard, Magnolia Boulevard and new street trees along Front Street. The Project would also include widening Front Street to include vehicular travel lanes, a turn lane and a bike lane. Overall, the design of the Project would help define the Project site as a transit oriented development project with a mix of publicly accessible open space and pedestrian and bicycle amenities that are unique to the site.
Support retail uses which serve the local community without diluting demand for the downtown area.	**Potentially Consistent** The Project's retail uses would include accessory retail and restaurant uses on the ground floor of the hotel, and a 1,067-square foot retail gallery on Front Street near the intersection of Burbank Boulevard. The Downtown Burbank area would benefit from increased pedestrian amenities and activity along Front Street by drawing new foot traffic and business patronage, which creates more "eyes on the street" making the bicycle and pedestrian experience travelling to and from the Metrolink station along Front Street a more safe and enjoyable experience while not substantially depleting demand at existing retail uses in the area.

Mixed Commercial/ Office/Residential Land Use Policies	Project Consistency
Support retail uses which serve adjacent senior residential uses.	**Potentially Consistent** The Project's retail uses would include accessory retail and restaurant uses on the ground floor of the hotel, and a 1,067-square foot retail gallery on Front Street near the intersection of Burbank Boulevard, which would be available to adjacent residential uses and to all community members.
Promote a higher quality of development by encourage lot assemblage and promoting shared parking between nearby parcels.	**Potentially Consistent** The Project would provide sufficient parking to be shared among the on-site residential, hotel, and retail uses. However, the Project site would be located adjacent to the Downtown Burbank Metrolink Station as well as other Metro bus stops. Therefore, Project tenants or hotel guests would not be required to seek off-site parking to use public transit.
Source: The Burbank Center Plan 1997	

Burbank Municipal Code (BMC) Amendments

The Project would include a zoning map amendment to re-designate the Project site from AD (Automobile Dealership) to PD (Planned Development) Zone. According to BMC Section 10-1-19124, the new PD Zone would permit multi-family residential uses with the following specified development standards:

A. The design of the overall Planned Development shall be comprehensive and shall embrace land, buildings, landscaping, and their interrelationships and shall be substantially consistent with the General Plan and any applicable Elements of the General Plan.

B. The Planned Development shall provide for adequate permanent open areas, circulation, off-street parking, and pertinent pedestrian amenities. Building structures and facilities and accessory uses within the Planned Development shall be well integrated with each other and to the surrounding topographic and natural features of the area.

C. The Planned Development shall be compatible with existing and planned land use on adjoining properties.

D. Any private street system or circulation system shall be designed for the efficient and safe flow of vehicle, pedestrians, and bicycles, and the handicapped, without creating a disruptive influence on the activity and functions of any area or facility.

E. The public street system within or adjacent to a Planned Development shall be designed for the efficient and safe flow of vehicles (including transit vehicles), pedestrians, bicycles, and the handicapped. Public streets shall be designed using standard City lane widths, capacities, and travel speeds. The design shall also include adequate space and improvement for transit vehicles and facilities for bicycle and pedestrian circulation. City standard entrance control requirements shall be maintained. Design of major streets shall also provide sidewalks, adequate street lighting, and concrete median islands on arterial streets.

F. Common area and recreational facilities shall be located so as to be readily accessible to the occupants of residential uses.

G. Compatibility of architectural design and appearance, including signing throughout the Planned Development, shall be sought. In addition, architectural harmony with surrounding neighborhoods shall be achieved so far as practicable.

H. Where applicable, an adequate variety of uses and facilities shall be provided in order to meet the needs of the Planned Development and adjacent neighborhoods.

I. The Planned Development and each building intended for occupancy shall be designed, placed, and oriented in a manner conducive to the conservation of energy.

Upon adoption of the proposed Specific Plan and Zone Map amendments and with the required approvals (i.e., development review, development agreement, and tentative tract map), the Project would comply with the land use requirements set forth by the Burbank2035 General Plan, the Burbank Center Plan-Specific Plan and the BMC, and therefore, would not result in adverse physical land use impacts.

Project Design Feature

Land Use PDF 1 – Master Sign Program

Prior to issuance of any building permit for Phase 1, the Developer shall submit a master sign program to the CDD at the time of Plan Check review. The master sign program shall indicate maximum allowable signage permitted per street frontage, signage type(s) and locations proposed, and identify any special characteristics associated with proposed signs. The comprehensive sign program is subject to approval by the CDD Director or his/her designee.

1. As part of the master sign program, the Developer shall provide a sign plan for the residential and commercial portions of the parking garages. The plan shall indicate all wayfinding signs, including colors of paint used to indicate presence of parking stalls and elevator vestibules.
2. Revisions to the comprehensive sign program may be approved by the CDD Director or his/her designee with a standard sign permit if the intent of the original approval is not affected. Revisions that would substantially deviate from the original approval shall require the approval of a new comprehensive sign program by the CDD Director.
3. Each primary building entry for the residential portions of the project shall have no more than one major sign, and the sign shall be designed to be compatible with the structure’s architectural design theme.
4. Other than permanent signs, advertising shall cover no more than 25 percent of the windows of the commercial spaces facing all public streets, or otherwise placed on the interior or exterior of the business with the intent of being visible from a public street. No additional window advertising will be permitted unless approved as a part of the master sign program.

Mitigation Measures

No mitigation measures would be required.

c. Cumulative Impacts

Cumulative development in accordance with the City’s Burbank2035 General Plan would incrementally modify land use patterns and the general setting of the area. The planned and pending projects in the vicinity of the Project site, listed in Table 3-1 of this EIR, include 23 projects consisting of retail, restaurant, residential, office, industrial, hotel, school airport and transportation related land uses. Projects that are within the vicinity of the Project site include First Street Village Mixed-Use Project (Related Project No. 6), Premier at First Street Mixed-Use Project (Related Project No. 7), Burbank Town Center Redevelopment Project (Related Project No. 10), Olive Station Mixed-Use Project (Related Project No. 14) and Burbank Common Project (Related Project No. 15). Planned cumulative development would incrementally increase overall development intensity throughout the area, while incrementally reducing the amount of undeveloped land. However, similar to the Project, land use and policy consistency impacts associated with individual projects would be addressed on a case-by-case basis to determine consistency with applicable plans and policies. Because planned and pending projects are designed or are being designed to be consistent with the General Plan, they would implement the City's vision for the City. In addition, similar to the Project, other planned and pending projects in Burbank involve infill development that would generally reduce motor vehicle trips and trip lengths and associated environmental impacts compared to development at the periphery of the LA metro area. Moreover, because the Project's impacts related to land use compatibility and consistency with local plans and goals would be less than significant with mitigation (as discussed above), the Project's contribution to cumulative land use impacts would not be considerable.

4.9 Noise

This section is an analysis of the potential noise impacts of the Project based on the findings of the Noise Study prepared by Rincon for the Project in September 2018, which is included as Appendix I to the EIR. This following analysis also includes noise reduction features from the Environmental Noise Evaluation & Recommendations Report prepared by SSA Acoustics for the proposed Project dated December 2018, which is included as Appendix I. The purpose of this analysis is to expand upon previous findings made by SSA Acoustics and further analyze the proposed Project's noise impacts related to both temporary construction activity and long-term operation of the Project.

4.9.1 Setting

a. Noise

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dBA level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA, and a sound that is 10 dBA less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dBA greater than the ambient noise level to be judged as twice as loud. In general, a 3 dBA change in the ambient noise level is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while areas adjacent to arterial streets are typically in the 50-60+ dBA range. Normal conversational levels are usually in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels from point sources, such as those from individual pieces of machinery, typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from the noise source. Noise levels from lightly traveled roads typically attenuate at a rate of about 4.5 dBA per doubling of distance. Noise levels from heavily traveled roads typically attenuate at about 3 dBA per doubling of distance. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces noise levels by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA (Federal Transit Administration [FTA] 2018). The manner in which homes in California are constructed generally provides a reduction of exterior-to-interior noise levels of approximately 20 to 25 dBA with closed windows (FTA 2018).

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period. Lmax is the highest RMS (root mean squared) sound pressure level within the measurement period, and Lmin is the lowest RMS sound pressure level within the measurement period.

The time period in which noise occurs is also important since nighttime noise tends to disturb people more than daytime noise. Community noise is usually measured using Day-Night Average Level (Ldn) that is the 24-hour average noise level with a 10-dBA penalty for noise occurring during nighttime (10:00 PM to 7:00 AM) hours, or Community Noise Equivalent Level (CNEL) that is the 24-hour average noise level with a 5 dBA penalty for noise occurring from 7:00 PM to 10:00 PM and a 10 dBA penalty for noise occurring from 10:00 PM to 7:00 AM. Noise levels described by Ldn and CNEL typically do not differ by more than 1 dBA. In practice, CNEL and Ldn are often used interchangeably.

b. Vibration

Vibration refers to groundborne noise and perceptible motion. Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise, such as the rattling of windows from passing trucks. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as peak particle velocity (PPV) in inches per second and is also referenced as vibration decibels (VdB) in the U.S.

According to the FTA *Transit Noise and Vibration Impact Assessment* (2018), the background vibration velocity level in residential areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Nonetheless, according to the FTA's criteria, buildings where people normally sleep would be impacted by frequent vibration events if vibration velocity levels exceed 72 VdB. In terms of ground-borne vibration impacts on structures, the FTA states that ground-borne vibration levels in excess of 100 VdB can damage fragile buildings, while levels in excess of 95 VdB can damage extremely fragile historic buildings (FTA 2018). Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel wheeled trains, and traffic on rough roads.

c. Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. According to the Burbank2035 General Plan Noise Element, residential areas, hospitals, convalescent and day care facilities, schools, and libraries are considered noise-sensitive uses (Burbank2035 2013). The Project site is surrounded by industrial and commercial uses. The nearest noise-sensitive uses to the Project site are single-family residences located approximately 875 feet northwest of the Project site across the I-5, Burbank High School located approximately 1,320 feet (0.25 mile) northeast of the Project site, and single-family residences approximately 1,740 (0.33 mile) west of the Project site along West Burbank Boulevard. In addition, the Project would include residences, open space areas, and a hotel that would be considered new noise-sensitive receptors on the Project site.

d. Existing Project Area Noise Levels

The most common and primary existing sources of noise in the Project site vicinity are motor vehicles (i.e., automobiles, trucks, and buses) on North Front Street, West Burbank Boulevard, and the I-5. Motor vehicle noise is of concern because it is characterized by a high number of individual events that often create a sustained noise level, and its proximity to noise sensitive uses. Additional sources of noise in the Project site vicinity include activities associated with the adjacent Metrolink station (Downtown Burbank Station) and railroad line (i.e., passing commuter trains and train horns), and aircraft noise from overhead flights associated with the Hollywood-Burbank Airport located approximately two miles northwest of the Project site.

Two on-site continuous 24-hour noise measurements were conducted by SSA Acoustics on March 23 and March 24, 2017, as part of their Environmental Noise Evaluation & Recommendations Report (2017) for the Project to determine the ambient daily noise exposure levels of future structures at the Project site. Based on measured noise levels, the ambient daily noise level at uses with direct exposure to Front Street and the I-5 would be 76 dBA Ldn and 81 dBA Ldn, respectively (SSA Acoustics 2017). In order to determine existing peak hour noise levels on the Project site and at adjacent noise-sensitive receptors, six additional peak hour weekday afternoon 10-minute noise measurements (Leq[10] dBA) were taken by Rincon using an ANSI Type II integrating sound level meter on January 30, 2018. Figure 4.9-1 shows the location of noise measurements in the Project area. Measurements 3, 4, and 5 were taken at the southeastern, center, and northwestern portions of the Project site, respectively. As shown in Table 4.9-1, the measured Leq[10] dBA levels on the Project site range from approximately 67 to 70 dBA Leq.

Table 4.9-1 Project Noise Monitoring Results - PM Peak Hour

Measurement Number	Measurement Location	Sample Times	Primary Noise Source, Distance to Centerline	Leq[10] (dBA)[1]
1	West Burbank Boulevard adjacent to single-family residences west of the Project site	4:13 PM – 4:23 PM	West Burbank Boulevard, 40 feet	66.7
2	3rd Street adjacent to Burbank High School northeast of the Project site	4:38 PM – 4:48 PM	3rd Street, 35 feet	66.2
3	On-site at the southeastern portion of the Project site	5:03 PM – 5:13 PM	I-5, 165 feet	70.0
4	On-site at the center portion of the Project site	5:28 PM – 5:38 PM	North Front Street, 50 feet	69.5[2]
5	On-site at the northwestern portion of the Project site	5:43 PM – 5:53 PM	I-5, 275 feet	66.9
6	Scott Road adjacent to single-family residences northwest of the Project site	6:09 PM – 6:19 PM	I-5, 150 feet	70.0

See Appendix I for noise monitoring data. See Figure 4.9-1 for a map of Noise Measurement Locations.

[1] The equivalent noise level (Leq) is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). For this measurement, the Leq was over a 10-minute period (Leq[10]).

[2] This noise measurement also captured a passing Metrolink commuter train departing from the Burbank Station at 5:28 PM.

Source: Rincon Consultants, field measurements on January 30, 2018 field using ANSI Type II Integrating sound level meter

Figure 4.9-1 Noise Measurement and Sensitive Receptor Locations

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4.9.2 Regulatory Setting

a. Burbank2035 General Plan Noise Element

The Noise Element of the Burbank2035 General Plan is intended to identify sources of noise and provide goals, objectives, and policies that ensure that noise from various sources, including transportation and stationary sources, does not create an unacceptable noise environment. As shown in Table 4.9-2, the City has adopted land use compatibility standards for use in assessing the compatibility of various land use types that are exposed to noise levels generated by transportation sources (e.g., traffic, railroad operations, and aircraft). According to the City's standards shown in Table 4.9-2, ambient noise up to 65 dBA CNEL/Ldn is normally acceptable for mixed-use multi-family residential development and transient lodging land uses, while ambient noise up to 70 dBA CNEL/Ldn is normally acceptable for neighborhood parks. These standards also establish maximum interior noise levels for new residential development, requiring that enough insulation be provided to reduce interior ambient noise levels to 45 dBA CNEL/Ldn (Burbank2035 2013).

Table 4.9-2 Maximum Allowable Noise Exposure – Transportation Sources

Land Use Category	Exterior Normally Acceptable[1] (dBA CNEL)	Exterior Possibly Acceptable[2] (dBA CNEL)	Exterior Normally Unacceptable[3] (dBA CNEL)	Interior Acceptable[4] (dBA CNEL except where noted)
Residential, Single-family	Up to 60	61-70	71 and higher	45
Residential, Multi-family	Up to 65	66-70	71 and higher	45
Residential, Multi-family Mixed-use	Up to 65	66-70	71 and higher	45
Transient Lodging	Up to 65	66-70	71 and higher	45
Hospitals, Nursing Homes	Up to 60	61-70	71 and higher	45
Theaters, Auditoriums, Music Halls	Up to 60	61-70	71 and higher	35 dBA Leq[5]
Churches, Meeting Halls	Up to 60	61-70	71 and higher	40 dBA Leq[5]
Playgrounds, Neighborhood Parks	Up to 70	71-75	75 and higher	–
Schools, Libraries, Museums[6]	–	–	–	45 dBA Leq[5]
Offices[7]	–	–	–	45 dBA Leq[5]
Retail/Commercial[7]	–	–	–	–
Industrial	–	–	–	–

[1] Normally acceptable means that land uses may be established in areas with the stated ambient noise level, absent any unique noise circumstances.

[2] Possibly acceptable means that land uses should be established in areas with the stated ambient noise level only when exterior areas are omitted from the Project or noise levels in exterior areas can be mitigated to the normally acceptable level.

[3] Normally unacceptable means that land uses should generally not be established in areas with the stated ambient noise level. If the benefits of the Project in addressing other Burbank2035 goals and policies outweigh concerns about noise, the use should be established only where exterior areas are omitted from the Project or where exterior areas are located and shielded from noise sources to mitigate noise to the maximum extent feasible.

[4] Interior acceptable means that the building must be constructed so that interior noise levels do not exceed the stated maximum, regardless of the exterior noise level. Stated maximums are as determined for a typical worst-case hour during periods of use.

[5] dBA Leq is as determine for a typical worst-case hour during periods of use.

[6] Within the Airport Influence Area, these uses are not acceptable above 65 dBA CNEL if subject to the City's discretionary review procedures.

[7] Within the Airport Influence Area, these uses may be acceptable up to 75 dBA CNEL following review for additional noise attenuation; in excess of 75 dBA CNEL these uses are not acceptable.

Source: Burbank2035 2013

When stationary noise is the primary noise source, the City applies a second set of hourly daytime and nighttime performance standards (expressed in Leq) that are designed to protect noise-sensitive land uses adjacent to stationary sources from excessive noise (Burbank2035 2013). Table 4.9-3 summarizes stationary-source noise standards for various land use types that represent acceptable noise levels at exterior spaces of the sensitive receptor.

Table 4.9-3 Maximum Allowable Noise Exposure – Stationary Sources

Noise Source	Noise Level Descriptor	Exterior Spaces[1] – Daytime (7 AM to 10 PM)	Exterior Spaces[1] – Nighttime (10 PM to 7 AM)
Typical	Hourly dBA Leq	55[2]	45[2]
Tonal, impulsive, repetitive, or consisting primarily of speech or music	Hourly dBA Leq	50[2]	40[2]
Any	dBA Lmax	75	65

[1] Where the location of exterior spaces (i.e., outdoor activity areas) is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the exterior space.

[2] The City may impose noise level standards that are more or less restrictive than those specified above based upon determination of existing low or high ambient noise levels.

Source: Burbank2035 2013

Furthermore, the following goals, objectives, and policies from the City's General Plan Noise Element are applicable to the Project (Burbank2035 2013):

Goal 1: Noise Compatible Land Uses: Burbank's diverse land use pattern is compatible with current and future noise levels.

> **Policy 1.1:** Ensure the noise compatibility of land uses when making land use planning decisions.
>
> **Policy 1.2:** Provide spatial buffers in new development projects to separate excessive noise generating uses from noise-sensitive uses.
>
> **Policy 1.3:** Incorporate design and construction features into residential and mixed-use projects that shield residents from excessive noise.
>
> **Policy 1.4:** Maintain acceptable noise levels at existing noise-sensitive land uses.
>
> **Policy 1.5:** Reduce noise from activity centers located near residential areas, in cases where noise standards are exceeded.
>
> **Policy 1.6:** Consult with movie studios and residences that experience noise from filming activities to maintain a livable environment.

Goal 2: Noise in Mixed-Use Development: Noise from commercial activity is reduced in residential portions of mixed-use projects.

> **Policy 2.1:** Require the design and construction of buildings to minimize commercial noise within indoor areas of residential components of mixed-use projects.
>
> **Policy 2.2:** Locate the residential portion of new mixed-use projects away from noise generating sources such as mechanical equipment, gathering places, loading bays, parking lots, driveways, and trash enclosures.

Goal 3: Vehicular Traffic Noise: Burbank's vehicular transportation network reduces noise levels affecting sensitive land uses.

Policy 3.1: Support noise-compatible land uses along existing and future roadways, highways, and freeways.

Policy 3.2: Encourage coordinated site planning and traffic management that minimizes traffic noise affecting noise-sensitive land uses.

Policy 3.3: Advocate the use of alternative transportation modes such as walking, bicycling, mass transit, and non-motorized vehicles to minimize traffic noise.

Policy 3.4: Install, maintain, and renovate freeway and highway right-of-way buffers and sound walls through continued work with the California Department of Transportation (Caltrans) and Los Angeles County Metropolitan Transportation Authority (MTA).

Policy 3.5: Monitor noise levels in residential neighborhoods and reduce traffic noise exposure through implementation of the neighborhood protection plans.

Policy 3.6: Prohibit heavy trucks from driving through residential neighborhoods.

Policy 3.7: Where feasible, employ noise-cancelling technologies such as rubberized asphalt, fronting homes to the roadway, or sound walls to reduce the effects of roadway noise on sensitive receptors.

Policy 3.8: Within the Airport Influence Area, seek to inform residential property owners of airport generated noise and any land use restrictions associated with high noise exposure. Mixed-use development contributes to a thriving community, but can place sensitive receptors adjacent to noisy businesses.

Goal 4: Train Noise: Burbank's train service network reduces noise levels affecting residential areas and noise-sensitive land uses.

Policy 4.1: Support noise-compatible land uses along rail corridors.

Policy 4.2: Require noise-reducing design features as part of transit-oriented, mixed-use development located near rail corridors.

Policy 4.3: Promote the use of design features, such as directional warning horns or strobe lights, at railroad crossings that reduce noise from train warnings.

Goal 5: Aircraft Noise: Burbank achieves compatibility between airport-generated noise and adjacent land uses and reduces aircraft noise effects on residential areas and noise-sensitive land uses.

Policy 5.1: Prohibit incompatible land uses within the airport noise impact area.

Policy 5.2: Work with regional, state, and federal agencies, including officials at Bob Hope Airport, to implement noise reduction measures and to monitor and reduce noise associated with aircraft.

Policy 5.3: Coordinate with the Federal Aviation Administration and Caltrans Division of Aeronautics regarding the siting and operation of heliports and helistops to minimize excessive helicopter noise.

Policy 5.4: Within the Airport Influence Area, seek to inform residential property owners of airport generated noise and any land use restrictions associated with high noise exposure.

Goal 6: Industrial Noise: Noise generated by industrial activities is reduced in residential areas and at noise-sensitive land uses.

Policy 6.1: Minimize excessive noise from industrial land uses through incorporation of site and building design features.

Policy 6.2: Require industrial land uses to locate vehicular traffic and operations away from adjacent residential areas.

Goal 7: Construction, Maintenance, and Nuisance Noise: Construction, maintenance, and nuisance noise is reduced in residential areas and at noise-sensitive land uses.

Policy 7.1: Avoid scheduling city maintenance and construction projects during evening, nighttime, and early morning hours.

Policy 7.2: Require project applicants and contractors to minimize noise in construction activities and maintenance operations.

Policy 7.3: Limit the allowable hours of construction activities and maintenance operations located adjacent to noise-sensitive land uses.

Policy 7.4: Limit the allowable hours of operation for and deliveries to commercial, mixed-use, and industrial uses located adjacent to residential areas.

b. Burbank Municipal Code

The City's noise standards, found in the City of Burbank Municipal Code (BMC), set forth hours of operation for certain activities and standards for determining when noise is deemed to be a disturbance.

Chapter 9-3-208 of the BMC prohibits the operation of any machinery, equipment, pump, fan, air conditioning apparatus, or similar mechanical device in such a manner as to cause the ambient noise level at an adjacent noise-sensitive property to be exceeded by more than five (5) dBA.

According to Chapter 9-3-213 of the BMC, no person shall use or operate any radio receiving set, musical instrument, phonograph, television set or other machine or device for the producing or reproducing of sound in such manner as to cause disturbance and cause the ambient noise level at an adjacent noise-sensitive property to be exceeded by more than five (5) dBA.

Similarly, according to Chapter 9-3-213.5 of the BMC, no person in a park (including public parking lots) or on a right of way adjacent to a park shall use or operate any radio receiving set, musical instrument, phonograph, television set or other machine or device for the producing or reproducing of sound or other sound amplification systems in such manner as to disturb the peace, quiet, and comfort of neighboring residents or any reasonable person of normal sensitiveness residing in the area.

The BMC also designates hours of construction applicable to all construction, alteration, movement, enlargement, replacement, repair, equipment, maintenance, removal and demolition work. Chapter 9-1-1-105.8 of the BMC prohibits construction activity between 7:00 PM and 7:00 AM Monday through Friday, between 5:00 PM and 8:00 AM on Saturdays, and at any time on Sundays or national holidays.

4.9.3 Impact Analysis

a. Methodology and Significance Thresholds

The following analysis of noise impacts considers the effects of both temporary construction-related activities and long-term operation of the Project, including increased vehicle trips. The analysis includes noise reduction features from the Environmental Noise Evaluation & Recommendations (2017) Report prepared by SSA Acoustics for the proposed Project.

According to *State CEQA Guidelines* Appendix G, the Project could have a potentially significant impact with respect to noise if it would:

1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
2. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels
3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project
4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project
5. 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 expose people residing or working in the project area to excessive noise levels
6. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels

The Initial Study prepared for the proposed Project determined that the Project would potentially result in significant impacts related to thresholds 1 through 4, but less than significant impacts related to thresholds 5 and 6.

Construction Noise

Temporary construction activity would expose adjacent noise-sensitive receptors to construction noise generated by the use of on-site construction equipment. Construction noise was estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM). The RCNM uses baseline noise levels, distances to receptors, shielding information, and construction equipment utilized to calculate the construction noise level from each piece of construction equipment and overall construction noise at each receptor. To calculate noise generated by each piece of equipment, the model uses equipment noise levels from a study done by the Environmental Protection Agency (EPA) and acoustical usage factors for equipment (i.e., the fraction of time each equipment is operating at full power) from the Empire State Electric Energy Research Corp. Guide (FHWA 2006).

Project construction noise levels were estimated using RCNM at nearby noise-sensitive receptors, including single-family residences located approximately 875 feet northwest of the Project site across the I-5, Burbank High School located approximately 1,320 feet (0.25 mile) northeast of the Project site, and single-family residences approximately 1,740 feet (0.33 mile) west of the site along

West Burbank Boulevard. However, construction activity would not operate exclusively along the Project boundary of the site. Rather, stationary construction activity would occur at various locations on the Project site and mobile construction equipment would operate throughout the site. To provide an overall estimate of the average hourly construction noise levels, the construction noise analysis assumes that on-site construction activity would occur, on average, 50 feet from the Project site boundaries. Therefore, the modeled distances between construction activity and nearby noise-sensitive receptors are 925 feet for single-family residences across the I-5, 1,370 feet for Burbank High School, and 1,790 feet for single-family residences along West Burbank Boulevard.

The modeled construction equipment for each construction phase was based on the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 equipment defaults for construction of the proposed mixed-use Project as analyzed in the Air Quality and Greenhouse Gas Study prepared by Rincon in September 2018 for the Project. CalEEMod uses project characteristics, such as land use, building sizes, and lot acreage, to estimate a project's emissions and uses default equipment lists in its modeling based on empirical data. The RCNM results and equipment list from CalEEMod are included in Appendix D. As discussed in Section 4.9.2, *Regulatory Setting*, Chapter 9-1-1-105.8 of the BMC prohibits construction activity between 7:00 PM and 7:00 AM Monday through Friday, between 5:00 PM and 8:00 AM on Saturdays, and at any time on Sundays or national holidays. In addition, Chapter 9-3-208 of the BMC prohibits the operation of any machinery, equipment, pump, or similar mechanical device in such a manner as to cause the ambient noise level at an adjacent noise-sensitive property to be exceeded by more than 5 dBA. Therefore, noise generated by construction activity would be significant if it occurs outside the construction hours specified in the BMC or if it increases ambient noise levels at the property line of nearby sensitive receptors by more than 5 dBA. For the purpose of this analysis, the ambient noise levels for adjacent noise-sensitive receptors are the measured noise levels shown in Table 4.9-1. Based on noise measurements in Table 4.9-1, the ambient noise at single-family residences across I-5 is 70 dBA Leq, the ambient noise level at Burbank High School is 66.2 dBA Leq, and the ambient noise level at single-family residences along West Burbank Boulevard is 66.7 dBA Leq. Therefore, the proposed Project would generate a significant impact if construction noise levels exceed 75 dBA Leq at single-family residences across I-5, approximately 71 dBA Leq at Burbank High School, and approximately 72 dBA Leq at single-family residences along West Burbank Boulevard.

Groundborne Vibration

The primary sources of vibration associated with operation of the Project would include vehicle circulation on the Project site that would be similar to the existing vibration levels on surrounding roadways and the I-5. Therefore, Project operations would not substantially increase the existing vibration levels in the immediate vicinity of the Project site. Construction activities also have the potential to generate ground-borne vibration near sensitive receptors, especially from grading and excavation of the Project site. Therefore, this analysis focuses on vibration impacts from Project construction that were evaluated by identifying the highest potential vibration sources from construction equipment, estimating the vibration levels at the potentially affected receptors, and comparing vibration levels with applicable significance thresholds.

Construction vibration estimates are based upon vibration levels reported by the FTA in the *Transit Noise and Vibration Impact Assessment* (2018) with an assumed standard attenuation rate of 6 VdB per doubling of distance. Similar to the methodology for estimating construction noise levels at nearby sensitive receptors, vibration levels were estimated under the assumption that construction activities would occur on average 50 feet within the Project boundary. Therefore, the modeled distances between construction activity and nearby noise-sensitive receptors are 925 feet for single-family residences across the I-5, 1,370 feet for Burbank High School, and 1,790 feet for single-family residences along West Burbank Boulevard. However, this analysis also models vibration levels at the nearest off-site building to the Project site to determine the worst-case level of vibration impact regardless of noise-sensitivity. Based on the location of the Project site and surrounding uses, the nearest non-residential off-site building is located approximately 175 feet southwest of the site across North Front Street. Vibration calculations are included in Appendix I (see the Vibration Analysis in Rincon's *Noise Study*). Based on impact criteria described in the FTA *Transit Noise and Vibration Impact Assessment* (2018), residences and buildings where people normally sleep would be impacted by frequent vibration events if vibration velocity levels exceed 72 VdB. In addition, Project-generated vibration would result in a significant impact if it would exceed 100 VdB (i.e., the threshold for damage to fragile buildings), or 95 VdB (i.e., the threshold for damage to extremely fragile historic buildings).

On-site Operational Noise

On-site operational noise associated with the Project would include noise from delivery trucks; trash hauling trucks; heating, ventilation and air conditioning (HVAC) equipment; and public and private recreational spaces consisting of courtyards, residential balconies, sky terraces at both parking structure roof levels, and the transit public plaza area. As discussed under *Sensitive Receptors*, noise-sensitive receptors in the area include single-family residences located approximately 875 feet northwest of the Project site across the I-5, Burbank High School located approximately 1,320 feet northeast of the Project site, and single-family residences approximately 1,740 feet west of the site along West Burbank Boulevard.

According to Chapter 9-3-208 and Chapter 9-3-213 of the BMC, the City prohibits the operation of any on-site machinery, mechanical devices, or sound-producing devices in a manner that causes the ambient noise level at an adjacent noise-sensitive property to be exceeded by more than 5 dBA. Although the 5 dBA noise standard outlined in the BMC is specific to the use of on-site mechanical equipment and sound-producing devices, this standard was applied to noise associated with use of on-site public and private recreational to determine impacts associated with all sources of on-site operational noise. Therefore, noise generated by operation of the Project would be significant if it increases ambient noise levels at the property line of nearby sensitive receptors by more than 5 dBA. Similar to the methodology for determining construction noise impacts at nearby sensitive receptors, the Project would generate a significant impact if on-site operational noise levels exceed approximately 72 dBA Leq at single-family residences along West Burbank Boulevard, approximately 71 dBA Leq at Burbank High School, and 75 dBA Leq at single-family residences across I-5. Operational noise level estimates do not account for the presence of intervening structures, topography, and the existing noise environment, which would reduce or mask operational noise levels at receptor locations. Therefore, the noise levels presented herein represent a worst-case estimate of actual operational noise.

Off-site Roadway Noise

Operation of the Project would also generate off-site vehicle trips, thereby increasing traffic on area roadways. Noise levels associated with existing and future traffic along area roadways were estimated using the U.S. Department of Transportation Federal Highway Administration's (FHWA) Traffic Noise Model 2.5 (TNM2.5) (FHWA 2004) (traffic noise model data is provided in Appendix I). TNM 2.5 was used to estimate noise levels generated by traffic on area roadways under existing and future conditions, with and without Project-added traffic. The analysis of anticipated noise levels from traffic generated by the Project utilizes traffic volume data for area roadways from the *Transportation Impact Analysis* prepared for the Project by F&P in March 2019 (F&P 2019). According to the *Transportation Impact Analysis*, the average daily trips (ADT) generated by the proposed Project would be 5,261; including 314 AM peak hour trips and 398 PM peak hour trips. Due to the Project area's proximity to the I-5, freeway noise was also incorporated into the model. Existing peak hour volumes for this segment of the I-5 were based on the latest traffic year peak hour volume data from the California Department of Transportation (Caltrans) Traffic Census Program (Caltrans 2016).

The nearest noise-sensitive receptors were included in the model that consist of Burbank High School located approximately 0.25-mile northeast of the Project site along 3rd Street, and single-family residences approximately 1,740 (0.33 mile) west of the site along West Burbank Boulevard. The single-family residences located approximately 875 feet northwest of the Project site were not included because these residences are located across the I-5 (see Figure 4.9-1). Therefore, Project-generated trips would not be directly distributed at roadways within this residential neighborhood.

The City of Burbank has not adopted specific thresholds to assess off-site Project-related traffic noise impacts. Therefore, this analysis uses thresholds contained in the FTA *Transit Noise and Vibration Impact Assessment* (2018) as guidance to determine whether a change in traffic would result in a significant permanent increase in roadway noise. Using the FTA criteria, the significance threshold is based on the existing ambient noise level. Roadways with lower ambient noise levels have a higher noise level increase threshold, while roadways with a higher ambient noise level have a lower noise level increase threshold. Traffic-related noise increases would result in a significant impact if roadway noise would increase by more than the levels indicated in Table 4.9-4.

Table 4.9-4 Significance of Changes in Operational Roadway Noise Exposure

Existing Noise Exposure (Ldn or Leq in dBA)	Significant Noise Exposure Increase (Ldn or Leq in dBA)
45-50	7
50-55	5
55-60	3
60-65	2
65-75	1
75+	0
Source: FTA 2018	

Exposure of New Sensitive Receptors to Ambient Noise

Although CEQA does not require analysis of potential impacts of the environment on the Project, the following impact analysis of the ambient noise environment on the Project is provided for informational purposes and for disclosure of existing noise conditions in the vicinity of the Project site.

At buildout, the Project would be a noise-sensitive receptor due to its outdoor recreational spaces, residential units, and hotel rooms. The Project would be exposed to motor vehicles noise from area roadways and the I-5, train operational noise from the adjacent Metrolink station and railroad line, and aircraft noise from overhead flights associated with the Hollywood Burbank Airport. However, according to the Burbank2035 General Plan Noise Element, the Project site is located outside of the airport influence area and 65 dBA CNEL noise contour (Burbank2035 2013). Therefore, the Project would not be exposed to significant noise from overhead flights associated with daily airport operations.

According to the City's General Plan Noise Element standards shown in Table 4.9-2, ambient noise up to 65 dBA Ldn is normally acceptable for mixed-use multi-family residential development and transient lodging land uses, while ambient noise up to 70 Ldn is normally acceptable for neighborhood parks. These standards also establish maximum interior noise levels for new residential development, requiring that sufficient insulation be provided to reduce interior ambient noise levels to 45 dBA CNEL (Burbank2035 2013). Therefore, the Project would be exposed to significant noise if on-site noise levels exceed land use compatibility standards shown in Table 4.9-2.

b. Project Impacts and Mitigation Measures

Threshold 4:	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Impact N-1 **CONSTRUCTION ACTIVITIES ASSOCIATED WITH BUILDOUT OF THE PROPOSED PROJECT WOULD GENERATE TEMPORARY NOISE LEVEL INCREASES AT THE PROJECT SITE. HOWEVER, DAILY ON-SITE CONSTRUCTION-RELATED NOISE WOULD NOT RESULT IN AN INCREASE OF 5 DBA ABOVE THE AMBIENT NOISE LEVEL AT THE NEAREST NOISE-SENSITIVE RECEPTORS BASED ON BMC STANDARDS. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

Construction of the Project would generate temporary noise that would exceed existing ambient noise levels on the Project site. Construction noise levels during all phases of construction (i.e., site preparation, grading, building construction, paving, and architectural coating) were modeled using the FHWA RCNM and CalEEMod construction equipment defaults to estimate construction noise levels at the nearest noise-sensitive receptors. Assuming that on-site construction activity would occur, on average, 50 feet from the Project site boundaries, the modeled distances between construction activity and nearby noise-sensitive receptors are 925 feet for single-family residences across the I-5, 1,370 feet for Burbank High School, and 1,790 feet for single-family residences along West Burbank Boulevard. Table 4.9-5 shows the average expected noise levels (Leq) at the nearest sensitive receptors based on the combined construction equipment anticipated to be used concurrently during each phase of construction as modeled in RCNM.

Table 4.9-5 Construction Noise Levels by Phase

Construction Phase	Construction Equipment	Construction Noise Level (dBA, Leq) at Noise-Sensitive Receptors		
		925 Feet [1]	1,370 Feet [2]	1,790 Feet [3]
Site Preparation	Tractors (2), Loader, Backhoe, Dozers (3)	61	58	55
Grading	Excavator, Dozer, Grader, Tractor, Loader, Backhoe	61	57	55
Building Construction	Crane, Forklifts (3), Generator Set, Tractor, Loader, Backhoe, Welder	63	60	58
Paving	Pavers (2), Rollers (2), Paving Equipment (2)	61	58	55
Architectural Coating	Air Compressor	48	45	43
Threshold [4]		**75**	**71**	**72**
Threshold Exceeded?		**No**	**No**	**No**

See Appendix I for RCNM results and CalEEMod equipment list.

[1] Modeled distance for single-family residences northwest of the Project site across the I-5.

[2] Modeled distance for Burbank High School located northeast of the Project site along 3rd Street.

[3] Modeled distance for single-family residences west of the Project site along West Burbank Boulevard.

[4] According to Chapter 9-3-208 of the BMC, noise generated by construction activity would be significant if it increases ambient noise levels at the property line of nearby sensitive receptors by more than 5 dBA.

Source: FTA 2018

As shown in Table 4.9-5, operation of equipment during various phases of construction could generate noise levels up to 63 dBA Leq at single-family residences northwest of the Project site across the I-5, 60 dBA Leq at Burbank High School northeast of the Project site, and 58 dBA Leq at single-family residences west of the Project site. Construction noise level estimates do not account for the presence of intervening structures or topography that could reduce noise levels at receptor locations. Therefore, the noise levels presented herein represent a worst-case estimate of actual construction noise.

According to Chapter 9-1-1-105.8 of the BMC, construction activity is prohibited in the City between the hours of 7:00 PM and 7:00 AM Monday through Friday, between the hours of 5:00 PM and 8:00 AM on Saturdays, and at any time on Sundays or national holidays. Compliance with the City's defined hours of construction would ensure that adjacent noise-sensitive residential receptors are not disturbed during nighttime sleep hours. As discussed under *Methodology and Significance Thresholds*, the Project would generate a significant impact if construction noise levels exceed 75 dBA Leq at single-family residences across I-5, approximately 71 dBA Leq at Burbank High School, and approximately 72 dBA Leq at single-family residences along West Burbank Boulevard. As shown in Table 4.9-5, Project-generated construction noise levels would be lower than the identified construction noise thresholds based on Chapter 9-3-208 of the BMC. The Project's compliance with this BMC regulation is required as a condition of approval for the Project. Therefore, temporary construction noise impacts would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

Threshold 2:	Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels.

Impact N-2 CONSTRUCTION VIBRATION WOULD BE TEMPORARY AND INTERMITTENT, AND WOULD NOT EXCEED APPLICABLE FEDERAL TRANSIT ADMINISTRATION (FTA) RECOMMENDED THRESHOLDS OF 72VDB FOR FREQUENT VIBRATION EVENTS AT RESIDENCES , 100 VDB FOR DAMAGE TO FRAGILE BUILDINGS, OR 95 VDB FOR DAMAGE TO EXTREMELY FRAGILE HISTORIC BUILDINGS. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Temporary construction activity associated with the Project would also create ground-borne vibration. Buildings in the vicinity of a construction site respond to vibration to varying degrees ranging from imperceptible effects at the lowest levels, to low rumbling sounds and perceptible vibrations at moderate levels, and up to minor damage at the highest vibrations levels. Similar to the construction noise analysis, the modeled distances between construction activity and nearby noise-sensitive receptors are 925 feet for single-family residences across the I-5, 1,370 feet for Burbank High School, and 1,790 feet for single-family residences along West Burbank Boulevard. As discussed under *Methodology and Significance Thresholds*, this analysis also models vibration levels at the nearest non-residential off-site building to the Project site to determine the worst-case level of vibration impact regardless of noise-sensitivity. Based on the location of the Project site and surrounding uses, the nearest off-site building is located approximately 175 feet southwest of the site across North Front Street.

To determine vibration impacts during Project construction, vibration levels were calculated at the nearest receptors using the PPV of the highest impact pieces of equipment that would be used during Project construction (see Appendix I for vibration calculations), which would be loading trucks, dozers, and rollers. Table 4.9-6 shows the estimated groundborne vibration levels from these pieces of equipment at various distances associated with the nearby receptors.

Table 4.9-6 Groundborne Vibration Levels by Equipment

	Vibration Level (VdB) at Noise-Sensitive Receptors			
Equipment	**175 Feet[1]**	**925 Feet [2]**	**1,370 Feet[3]**	**1,790 Feet[4]**
Loading Truck	60	39	33	30
Dozer	62	40	35	31
Roller	69	47	42	39

See Appendix I for vibration calculations.

[1] Modeled distance for industrial building southwest of the Project site across North Front Street.

[2] Modeled distance for single-family residences northwest of the Project site across the I-5.

[3] Modeled distance for Burbank High School located northeast of the Project site along 3rd Street.

[4] Modeled distance for single-family residences west of the Project site along West Burbank Boulevard.

Source: FTA 2018

Operation of a loaded truck, dozer, and roller would generate peak vibration levels up to 47 VdB at the nearest noise-sensitive receptor. As discussed in the construction noise analysis, compliance with the City's permitted hours of construction outlined in Chapter 9-1-1-105.8 of the BMC would ensure that adjacent noise-sensitive residential receptors are not disturbed by construction vibration during nighttime sleep hours. The Project's compliance with this BMC regulation is required as a condition of approval for the Project. Furthermore, vibration levels would not exceed the FTA's vibration impact criterion of 72 VdB for residences or buildings where people normally sleep. In addition, construction vibration would not reach 100 VdB (i.e., the threshold for damage to fragile buildings) or 95 VdB (i.e., the threshold for damage to extremely fragile historic buildings) (FTA 2018). Therefore, construction vibration impacts would be temporary and less than significant.

Mitigation Measures

No mitigation measures would be required.

Threshold 1:	Exposure of persons to or generation of noise levels in excess of standards established in the City's general plan or noise ordinance, or applicable standards of other agencies.
Threshold 3:	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Impact N-3 **NOISE ASSOCIATED WITH OPERATION OF THE PROJECT, INCLUDING NOISE FROM TRAFFIC ON NEARBY ROADS, ROOFTOP MOUNTED MECHANICAL EQUIPMENT, AND TRASH HAULING AND DELIVERY TRUCKS WOULD NOT INCREASE AMBIENT NOISE LEVELS ABOVE STANDARDS. THEREFORE, OPERATIONAL NOISE IMPACTS ASSOCIATED WITH THE PROJECT WOULD BE LESS THAN SIGNIFICANT.**

On-site Operational Noise

The Project would introduce a new residential/retail mixed-use development with an open space public plaza area. On-site operational noise associated with the Project would include noise from delivery trucks; trash hauling trucks; heating, ventilation and air conditioning (HVAC) equipment; and public and private recreational spaces consisting of courtyards, residential balconies, sky terraces at both parking structure roof levels, and the transit publicly accessible plaza area. Because the parking activities would be enclosed within parking structures and subterranean parking, noise from on-site vehicle circulation and parking activities (i.e., tire squeals, alarms, and engine start-ups) would not be a significant source of on-site operational noise that would be audible to off-site receivers.

Due to the distances between the Project and the nearest noise-sensitive receptors as well as the existing noise environment (i.e., vehicles along North Front Street, West Burbank Boulevard, and I-5), it is not anticipated that adjacent noise-sensitive receptors would be subject to substantial or perceptible noise associated with operation of the Project. Nonetheless, each source of on-site operational noise is analyzed at the nearest noise-sensitive receptor for a conservative estimate of the Project's operational noise impacts. As discussed in Section 3.1, *Methodology and Significance Thresholds*, the Project would generate a significant impact if on-site operational noise levels exceed approximately 72 dBA Leq at single-family residences along West Burbank Boulevard, approximately 71 dBA Leq at Burbank High School, and 75 dBA Leq at single-family residences across I-5.

Delivery and Trash Trucks

The Project would require periodic delivery and trash hauling services that would use available areas for loading and unloading activities, generating noise throughout the Project site. Based on the site plan shown in Figure 2-3 in Section 2, *Project Description*, delivery and trash trucks would access the Project site through North Front Street. The average noise level for a single idling truck is generally 70 dBA at a distance of 25 feet (Salter 2017). At the nearest distance to noise-sensitive receptors, delivery and trash trucks would be operating approximately 875 feet from single-family residences northwest of the Project site. At this distance, and based on an attenuation rate of 6 dBA per doubling of distance, truck noise would be approximately 39 dBA at the nearest noise-sensitive receptor. Operational truck noise would not generate noise levels in excess of the applicable threshold of 75 dBA at single-family residences to the northwest. In addition, the Project site is located in a developed urban area and is surrounded by industrial and commercial uses. Therefore, delivery and trash trucks are already a common occurrence in the vicinity of the Project site. Operational noise impacts associated delivery and trash trucks would be less than significant.

Commercial HVAC Equipment

Operation of mechanical equipment at the Project site would include HVAC equipment associated with the proposed mixed-use development. Commercial ventilation and air conditioning equipment typically has noise shielding cabinets, is placed on the roof or within mechanical equipment rooms, and is not usually a significant source of noise. Noise from rooftop-mounted HVAC equipment at commercial centers ranges from 60 to 70 dBA Leq at 15 feet from the source (Illingworth & Rodkin 2009). Based on the Project site plan (see Figure 2-3 in Section 2, *Project Description*), the majority of the Project site would be developed with occupiable buildings that would likely include rooftop-mounted HVAC equipment. Therefore, at the nearest distance to noise-sensitive receptors, HVAC equipment would be operating approximately 875 feet from single-family residences northwest of the Project site. At this distance, and based on an attenuation rate of 6 dBA per doubling of distance, on-site HVAC equipment would generate noise levels up to 35 dBA Leq at the nearest noise-sensitive receptor. Operational HVAC equipment noise would not generate noise levels in excess of 75 dBA at single-family residences to the northwest. Because the Project site is located in a developed urban area and is surrounded by industrial and commercial uses, HVAC equipment is an existing noise source in the Project area. Operational noise impacts associated with HVAC equipment would be less than significant.

On-site Recreational Spaces

Other on-site operational noise would involve use of outdoor recreational spaces, particularly courtyards, residential balconies, sky terraces at both parking structure roof levels, and the open space public plaza area. Because the proposed residential balconies would only have the capacity for a few people at a time, noise from on-site balconies (i.e., human conversation) would not be a significant source of on-site operational noise. For the purpose of this analysis, noise associated with the operation of on-site courtyards, sky terraces, and the transit public plaza area was analyzed using a reference noise level for a park. According to a noise measurement taken by Rincon on April 9, 2017 near gathering areas at a local park, recreation noise was measured at 58.6 dBA Leq at 25 feet from the source (Rincon 2017). Based on the Project site plan (see Figure 2-3), the proposed sky terrace at the roof of the center parking structure would be located approximately 1,350 feet (0.25 mile) from Burbank High School that is located northeast of the Project site. At this distance, use of on-site recreational spaces would not generate noise levels in excess of 71 dBA at Burbank High

School to the northeast. Operational noise impacts associated with on-site recreational spaces would be less than significant.

Off-site Roadway Noise

The Project would generate new vehicle trips and increase off-site traffic volumes on area roadways. Traffic generated by the Project was estimated by the *Transportation Impact Analysis* prepared for the Project by the F&P. Table 4.9-7 compares measured and modeled noise levels at the nearest off-site noise sensitive receptors that would be exposed to an increase in traffic volumes associated with the Project.

Project-generated vehicle traffic would result in a significant increase roadway noise levels if the noise increase would exceed the roadway noise increase thresholds shown in Table 4.9-4. Table 4.9-7 shows the increase in sound levels due to the Project-generated traffic under the existing and existing plus Project scenario.

Table 4.9-7 Comparison of Existing and Plus Project Traffic Noise Levels on Local Roadways

Noise-Sensitive Receptor, Location	Existing Noise Level (dBA, Leq)	Existing Plus Project Noise Level (dBA, Leq)	Project Change	Significance Threshold	Significant?
Single-Family Residences, Burbank Boulevard	68.9	69.2	+0.3	1	No
Burbank High School (Classroom building), 3rd Street	69.2	69.7	+0.5	1	No
Burbank High School (Recreational uses), 3rd Street	68.7	69.1	+0.4	1	No

See Appendix I for noise model results.
Source: TNM2.5, FHWA 2004.

As shown in Table 4.9-7, the greatest estimated traffic noise increase caused by Project-generated traffic would be 0.5 dBA along 3rd Street. Other roadways in the vicinity of the Project would also experience an increase in traffic; however, the increase would not exceed the applicable significance thresholds for any of the evaluated roadways. Therefore, Project-generated traffic noise would not have a significant impact on noise-sensitive receptors in the vicinity of the Project site under the existing and existing plus Project scenario.

Table 4.9-8 shows the Project's contribution to a cumulative increase in existing traffic noise levels for the year 2022. The Project would increase future traffic-related noise by up to 0.1 dBA at noise-sensitive residential receptors along West Burbank Boulevard that would not exceed applicable thresholds. Therefore, the Project would not have a significant contribution to cumulative traffic noise impacts.

Table 4.9-8 Comparison of Future and Plus Project Traffic Noise on Local Roadways

Noise-Sensitive Receptor, Location	Noise Level (dBA CNEL) Existing [1]	Future [2]	Future Plus Project [3]	Cumulative Change in Noise Level [3] – [1]	Project Change [3] – [2]	Significance Threshold	Significant?
Single-Family Residences, West Burbank Boulevard	68.9	69.4	69.5	+0.6	+0.1	1	No
Burbank High School (Classroom building), 3rd Street	69.2	69.9	69.9	+0.7	+0.0	1	No
Burbank High School (Recreational uses), 3rd Street	68.7	69.3	69.3	+0.6	+0.0	1	No

See Appendix I for noise model results.
Source: TNM2.5, FHWA 2004.

Mitigation Measures

No mitigation measures would be required.

Threshold 1:	Exposure of persons to or generation of noise levels in excess of standards established in the City's general plan or noise ordinance, or applicable standards of other agencies**.**

Impact N-4 ALTHOUGH THE EFFECT OF AMBIENT NOISE ON A PROPOSED PROJECT IS NOT AN IMPACT UNDER CEQA, THE POTENTIAL NOISE LEVELS AT THE PROPOSED PROJECT ARE PROVIDED FOR PUBLIC DISCLOSURE. THE PROJECT SITE IS EXPOSED TO HIGH TRAFFIC LEVELS FROM THE I-5. THEREFORE, THE PROJECT WOULD BE EXPOSED TO NOISE LEVELS THAT EXCEED THE CITY'S EXTERIOR AND INTERIOR LAND USE COMPATIBILITY STANDARDS. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

As discussed in under *Methodology and Significance Thresholds*, CEQA does not require analysis of potential impacts of the environment on the Project. Therefore, the following impact analysis of the ambient noise environment on the Project is provided for informational purposes and for disclosure of existing noise conditions in the vicinity of the Project site.

The Project would include residences, open space areas, and a hotel that would be considered new noise-sensitive receptors on the Project site. Based on two 24-hour noise measurements conducted by SSA Acoustics at the Project site, the ambient daily noise level at future uses with direct exposure to Front Street and the I-5 would be 76 dBA Ldn and 81 dBA Ldn, respectively (SSA Acoustics 2017). According to the City's standards shown in Table 4.9-2, ambient noise up to 65 dBA Ldn is normally acceptable for mixed-use multi-family residential development and transient lodging land uses, while ambient noise up to 70 dBA Ldn is normally acceptable for neighborhood parks. Based on a noise exposure level up to 81 dBA Ldn, the Project would be exposed to normally unacceptable noise levels, except where exterior areas are located and shielded from noise sources to mitigate nose to the maximum extent feasible. Furthermore, as discussed in Section 2.1, the manner in which homes in California are constructed generally provides a reduction of exterior-to-interior noise levels of approximately 20 to 25 dBA with closed windows (FTA 2018). Therefore, based on an exterior noise exposure level up to 81 dBA Ldn, interior noise levels at residential units and hotel rooms would be up to 61 dBA Ldn, which would exceed the City's standard of 45 dBA Ldn for interior noise. Therefore, the Project would require implementation of noise-reducing measures to reduce ambient noise at outdoor recreational spaces (i.e., residential and hotel balconies, open space public plaza) and exterior noise at interior spaces to acceptable levels per the City's standards.

Project Design Features

Noise PDF 1 – Operation and Maintenance

- Hours of operation for the commercial tenant spaces shall be limited to between 6:00 a.m. and 12:00 a.m. (midnight). Late night businesses and/or operations (including deliveries) shall be prohibited, unless otherwise approved in accordance with the BMC. The owner/operator of the Project shall be responsible for providing a written notice to all residents that they are located in a mixed-use development adjacent to retail and commercial land uses, and the residents could be affected by noise from adjacent uses.
- No exterior maintenance of the premises, including but not limited to lot sweeping and cleaning, landscaping and gardening, or washing of sidewalks shall be conducted on the premises before 7:00 a.m. or after 10:00 p.m. Monday through Saturday or before 9:00 a.m. or after 8:00 p.m. on Sunday.
- Any noise resulting from the operation of the business or conduct of the patrons, including the playing of musical instruments, whether live or mechanical, singing or other vocal sounds shall be kept at a level so as not to cause any disturbances or nuisances that would be detrimental to other properties in the area or to the welfare of the occupants thereof.

Noise PDF 2 – Sound Wall

The developer shall construct a Sound Wall located on either California Department of Transportation (Caltrans) right-of-way or on the Project site and City right-of-way adjacent to southbound Interstate 5. The northern limits of the Sound Wall shall be a point where the on-ramp to the southbound Interstate 5 is ten (10) feet above the finished grade of the mainline of Interstate 5, and the southern limit shall be a point where the Magnolia Boulevard Bridge intersects with the Caltrans right-of-way boundary.

Unless otherwise required by Caltrans, the Sound Wall shall be built consistent with the California Department of Transportation's "Sound Wall 1584" specifications and shall be a minimum of overall height of not less than ten (10) feet. The final design and construction of the Sound Wall is subject to review and approval by Caltrans (if located on State right right-of-way). If Caltrans does not approve the proposed Sound Wall to be placed on State right-of-way, then the developer shall construct the sound wall on private property and the adjacent City owned property with the final design of the Sound Wall being reviewed and approved by Community Development Director or his/her designee.

Mitigation Measures

Based on the noise exposure levels at the Project site, the Project would be exposed to exterior and interior noise levels in excess of the City's standards. The following recommended mitigation measures were incorporated from SSA Acoustics' Environmental Noise Evaluation & Recommendations Report (2017) and expanded upon to ensure that noise levels at the site are reduced to levels consistent with the City's standards. The proposed mitigation measures noted below are consistent with noise controlling measures as noted in Burbank2035 General Plan Noise Element Table N-5 for noise exposure levels of 65 dBA to 70 dBA.

N-4a Cooling and Ventilation

- A cooling and ventilation system with an outdoor condensing unit and an interior ceiling-installed or wall-mounted fan coil unit shall be incorporated into the Project to allow tenants the option of climate control without opening windows.
- Sound barriers at least six feet high shall be placed around the outdoor condensing unit on the rooftop terrace.

N-4b Walls, Windows, and Balcony Doors

The following building materials shall be incorporated into the Project:

- Walls: 6-inch wood stud wall with two layers of 5/8" gypsum wallboard (GWB) in the interior, ½" plywood and 5/8" GWB on exterior and 6-inch glass fiber insulation in the cavity
- Windows and Sliding Glass Doors: ¼"-glass – ½" airspaces – ¼" glass (STC 35); windows and sliding glass doors shall be mounted in low air infiltration rated frames.
- Exterior Door: solid core door with ½" glass insert with perimeter weather stripping and threshold seals.

N-4c Outside Air Vents

The following design features shall be incorporated into the Project's exterior air vents:

- Ducted outside air path from rooftop or façade, to provide outside air to residential units without creating a direct entry path for ambient sound
- Minimum of 7 feet of ducting with 1-inch thick duct liner
- Minimum of 1 elbow between outside inlet and interior vent
- All roof and attic vents shall be boxed or provided with baffling.

N-4d Deck Level Plexiglass Barriers

- The three outdoor decks that face the I-5 to the north shall include plexiglass noise barriers to deflect freeway noise. Specifically, the two lower decks shall include 8' plexiglass barriers and the upper deck shall include a 6' plexiglass barrier to maintain outdoor air flow and views while minimizing freeway noise. Figure 4.9-2 shows a rendering of the proposed plexiglass barrier on the outdoor deck.

Figure 4.9-2 Deck Level Plexiglass Barrier

N-4e Acoustic-designed Public Plaza

- Acoustical shaping shall be incorporated into the design of the public plaza to deflect or absorb freeway noise thereby creating an artificially quiet community area directly adjacent to the I-5. The plaza shall be set at a lower elevation from the I-5, reducing the amount of sound that initially reaches the plaza in conjunction with Noise PDF 2. Figure 4.9-3 shows an example of an acoustic-designed open space area.

Figure 4.9-3 Acoustic-Designed Open Space Area

Significance After Mitigation

Implementation of the above mitigation measures recommended by SSA Acoustics in their Environmental Noise Evaluation & Recommendations Report (2017) would reduce exterior noise at proposed outdoor residential uses (i.e., balconies) to 65 dBA CNEL, would reduce exterior noise at the proposed open space public plaza to 70 dBA CNEL, and would reduce interior noise in habitable rooms to an acceptable level of 45 dBA CNEL. Exterior and interior noise exposure levels at the Project site would be reduced to less than significant levels.

c. Cumulative Impact

The planned and pending projects in the vicinity of the Project site are listed in Section 3, *Environmental Setting*, which include apartment or condominium projects, mixed-use projects, commercial/retail projects, hotel projects, and office building projects. According to the cumulative projects list in Section 3, there are six planned projects within a 0.5-mile radius of the Project site consisting of the First Street Village Mixed-Use Project (315 North First Street), Premier at First Street (area bounded by First Street, Tujunga Avenue, San Fernando Boulevard, and Verdugo Avenue), AC Hotel Project (550 North Third Street), Burbank Town Center Redevelopment (600 North San Fernando Boulevard), Olive Station (160 West Olive), and Burbank Common (10 West Magnolia Boulevard).

Cumulative construction impacts would consist of combined noise and vibration impacts from the construction of the Project and other planned projects in the City of Burbank. Among the projects located within a 0.5-mile radius to the Project site, the Burbank Common (10 West Magnolia Boulevard) would be the nearest to the site at a distance of approximately 210 feet southeast of the site. Similar to the Project, the Burbank Common would be immediately surrounded by the I-5, Magnolia Boulevard, and other industrial and commercial uses. Generally, planned projects located within a 0.5-mile radius of the Project site would be situated in a similar noise environment with respect to the I-5 and other arterial roadways in the City, whose ambient noise is already characterized by traffic noise levels. As determined under impact analyses N-1 and N-2, Project-generated construction noise and vibration levels would generate less than significant impacts due to the distant locations of off-site receptors. Due to the ambient noise from the I-5 and distances between the Project site and nearest off-site receptors, Project-generated construction noise and vibration would not combine with that of other planned development in a manner to significantly supersede ambient traffic noise levels and exceed applicable significance thresholds. In addition, the Project, as well as other planned and pending projects, would be required to comply with the daytime construction hours permitted by Chapter 9-1-1-105.8 of the BMC. Compliance with the City's defined hours of construction would ensure that the nearest noise-sensitive receptors are not disturbed during nighttime sleep hours. Therefore, the Project would not substantially contribute to temporary cumulative construction noise and vibration impacts.

Cumulative operational noise impacts would consist of combined operational noise of the Project in conjunction with planned projects in the vicinity of the Project site, including potential increases in cumulative traffic noise on area roadways. As discussed under impact analysis N-3, due to the distances between the Project and the nearest noise-sensitive receptors as well as the existing noise environment (i.e., vehicles along North Front Street, West Burbank Boulevard, and I-5), it is not anticipated that the nearest noise-sensitive receptors would be subject to substantial or perceptible noise associated with operation of the Project. Other planned projects located within a 0.5-mile radius of the Project site would be situated in a similar noise environment with respect to the I-5 and other arterial roadways in the City, whose ambient noise is already characterized by traffic noise levels. As determined under Impact N-3, on-site noise sources associated with operation of the Project would not result in a substantial permanent noise increase at the nearest sensitive receptors. Therefore, the Project would not contribute considerably to cumulative operational noise increases in the Project vicinity above ambient noise levels.

Cumulative off-site traffic noise was calculated based on cumulative and cumulative plus project traffic volumes. The results in Table 4.9-8 under impact analysis N-3 indicate that the Project would increase cumulative traffic-related noise by up to 0.1 dBA at the nearest noise-sensitive receptors along West Burbank Boulevard, which is below the FTA significance thresholds of 1 dBA as shown in

Table 4.9-4. The Project would not exceed significance thresholds at any receptor location near the project. Therefore, Project's contribution to cumulative traffic noise impacts would not be considerable.

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4.10 Population and Housing

This section analyzes the Project's impacts related to population and housing growth.

4.10.1 Setting

a. City of Burbank

According to the California Department of Finance (DOF), Burbank's current estimated population is 107,149 persons, a 0.1 percent increase from its 2017 population of 107,029 (California DOF 2018). Table 4.10-1 shows the State's 2018 estimates of population, households, and housing units for the City of Burbank and Los Angeles County.

Table 4.10-1 2018 Population, Households, and Housing Unit Estimates

	City of Burbank	Los Angeles County
Population	107,149	10,283,729
Households	106,576	10,101,398
Housing Units (Total)	44,642	3,546,853
Housing Units (Occupied) [1]	42,712	3,338,658
Persons/Household Ratio[2]	2.5	3.03

[1] Estimated by applying a derived civilian vacancy rate to the estimated civilian housing units. Vacancy rates are based on 2010 Census benchmark data, adjusted to incorporate the directional changes described by the latest available American Community Survey (ACS) data.

[2]This is a ratio of persons (household) to an occupied housing unit.

Source: California DOF 2018

As shown in Table 4.10-1, Burbank's 2018 population of 107,149 is approximately one percent of the countywide population of 10,283,729; and the City's 44,642 housing units constitute approximately 1.3 percent of the County's 3,546,853 total housing units. The average number of persons per household in the City in 2018 is estimated at 2.5, which is about 21 percent lower than the countywide average of 3.03 persons per household in 2018. Table 4.10-2 shows the City's employment, housing, and population estimates for the year 2012 and forecasts for the years 2020, 2035, and 2040 from the Southern California Association of Governments (SCAG) SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Demographics & Growth Forecast in comparison to Los Angeles County.

Table 4.10-2 SCAG Population, Housing, and Employment Forecasts

City of Burbank	2012	2020	2035	2040
Population	103,300	107,900	116,500	118,700
Housing Units	42,500	44,300	47,600	48,400
Employment	106,800	119,000	141,900	145,000
Employment/Housing Ratio	2.5	2.7	3.0	3.0
Los Angeles County	**2012**	**2020**	**2035**	**2040**
Population	9,923,000	10,326,000	11,145,000	11,514,000
Housing Units	3,257,000	3,494,000	3,809,000	3,946,000
Employment	4,246,000	4,662,000	5,062,000	5,226,000
Employment/Housing Ratio	1.30	1.33	1.33	1.32

Source: SCAG 2016

Based on the SCAG estimates of employment (jobs) and households shown in Table 4.10-2, there were 2.5 jobs per household in the City in 2012. This ratio is about 92 percent higher than the SCAG estimate of 1.30 jobs per household for all of Los Angeles County in the same year. This suggests that Burbank is a “jobs rich” community in which more workers commute to the City from other communities for their jobs than residents commute to points outside the City for their jobs. The City’s higher ratio in comparison to the County is expected to continue in future years, based on SCAG forecasts.

b. Regulatory Setting

Regional Housing Needs Assessment

California’s Housing Element law requires that a local jurisdiction accommodate a share of the region’s projected housing needs for the planning period. This share, called the Regional Housing Needs Allocation (RHNA), is important because State law mandates that jurisdictions provide sufficient land to accommodate a variety of housing opportunities for all economic segments of the community. Compliance with this requirement is measured by the jurisdiction’s ability to provide adequate land to accommodate the RHNA. SCAG, as the regional planning agency, is responsible for allocating the RHNA to individual jurisdictions within the six-county region: Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial. For the 2014-2021 Housing Element, the RHNA commences on January 1, 2014 through October 1, 2021. The RHNA is distributed by income category (Burbank Housing Element 2014). For the City’s 2014-2021 Housing Element update, Burbank is allocated a RHNA of 2,684 units, as shown in Table 4.10-3. During the current RHNA reporting period (2014-2021), the City facilitated the development 397 residential units, including 360 above moderate income, 6 moderate income, 20 low income, and 11 very low income.

Table 4.10-3 Regional Housing Needs Assessment

Income Group	RHNA Allocation (units)	Percent of Total
Extremely Low/Very Low	694	25.9
Low	413	15.4
Moderate	443	16.5
Above Moderate	1,134	42.3
Total	2,684	100%

Source: Burbank 2014

Regional Transportation Plan/Sustainable Communities Strategy

SCAG's RTP/SCS is a long-range regional transportation and land use network plan that looks ahead 20+ years and provides a vision of the region's future mobility and housing needs with economic, environmental, and public health goals. The RTP identifies major challenges as well as potential opportunities associated with growth, transportation finances, the future of airports in the region, and impending transportation system deficiencies that could result from growth that is anticipated in the region. SCAG adopted its current RTP/SCS in April 2016 (SCAG 2016).

Burbank 2014-2021 Housing Element

The City's Housing Element fulfills the 2014-2021 update cycle for jurisdictions within the SCAG region that covers the planning period from January 1, 2014 through October 1, 2021. The Housing Element ensures that the City establishes policies, procedures and incentives in its land use planning and development activities that result in the maintenance and expansion of the housing supply to adequately accommodate households currently living and expected to live in Burbank. As required by State law, the Housing Element identifies strategies and programs that focus on: (1) conserving and improving existing affordable housing; (2) providing adequate housing sites to accommodate future housing needs for all income segments of the community; (3) assisting in the development of affordable housing; (4) removing governmental constraints to housing development; and (5) promoting equal housing opportunities for all Burbank residents (Burbank 2014). Specific policies from the Housing Element are listed below.

Policy 2.1: Facilitate mixed-use developments in targeted area, including Downtown and the Media District. Promote adaptive reuse of non-residential buildings for residential use.

Policy 2.2: Consistent with the Land Use Element, promote opportunities for a variety of housing types, including small lot development, live-work units and mixed-use development, to accommodate the City's diverse housing needs.

Policy 2.3: Encourage and facilitate the adaptive re-use of underutilized commercial and industrial buildings in appropriate locations to augment the supply of housing in the community and to create additional opportunities for providing affordable housing.

Policy 2.4: Take advantage of existing infrastructure and public improvements to provide additional affordable housing by allowing second units in single-family zoning districts.

Policy 3.1: Encourage production of a variety of housing types to address the needs of lower (including extremely low) moderate, and upper income households to maintain an economically diverse and balanced community.

Policy 3.3: Provide regulatory incentives and concessions to facilitate the development of affordable housing.

Policy 3.4: Utilize inclusionary housing as a tool to integrate affordable units within market rate developments. Ensure in-lieu fee revenues are expended in proportion to the targeted income group for which they were collected.

Policy 3.6: Encourage use of sustainable and green building design in new and existing housing.

Policy 4.1: Offer regulatory incentives and concessions, including density bonuses and reduced development standards, where feasible to offset or reduce the costs of developing affordable housing.

Policy 4.3: Provide opportunities for new housing types, including small lot single-family development, live-work units, and mixed-use residential development, to address Burbank's changing housing needs.

4.10.2 Impact Analysis

a. Methodology and Thresholds of Significance

Impacts related to population are generally social or economic in nature. Under CEQA, a social or economic change generally is not considered a significant effect on the environment unless the changes can be directly linked to a physical change. Pursuant to the State CEQA Guidelines Appendix G Environmental Checklist, impacts related to population and housing would be potentially significant if development of the Project would:

1. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure), or
2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere, or
3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

The Initial Study in Appendix A determined that the Project would have no impacts related to displacement of existing housing or people since the Project site is currently vacant. Therefore, the analysis focuses on significance threshold 1. For purposes of this analysis, "substantial" population growth is defined as growth exceeding SCAG forecasts for Burbank. For additional discussion of impacts related to the Project's potential to induce growth, refer to Section 5, *Other CEQA-Required Discussions*.

b. Project Impacts and Mitigation

Threshold 1:	Would the project induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

Impact PH-1 DEVELOPMENT OF THE PROPOSED PROJECT MAY DIRECTLY AND INDIRECTLY INCREASE THE CITY'S POPULATION. HOWEVER, THIS POPULATION GROWTH WOULD FALL WITHIN THE CITY'S HOUSING ELEMENT AND SCAG POPULATION FORECASTS. THEREFORE, THE PROPOSED PROJECT WOULD NOT INDUCE POPULATION GROWTH BEYOND THAT ALREADY PLANNED. IMPACTS RELATED TO INDUCEMENT OF SUBSTANTIAL POPULATION GROWTH WOULD BE LESS THAN SIGNIFICANT.

Construction

Construction would occur over three phases for the various construction activities starting with earthwork and site preparation and continuing through building construction and final paving and landscaping. Subsection 2.7.5 in Section 2, *Project Description*, breaks down each proposed phase and the approximate duration of activities. The number of construction workers would vary throughout the construction period. Site preparation is expected to involve up to nine workers and grading is expected to involve up to eight workers. The building construction phases are expected to involve up to a total of 470 workers per day. Construction activities associated with the various phases would overlap, thus increasing the number of construction workers that would be on-site from day to day. However, the number of on-site workers during a maximum day of construction activity would be as many as 470 workers, although the average number of workers per day would be somewhat lower.

Due to the nature of development at the Project site, construction would provide short-term demand for various construction trade skills and labor over the construction period, with varied numbers of workers with particular skill sets passing through on shorter durations. Based on the size and duration of construction, it is anticipated that the Project would draw construction workers from the existing labor force within the region, where construction workers would commute daily to the Project site and new housing for construction employees would not be required. Therefore, construction activities associated with the Project would not increase the demand for temporary or permanent housing within the City. Project construction activities would not result in substantial indirect population growth in the City, and impacts would be less than significant.

Operation

According to the California Department of Finance (DOF), Burbank's current estimated population is 107,149 persons (California DOF 2018). The Project would involve construction of a mixed-use project that would consist of 573 residential units. Based on the City's average household size of 2.5 persons (see Table 4.10-1), an increase of 573 housing units would generate a population of approximately 1,433 residents and increase the City's population to 108,582. The Project is anticipated to be operational in 2024. According to SCAG 2016 RTP/SCS population forecasts for the City, the forecast for the year 2020 is 107,900 and the forecast for the year 2035 is 116,500. Based on linear interpolation calculations, the estimated population forecast for the Project's buildout year 2024 is 110,193. Therefore, the interpolated forecast for 2024 is used to evaluate sufficient accommodation of the growth in population triggered by the Project. The new resident total resulting from the proposed Project would be within the estimated forecast of 110,193 for the year 2024 and SCAG's forecast of 116,500 for the year 2035.

The Project would also involve construction of a 205,300 square foot (approximately 4.7 acres) hotel containing 307 guest rooms along with retail and restaurant uses, and a 1,067-square foot retail gallery that would generate employees on the Project site. According to the SCAG Employment Density Study Summary, hotels in Los Angeles County have an average of 51.91 employees per acre of floor area and commercial developments have an average of one employee per 424 square feet of floor area (SCAG 2001). Based on these averages, the hotel would generate about 244 employees and the gallery would generate about 3 employees. The total estimated number of employees associated with the Project is therefore 247. It is assumed that not all employees would become new residents of Burbank (they may, for example, already live in the City or live outside of the City after they are hired). However, if they did, generated employees would create an additional population growth of 247 residents for a total estimated population growth of 1,680 residents (1,433 plus 247). Based on these conservative assumptions, implementation of the Project would increase the City's estimated existing population of 107,149 to 108,829. This would still be within the estimated forecast of 110,193 for the year 2024 and SCAG's 2035 population forecast of 116,500 from the 2016 RTP/SCS (SCAG 2016).

Burbank is a built-out community and a few remaining vacant parcels are open for future development. According to the City's Housing Element, new housing growth has primarily occurred in the downtown and on target opportunity sites, as well as through small infill projects in multi-family neighborhoods. The City's Housing Element states that the City has more than adequate sites at appropriate densities to accommodate the overall RHNA allocation of 2,684 units (Burbank 2014). Construction of 573 housing units would satisfy approximately 21 percent of the City's RHNA of 2,684 units. The increase in housing units and commercial area associated with the Project would efficiently use buildable area to help meet the City's RHNA and simultaneously incorporate commercial use to increase the City's employment. The addition of 573 housing units would also provide opportunities for those who already work in Burbank, but live in other communities and commute to Burbank for their jobs to live in the City. This would be consistent with SCAG's regional planning objectives and, in the long term, would be expected to incrementally reduce regional per capita vehicle miles traveled and associated emissions of air pollutants and greenhouse gases.

Because the Project would be consistent with the City's Housing Element (including Burbank2035 General Plan Housing Element Goal N. 2: Variety of Housing Sites and Housing Element Policy 2.1: Facilitate mixed-use developments in targeted areas including Downtown) and no exceedance of the population forecast is anticipated, development of the Project would not induce substantial population growth and impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

c. Cumulative Impacts

As indicated in Table 4.10-2, Burbank is expected to incrementally grow in population, housing needs, and employment through 2040. The City's population is forecasted to grow from 107,900 in 2020 to 118,700 in 2040 (10 percent), the number of households is forecasted to increase from 44,300 in 2020 to 48,400 in 2040 (nine percent), and employment is forecasted to grow from 119,000 in 2020 to 145,000 in 2040 (22 percent). Cumulative development projects planned in the local area, described in detail in Section 3, *Environmental Setting*, would induce population growth in the cities of Burbank, Glendale and the Los Angeles areas of Universal City and North Hollywood.

Based on the cumulative projects listed in Section 3, *Environmental Setting*, planned residential projects in Burbank would generate an overall population increase of approximately 5,200 residents (2,080 residential units multiplied by an average household size of 2.5 for the City of Burbank), in addition to the estimated 1,433 residents generated by the Project. The addition of 6,633 residents (5,200 plus 1,433 estimated residents generated by the proposed Project) would increase the existing population of 107,149 to 113,785, which would not exceed the SCAG's 2040 forecast of 118,700 residents or SCAG's 2035 forecast of 116,500 residents. Therefore, the cumulative impact would not be significant.

State laws require local governments to regularly assess and plan for future growth. For example, SCAG is required to update its RTP/SCS and accompanying growth projections every four years and the City is required to update its Housing Element, and correspondingly conduct a RHNA, every other RTP/SCS cycle, or every eight years. In turn, individual development projects that exceed zoning code and land use designation requirements would be assessed for consistency with SCAG projections through the environmental review process. Therefore, it is not anticipated that future cumulative development would induce population growth exceeding projections incorporated into the City's planning efforts. Furthermore, as discussed above, implementation of the Project would have a less than significant impact related to growth inducement. Therefore, this impact would not be cumulatively significant.

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4.11 Public Services

This section analyzed impacts related to the provision of public services to accommodate the Project. Public services addressed include fire protection services, police protection services, and schools.

4.11.1 Setting

a. Fire Protection

The Burbank Fire Department (BFD) provides fire protection services in Burbank. The BFD consists of seven divisions, including: Fire Prevention Bureau, Fire Suppression, Emergency Medical Services, Emergency Management, Fire Apparatus and Equipment, Training and Safety, and Administration. A total of 136 personnel make up the BFD, which has jurisdiction over all fires and life-threatening incidents within the City (BFD 2018). Staffing includes 107 suppression personal (BFD 2019). If the City has a fire emergency for which the BFD does not have sufficient resources, a statewide system of mutual aid can provide services. These aid requests are processed through the California Emergency Management Agency and under this system, the City is to rely on its own resources and neighboring jurisdiction’s resources before calling for outside assistance. BFD also had mutual aid agreements with the Los Angeles County Fire Department and Los Angeles City Fire Department. Additionally, BFD has automatic mutual aid through Area C Unified Response with the Cities of Alhambra, Arcadia, Hollywood-Burbank Airport, Glendale, Montebello, Monrovia, Monterey Park, Pasadena, San Gabriel, San Marino, Sierra Madre, South Pasadena, and Vernon. The BFD operates public education programs in order to prevent fires and other disasters in the community (Burbank 2014). According to CAL FIRE, the Project site is not located within a Very High Fire Hazard Severity Zones (VHFHSZ) (CAL FIRE 2011).

In 2017, BFD 90th percentile baseline performance for fire incident emergency calls was seven minutes 29 seconds. The 90th percentile benchmark for emergency medical service emergency calls is five minutes. In 2017, BFD 90th percentile baseline performance for emergency medical service emergency calls was six minutes nine seconds. The response goal for non-emergency calls (including assist calls, service calls, welfare checks, etc.) is one minute for alarm handling plus code 2 travel time. (BFD 2019).

The BFD is also responsible for checking plans for fire, life safety, and environmental requirements; issuing fire permits; conducting fire, life safety, and environmental inspections; managing hazardous materials; administering the Fire Hazard Reduction Program; conducting fire investigations; providing public education programs; and overseeing the Fire Film Safety Office (BFD 2018).

The City is divided into six geographical fire districts. Each fire district is served by a fire station and defines the first-due response area for each station. Each fire station serves a population of approximately 200,000 people during the daytime and 107,149 persons during the nighttime. The firefighter-to-resident population ratio citywide and for the fire stations serving the Project Site is approximately 900:1. In addition to the six fire stations, there is also a training center that is located at 1845 North Ontario Street (BFD 2018). The Burbank Fire Headquarters and the six fire stations are described below.

Burbank Fire Headquarters

The Burbank Fire Headquarters is located at 311 East Orange Grove Avenue. This building is a combined Police and Fire Headquarters building. The primary responders to the Project site would consist of Fire Station 11, Fire Station 15, and Fire Station 16.

Fire Station 11

Fire Station 11 is located at 311 East Orange Grove Avenue. This station houses Engine 11, Truck 11, Rescue Ambulance 11, and Battalion 1. The Department's mechanic shop is also located within Fire Station 11. Truck 11 includes four staff persons (Captain, Engineer and two Firefighters). Engine 11 includes four staff persons (Captain, Engineer and two Firefighters). Rescue Ambulance 11 includes two Firefighters/Paramedics. Battalion 1 includes one Battalion Chief. Station 11 is approximately 1.5 miles from Project site, located across the I-5 freeway to the east.

Fire Station 12

Fire Station 12 is located at 644 North Hollywood Way. This station houses an engine and truck company. Engine 12 includes four staff persons (Captain, Engineer and two Firefighters). Truck 12 includes four staff persons (Captain, Engineer and two Firefighters). Hazmat 12 includes four staff persons (Captain, Engineer and two Firefighters). Hazmat 12 is also Staffed by crossover personnel from Truck 12. The Hazardous Materials Division is also located in this station. The crew of Engine 12 will switch to Hazardous Materials 12 as needed. This station is first in response to Warner Bros. Studios and the Warner Bros. Ranch, as well as several high-rise office buildings. Station 12 is approximately 3.5 miles from the Project site, located to the southwest.

Fire Station 13

Fire Station 13 is located at 2713 Thornton Avenue. This station houses an engine and a rescue ambulance. Engine 13 includes four staff persons (Captain, Engineer and two Firefighters). Rescue ambulance 13 includes is staffed by two Firefighters/Paramedics. This station is first in response to the Hollywood Burbank Airport. Station 13 is approximately 3.6 miles from the Project site, located to the northwest.

Fire Station 14

Fire Station 14 is located at 2305 West Burbank Boulevard. This station is home to a single fire engine. Engine 14 incudes 3 staff persons (Captain, Engineer and one Firefighter). This station maintains and repairs the self-contained breathing apparatus (SCBA), as well as tests all firefighters in the correct fit of the SCBA masks. Station 14 is approximately 2.5 miles from the Project site, located to the west.

Fire Station 15

Fire Station 15 is located at 1420 West Verdugo Avenue. This station is home to Engine 15 and Rescue Ambulance 15. Engine 15 includes three staff persons (Captain, Engineer and one Firefighter). Rescue ambulance includes two staff Firefighters/Paramedics. This station handles the majority of the Emergency Medical Services. Station 15 is approximately 2.1 miles from the Project site, located to the south.

Fire Station 16

Fire Station 16 is located at 1600 North Bel Aire Drive. This station houses an engine and a water tender. Station 16 includes three staff persons (Captain, Engineer and one Firefighter). Station 16 is approximately 3.1 miles from the Project site, located to the northeast.

b. Police Protection

The Burbank Police Department (BPD) provides police protection services within the City limits. BPD currently has 168 sworn officers. Based on Burbank's current population of 107,149, of the BPD employs 1.57 officers per 1,000 residents. The BPD is made up of five divisions, including: patrol, investigations, administrative services, support services, and budget and finance. The Patrol Division receives and responds to all calls for emergency services, conducts initial investigations and appropriate follow-up, prevents crime through directed and non-directed patrols, and prepares documentation on all calls for service and police reports (BPD 2018). The BPD operates five facilities: a Police Headquarters, an animal shelter, a police pistol range, the City Jail, and a heliport in Sun Valley. According to personal communication with BPD Sergeant and Public Information Officer Derek Green, the average response time for all Priority One (emergency) calls in 2017 was three minutes and 40 seconds. Similar to the BFD, the BPD maintains mutual aid relationships with police departments for the Cities of Los Angeles, San Fernando, Glendale, and Pasadena. As part of the State Emergency Aid System, the BPD will also provide officers and equipment to other jurisdictions in the event of an emergency. The Los Angeles County Sheriff's Department of the California Emergency Management Agency can also provide aid, if needed (Burbank 2014).The police station is approximately 0.43 mile from the Project site at 200 North Third Street.

c. Schools

The Project site is located in the Burbank Unified School District (BUSD) and would be served by Emerson Elementary School with a capacity of 600 students, John Muir Middle School with a capacity of 1,500 students, and Burbank High School with a capacity of 2,650 students. BUSD consists of eleven elementary schools, three middle schools and three high schools totaling a combined student capacity of 15,184. Burbank Community Day School and Burbank First Academy are also in close proximity to the Project site (under two miles). These schools are discussed below.

Ralph Emerson Elementary School

Ralph Emerson Elementary School is a school for grades K-5. In 2017, the school had an enrollment totaling of 596 students (Burbank USD 2017). The school is located at 720 East Cypress Ave, approximately 0.71 mile from the Project site, across Interstate-5 to the northeast.

John Muir Middle School

John Muir Middle School is a school for grades 6-8. In 2017, the school had an enrollment totaling of 1,399 students (Burbank USD). The school is located at 902 North Third Street, approximately 0.81 miles from the Project site, across Interstate-5 to the northeast.

Burbank High School

Burbank High School is a school for grades 9-12. In 2016, the school had an enrollment totaling of 2,585 students (Burbank USD 2017). The school is located at 902 North Third Street, approximately 1.8 miles from the Project site, across Interstate-5 to the northeast.

Burbank Community Day School

Burbank Community Day School is a school for grades 7-12 for students who are having difficulties with behavior, attendance, and/or grades. The school can accommodate 75 students and in 2016 had an enrollment totaling 27 students (Burbank Community Day 2016). The school is located at 223 East Santa Anita Avenue, approximately one mile from the Project site, across Interstate-5 to the southeast.

Burbank First Academy

Burbank First Academy is an all ages performing arts, language, and fitness based school. The school is located at 700 North Glenoaks Boulevard, approximately 1.8 miles from the Project site, across Interstate-5 to the northeast.

d. Regulatory Setting

State Policies

2010 California Strategic Fire Plan (Fire Plan)

The Fire Plan is a cooperative effort between the State Board of Forestry and Fire Protection and the California Department of Forestry and Fire Protection. By placing the emphasis on what needs to be done long before a fire starts, the Fire Plan looks to reduce firefighting costs and property losses, increase firefighter safety, and to contribute to overall ecosystem health. The central goals that are critical to reducing and preventing the impacts of fire revolve around both suppression efforts and fire prevention efforts. The Fire Plan addresses:

- Improved availability and use of information on hazard and risk assessment
- Land use planning: Development of wildland and Wildland Urban Interface protection policies, incorporating minimum key elements of a fire safe community, and promote the consolidation of project-level land use planning and wildland fire occurrence data
- Shared vision among communities and the multiple fire protection jurisdictions, including county-based plans and community-based plans such as Community Wildfire Protection Plans
- Establishing fire resistance in assets at risk, such as homes and neighborhoods Shared vision among multiple fire protection jurisdictions and agencies
- Levels of fire suppression and related services
- Post-fire recovery

California Fire Code (Title 24, Part 9, California Code of Regulations)

The California Fire Code incorporates the Uniform Fire Code (UFC) with necessary California amendments. This Code prescribes regulations consistent with nationally recognized good practices for the safeguarding, to a reasonable degree, of life and property from the hazards of fire explosion. It also addresses dangerous conditions arising from the storage, handling, and use of hazardous materials and devices; conditions hazardous to life or property in the use or occupancy of buildings or premises; and provisions to assist emergency response personnel.

California Building Code

The 2016 California Building Code (CBC) became effective January 1, 2017, including Part 9 of Title 24, the California Fire Code. Section 701A.3.2 of the CBC requires that new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, any Local Agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted, comply with all sections of the Chapter.

California Health and Safety Code (Sections 13000 et seq.)

This Code establishes State fire regulations, including regulations for building standards (also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

California Government Code Section 65995 (California Government Code, Title 7, Chapter 4.9)

California Government Code Section 65995 authorizes school districts to collect impact fees from developers of new residential and commercial/industrial building space. Section 65995 was established under the School Facilities Act of 1986 and refined and amended by the Leroy F. Greene School Facilities Act of 1998 (SB 50) to provide further guidance and restrictions on fee limits and fee types. The maximum fees authorized under SB 50 apply to zone changes, general plan amendments, zoning permits and subdivisions. The payment of school impact fees by developers are deemed to provide full and complete mitigation of school facilities impacts, notwithstanding any contrary provisions in CEQA or other State or local laws. The Burbank Unified School District (BUSD) determines fees annually in accordance with California Government Code Section 65995.

Local Policies

Burbank Development Impact Fees

The City of Burbank requires the payment of development impact fees (DIFs) that are meant to offset the impacts of new developments on City facilities. As stated in BMC Article 22, Community Facility Fees (also known as DIFs) are collected for the purpose of financing capital improvements within the following categories: transportation improvement fees, library fees, park and recreation fees (except fees charged in lieu of park land dedication pursuant to Government Code Section 66477), police fees, and fire fees. Per BMC Section 10-1-2204, Definitions, DIFs are collected for the purpose of defraying all or a portion of the cost of certain capital improvements related to a development project. Per BMC Section 10-1-2208, DIFs shall be used exclusively for the capital improvements for which the development fees were collected. These fees do not usurp Park and Recreation fees charged in lieu of park land dedication pursuant to Government Code Section 66477, Quimby Act. The current rates for DIFs are specified within Article VIII, Electrical and Building Permits, Section 3, Development Impact Fees, of the City’s Adopted Citywide Fee Schedule for fiscal year 2018–2019. Fees are determined at a rate per square foot; the square footage of the development determines the total fee to be paid. A portion of development fees collected by the City are distributed to public facilities including fire protection facilities, library facilities, parks and recreation facilities, and police protection facilities.

Burbank Fire Department Plan Checks and Building Inspections

Fire system plan checks are required and performed by the BFD Fire Prevention Bureau for all commercial and residential occupancies. Plan checks of fire systems include automatic fire sprinkler systems, fire alarm systems, and architectural plan reviews. Fire system plans must be submitted by a contractor who has paid the Contractor's City Business Tax.

The BFD Fire Prevention Bureau is also responsible for conducting life safety inspections of new building construction, building tenant improvements or re-models, fire sprinkler systems, fire alarm systems and special protection systems for compliance with the California Fire Code as amended by the BMC. The fee for these inspections must be paid by the Project applicant.

Burbank Municipal Code Title 9, Chapter 2 – Fire Prevention

This City code section discusses fire prevention and building regulations as they apply to fire prevention. The section points to the California Fire Code as a reference.

City of Burbank Natural Hazard Mitigation Plan (2011)

The hazard mitigation plan addresses natural hazards such as wind storms, localized stormwater drainage floods, earthquakes, fires, landslides, and major floors. The Plan is designed to meet requirements set by the Federal Emergency Management Agency (FEMA) regarding FEMA funding for mitigation projects.

Burbank2035 General Plan

The Burbank2035 General Plan Safety Element's main objective is to introduce safety considerations into the planning process to reduce the potential loss for life, injuries, damage to property, or economic and social dislocation resulting from fire, geologic hazard, or seismic hazards. The Safety Element's discussion of fire services is generally geared towards planning for effective confrontation of wildfires (Burbank2035 2013). Table 4.11-1 details specific policies relating to fire protection, police protection, and crime prevention within the General Plan's Safety Element.

Table 4.11-1 General Plan Policies Relating to Public Services

General Plan Policy	Description of Policy
Police Protection	
Policy 2.1	Maintain an average police response time of less than 4 minutes to emergency calls for service.
Policy 2.2	Ensure adequate staffing, facilities, equipment, technology, and funding for the Burbank Police Department to meet existing and projected service demands and response times.
Policy 2.3	Provide and use up-to-date technology to improve crime prevention.
Policy 2.4	Develop and support crime prevention programs throughout the city, including the Crime Prevention Through Environmental Design (CPTED) and Neighborhood Watch programs.
Policy 2.5	Provide public education from neighborhood safety programs to encourage active participation by Burbank residents and businesses.
Crime Prevention	
Policy 3.1	Adapt to changing safety needs of the community.
Policy 3.2	Reduce opportunities for criminal activity through physical design standards such as CPTED and youth programs, recreation opportunities, education programs, and counseling services.
Fire Protection	
Policy 4.1	Maintain a maximum response time of 5 minutes for fire suppression services. Require new development to ensure that fire response times and service standards are maintained.
Policy 4.2	Provide adequate staffing, equipment, technology, and funding for the Burbank Fire Department to meet existing and projected service demands and response times.
Policy 4.3	Implement fire prevention and suppression programs in areas of high fire hazard risk, including both urban and wildland areas.
Policy 4.4	Maintain adequate fire breaks in areas within and adjacent to areas of high wildfire risk.
Policy 4.5	Coordinate firefighting efforts with local, state, and federal agencies.
Policy 4.6	Reduce fire hazards associated with older buildings, multi-story structures, and industrial facilities.
Policy 4.7	Maintain adequate fire suppression capability in areas of intensifying urban development, as well as areas where urban uses and open spaces mix.

Source: Burbank 2013

4.11.2 Impact Analysis

a. Methodology and Significance Thresholds

The following analysis focuses on determining whether implementation of the Project would result in adverse physical impacts to the City's public services, including fire protection, police protection, and schools. According to the adopted *State CEQA Guidelines*, impacts related to public services from implementation of the Project would be significant if it would:

a. Result in substantial adverse physical impacts associated with the need for or provision of new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other objectives for:
   1. Fire protection;
   2. Police protection;

3. Schools;
4. Parks; and
5. Other public facilities.

The Initial Study in Appendix A determined that the Project would have less than significant impacts related to parks or other public facilities. Therefore, the analysis focuses on significance thresholds a1, a2, and a3.

In *City of Hayward v. Trustees of California State University* (2015) 242 Cal.App.4th 833, the Court of Appeal held that significant impacts under CEQA consist of adverse changes in any of the physical conditions within the area of a project, and potential impacts on public safety services are not an environmental impact that CEQA requires a project applicant to mitigate: "[T]he obligation to provide adequate fire and emergency medical services is the responsibility of the city. (Cal. Const., art. XIII, § 35, subd. (a)(2) ["The protection of the 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."].) Thus, the need for additional fire and police protection services is not an environmental impact that CEQA requires a project proponent to mitigate.

b. Project Impacts and Mitigation Measures

Threshold a1:	Would the Project result in substantial adverse physical impacts associated with the need for or provision of new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection?

Impact PS-1 THE PROJECT SITE IS LOCATED IN AN EXISTING BFD FIRE SERVICE AREA AND WOULD NOT BE EXPOSED TO SUBSTANTIAL WILDFIRE RISK. HOWEVER, OPERATION OF THE PROPOSED PROJECT WOULD RESULT IN AN INCREASE IN CALLS FOR SERVICE TO BFD, WHICH WOULD LIKELY REQUIRE ADDITIONAL STAFFING AND APPARATUS. WITH INCORPORATION OF MITIGATION, IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed in Section 4.10, *Population and Housing*, development of the Project would add an estimated 1,680 residents to the City, increasing Burbank's population from 107,149 to 108,829 persons. This population increase would incrementally increase demand for fire protection services.

BFD is responsible for enforcing fire codes, providing fire inspections, assisting in planning and enforcing development standards for Very High Fire Hazard Severity Zones (VHFHSZ), and implementing the Fire Hazard Reduction Program (Brush Clearance) to ensure that a defensible space is incorporated into newly constructed homes within the VHFHSZ (BFD 2018). However, according to CAL FIRE, the Project is not located within a VHFHSZ (CAL FIRE 2011). In addition, all site and building development carried out under the Project would be required to comply with all applicable fire code and ordinance requirements for construction, emergency/fire, access, water mains, fire flows, and hydrants, and would be subject to review and approval by the BFD prior to building permit and certificate of occupancy issuance. Development with modern materials and in accordance with current standards, inclusive of fire resistant materials, fire alarms and detection systems, automatic fire sprinklers, would enhance fire safety and support fire protection services.

Nonetheless, the anticipated significant increase in calls for service for this Project as well as other projects in queue for development would likely require additional staffing and apparatus. Construction of a future fire station or an expansion to an existing station could result in one or more potentially significant impacts. However, no sites have yet been selected by the City. It is anticipated that a future fire station or an expansion to an existing station will be subject to CEQA review at the time a site is identified and a specific design proposed. Regardless, the following mitigation would be required to reduce potential impacts to fire protection services. Impacts would, therefore, be less than significant with implementation of mitigation.

Mitigation Measure

Implementation of Mitigation Measure PS-1 would be required to ensure that the Project applicant pays their fair share of fees and costs towards fire service and protection.

PS-1 Fair Share Fees

The Project applicant would pay the project's fair share of the cost of additional fire protection equipment and fire station needs required for the Project, by contributing to the City's Development Impact Fee Program (DIF) and by paying fees associated with building permit issuance and the negotiated development agreement, which collectively are intended to provide for offset of facility impacts. All associated fees shall be paid before the issuance of a building permit to construct the Project.

Significance After Mitigation

The proposed mitigation measure would reduce impacts to fire protection services to a less than significant level.

Threshold a2:	Would the project result in substantial adverse physical impacts associated with the need for or provision of new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection?

Impact PS-2 **IMPLEMENTATION OF THE PROPOSED PROJECT WOULD NOT CAUSE A SIGNIFICANT CHANGE IN THE OFFICER TO POPULATION RATIO IN THE CITY, NOR WOULD IT CREATE THE NEED FOR NEW OR EXPANDED POLICE PROTECTION FACILITIES. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

As discussed in Section 4.10, *Population and Housing*, the Project would add an estimated 1,680 residents that would increase the City's population from 107,149 to 108,829 persons. If all 1,680 potential new residents were added to the current population of 107,149, this would represent an approximately 1.6 percent increase in the City's population. Based on BPD's current staffing level of 168 sworn officers, the BPD's officer/resident ratio would drop from 1.57 to approximately 1.54 sworn officers per 1,000 residents. This ratio is slightly below the City's goal of 1.55.;

According to personal communication with BPD Sergeant and Public Information Officer Derek Green Sergeant, the average response time for all Priority One (emergency) calls in 2017 was 3:40 (BPD 2018). The Project would include security features, such as LED lighting and cameras, Because the Project site is within the BPD service area, and because implementation of the Project would not cause a substantial change in the officer to population ratio in the City or have a significant impact on the Police Department's service goals, the Project would not create the need for new police-related physical facilities. As such, impacts related to the provision of police protection would be less than significant.

Mitigation Measures

No mitigation measures are required.

Threshold a3:	Would the project result in substantial adverse physical impacts associated with the need for or provision of new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools?

Impact PS-3 ALTHOUGH THE PROJECT WOULD ADD NEW STUDENTS TO THE SCHOOL DISTRICTS SERVING THE PROJECT SITE, THE PROPOSED PROJECT WOULD BE SUBJECT TO GOVERNMENT CODE 65995 (B) AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Implementation of the Project would add an estimated 1,680 residents and some of those residents may have children. Based on student generation rates for the Burbank Unified School District, the Project could generate approximately 140 students, including 59 elementary school students (grades K-5), 31 middle school students (grade 6-8), and 50 high school students (grades 9-12).[1]

To offset a project's potential impact on schools, Government Code 65995 (b) establishes the base amount of allowable developer fees a school district can collect from development projects located within its boundaries. The fees obtained by BUSD are used to maintain the desired school capacity and the maintenance and/or development of new school facilities. The Project would be subject to these State-mandated school impact fees. Pursuant to Section 65995 (3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees "is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

c. Cumulative Impacts

The planned and pending projects in the vicinity of the Project site, listed in Table 3-1 of this EIR, include 22 projects consisting of retail, restaurant, residential, office, industrial, hotel, school airport and transportation related land uses. Projects that are within the vicinity of the Project site include First Street Village Mixed-Use Project (Related Project No. 6), Premier at First Street Mixed-Use Project (Related Project No. 7), Burbank Town Center Redevelopment Project (Related Project No. 10), Olive Station Mixed-Use Project (Related Project No. 14) and Burbank Common Project (Related Project No. 15). Development of the Project would incrementally increase the demand for fire protection services, police protection services, and school facilities. However, increased demand for fire protection services would be addressed by compliance with BFD fire inspections and development standards as well as general regulations from the California Fire Code and California

[1] Generation rates based on the 2018 Burbank Unified School District (BUSD) School Fee Justification Study. Generation rates for multi-family residential units include: 0.1047 for elementary school students (grades K-5), 0.0544 for middle school students (grades 6-8), and 0.0880 for high school students (grades 9-12).

Building Code. In addition, development of the proposed Project would not result in the need for new physical police-related facilities and compliance with Government Code 65995 (b) would address impacts related to the need for new or expanded school facilities. All new development projects in the City of Burbank would be subject to compliance with BFD fire inspections and development standards as well as subject to the general regulations from the California Fire Code and California Building Code. Developers of new residential and commercial/industrial building space would also be subject to Government Code 65995 (b) and pay the applicable Project development impact fees to offset their potential impacts on City public services associated with the Project's implementation. Therefore, cumulative impacts to public services would be less than significant.

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4.12 Transportation and Traffic

This section analyzes the proposed Project's potential impacts to the local transportation and circulation system. The analysis in this section is based on a Transportation Impact Analysis prepared for the proposed Project by Fehr and Peers in March 2019. The full study is provided in Appendix J of this EIR.

4.12.1 Setting

a. Existing Roadway System

The Project site is located at the 777 North Front Street, bounded by Burbank Boulevard to the north, Interstate 5 (I-5) to the east, Magnolia Boulevard to the south (above grade), and Front Street to the west. The site is currently vacant. Access to the site is provided by two residential driveways and one hotel driveway along North Front Street.

Regional/Local Roadways

The following is a brief description of the major streets serving the Project site:

Front Street

Front Street is a classified as a Downtown Collector that runs north/south in the study area, east of I-5. Front Street has one through lane in each direction, and no parking is permitted on either side of the street. The speed limit is 40 miles per hour (mph).

Burbank Boulevard

Burbank Boulevard is a secondary arterial running in the east/west direction and provides two through lanes per direction east of the I-5 northbound ramps, three through lanes in each direction between the I-5 northbound ramps and Victory Boulevard, and two lanes in each direction west of Victory Boulevard. Parking is prohibited on both sides of the street between North San Fernando Boulevard and Victory Boulevard. There is no parking available on Burbank Boulevard near the Project site. The speed limit is 35 mph.

Glenoaks Boulevard

Glenoaks Boulevard is a major north/south arterial with two through lanes per direction. Parking is generally allowed on both sides of the street. The speed limit is 30-35 mph in the study area.

Magnolia Boulevard

Magnolia Boulevard is a secondary arterial running in the east/west direction, with two through lanes per direction. On-street parking is allowed along most segments of Magnolia Boulevard within the study area. The speed limit is 30 - 35 mph in the study area.

Olive Avenue

Olive Avenue is primarily a northeast/southwest major arterial that provides two and three through lanes per direction in the study area. Olive provides regional access to SR-134 and the I-5. Parking is generally allowed along both sides of the street within the study area. The speed limit is 30 -35 mph in the study area.

San Fernando Boulevard

San Fernando Boulevard is classified as a secondary north/south arterial street and provides two lanes in each direction between the southern City limits and Verdugo Avenue, one lane in each direction between Verdugo Avenue and Magnolia Boulevard, and two lanes in each direction between Cypress Avenue and I-5. Parking is generally permitted on both sides of the street. The speed limit is 35 mph between Magnolia Boulevard and Verdugo Avenue. East of Magnolia, San Fernando Boulevard carries two-way traffic with one lane with diagonal parking, and a speed limit of 25 mph.

Verdugo Avenue

Verdugo Avenue is a collector west of Flower Street and a downtown collector between Front Street and Glenoaks Boulevard. Verdugo Avenue runs east/west in the study area, with one through lane per direction, and a shared center turn lane or left-turn pockets. Parking is generally allowed on both sides of the street. The speed limit is 35 mph.

Victory Boulevard

Victory Boulevard is a 4-lane major arterial running east/west in the study area. Victory becomes a northwest/southwest running street east of Empire Avenue. Generally, parking is allowed on both sides of the street. The speed limit is 30 – 35 mph.

1st Street/Ikea Way

1st Street/Ikea Way is a secondary arterial running north/south in the study area with two through lanes per direction. Parking is generally not allowed on either side of the street. The speed limit on 1st Street/Ikea Way is 30 mph within the study area.

b. Study Area Intersections

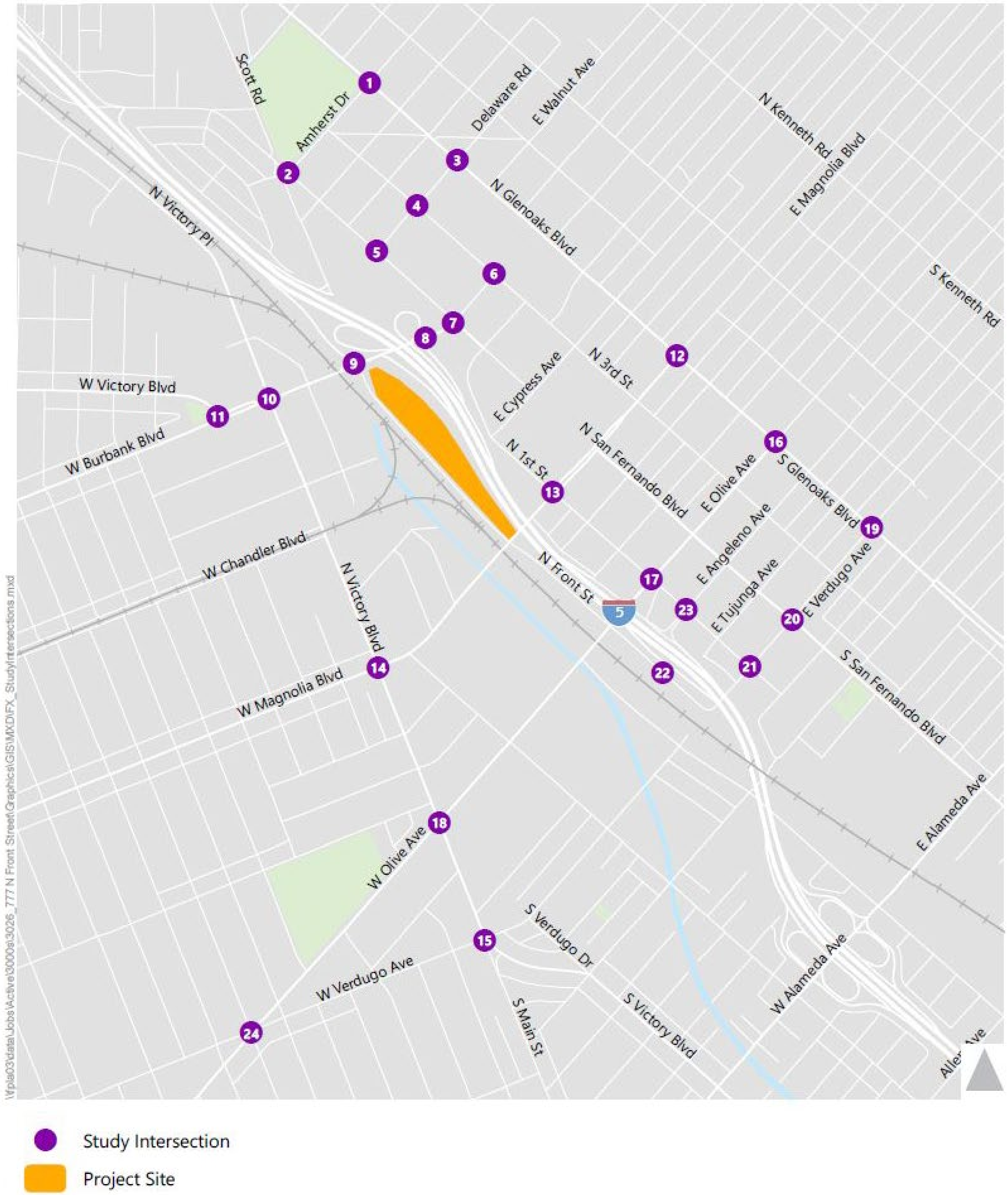
For the traffic impact analysis, 24 study intersections were defined for the overall study area for detailed analysis (see Figure 4.12-1).

1. Glenoaks Boulevard and Amherst Drive
2. San Fernando Boulevard and Amherst Drive
3. Glenoaks Boulevard and Delaware Road
4. 3rd Street and Delaware Road
5. San Fernando Boulevard and Delaware Road
6. 3rd Street and Burbank Boulevard
7. San Fernando Boulevard and Burbank Boulevard
8. I-5 Northbound (NB) Off Ramp and Burbank Boulevard
9. I-5 Southbound (SB) Off Ramp/Front Street and Burbank Boulevard
10. Victory Place and Burbank Boulevard
11. Victory Boulevard and Burbank Boulevard
12. Glenoaks Boulevard and Magnolia Boulevard

13. 1st Street and Magnolia Boulevard
14. Victory Boulevard and Magnolia Boulevard
15. Victory Boulevard and Verdugo Avenue
16. Glenoaks Boulevard and Olive Avenue
17. 1st Street and Olive Avenue
18. Victory Boulevard and Olive Avenue
19. Glenoaks Boulevard and Verdugo Avenue
20. San Fernando Boulevard and Verdugo Avenue
21. 1st Street/Ikea Way and Verdugo Avenue
22. Front Street and I-5 Southbound Ramps
23. 1st Street/Ikea Way and Angeleno Avenue
24. Olive Avenue/Sparks Road and Verdugo Avenue

All 24 of the analyzed intersections are located in the City of Burbank. Figure 2-2 in Section 2, *Project Description*, shows the location of the Project site and the surrounding roads in the study area. Interstate 5 to the north and south provides primary regional access to the site. Access to Project site from the I-5 is available via the ramps at Burbank Boulevard.

Figure 4.12-1 Study Intersections



4.12.2 Analysis Methodology

The methodologies used to perform the future traffic volume forecasts and the explicit traffic operations analysis as part of the Traffic Impact Analysis are summarized in this section. The analysis is based on potential impacts that would result from the increase in vehicle trips to and from the proposed Project that would be generated by Project implementation. For a detailed discussion of the analytical methodology, please refer to Appendix J.

The Traffic Impact Analysis analyzes 2022 as the future year. The following traffic scenarios have been developed and analyzed as part of the study:

- **Existing (2018) Traffic Conditions.** The analysis of existing traffic conditions is intended to provide a basis for the Traffic Impact Analysis. The existing conditions analysis includes a description of the street system serving the site, current traffic volumes, and an assessment of the operating conditions at these locations.
- **Existing (2018) Plus Project Traffic Conditions.** This traffic scenario provides projected traffic volumes and an assessment of operating conditions under existing conditions with the addition of Project-generated traffic. The direct impacts of the proposed Project on existing traffic operating conditions were then identified.
- **Future (2022) Base Traffic Conditions**. Future traffic conditions without the proposed Project were developed for the year 2022. This analysis projects future traffic growth and operating conditions that could be expected to result from regional growth and related projects near the Project site by the year 2022. This scenario includes the changes in traffic from the reconfiguration of Burbank Boulevard ramps as part of the Empire Interchange Project.
- **Future (2022) Plus Project Traffic Conditions.** This traffic scenario includes the proposed Project, provides projected traffic volumes, and an assessment of operating conditions under future conditions with the addition of Project-generated traffic. The impacts of the proposed Project on future traffic operating conditions were then identified.

a. Existing Conditions Methodology

Existing Traffic Volumes – Intersections

Traffic volumes at the 24 study intersections were collected during the morning and afternoon peak hours, from 7:00 AM to 10:00 AM and from 4:30 PM to 7:30 PM, respectively. The peak one-hour period for the morning and afternoon is found by identifying the four consecutive 15-minute periods with the highest traffic volumes.

Three sets of weekday counts were collected by the National Data and Surveying Services (NDS) in April 2018. Two sets of weekday counts were collected for three intersections in October 2017. Weekday counts were averaged to determine volumes for weekday existing conditions. Counts were provided by the City of Burbank staff. Local schools were in session on the days of the counts.

Existing Traffic Volumes – Roadway Segments

Three days of 24-hour traffic counts on Front Street south of Burbank Boulevard were collected in April 2018. The average of the three 24-hour daily counts showed an average of 2,698 daily vehicles on Front Street.

Buildout Year Growth

The Future Base (Year 2022) traffic projections reflect growth in traffic from two primary sources: background or ambient growth in the existing traffic volumes to reflect the effects of overall regional growth both in and outside of the study area, and traffic generated by specific projects in, or in the vicinity of, the study area.

Area-wide Traffic Growth

The Burbank2035 General Plan (Burbank2035) forecasts growth of traffic volumes of approximately 0.72% per year near the study area. Future increases in background traffic volumes due to regional growth and development are expected to continue at this rate at least through the year 2022. This adjustment was applied to the existing (year 2018) traffic volume data to reflect the effect of ambient growth by the year 2022.

Due to construction at I-5 SB Off-Ramp/Front Street & Burbank Boulevard when existing counts were taken, several movements were restricted. In order to develop future forecasts at this intersection as well as adjacent intersections, count data from January 2017 was used when construction was not occurring and all available movements were possible at these intersections. These counts were grown using the same growth factor established in the model, 0.72% per year, to create existing base volumes (year 2018). January 2017 historic counts were used for the following intersections:

7. San Fernando Boulevard & Burbank Boulevard
9. I-5 SB Off-Ramp/Front Street & Burbank Boulevard
10. Victory Place & Burbank Boulevard
11. Victory Boulevard & Burbank Boulevard

Future Project Traffic Generation and Assignment

The second part of background traffic growth is the traffic generated by related projects. Related projects or cumulative projects are planned developments to be completed in the same timeframe as the proposed project. Future projects are taken into account in terms of the extent of growth, the location of growth, and the origins/destinations of trips.

Information on future projects was collected from the City of Burbank. A total of 22 related projects that affect the study area were identified (see Table 6 in the Traffic Impact Analysis; Appendix J). Three related projects within the City of Glendale were also identified. The projects are summarized in Table 6 and their locations illustrated in Figure 10 in the Traffic Impact Analysis (Appendix J).

Trip generation estimates for each of the related projects listed in Table 6 were provided by the respective city or developed using trip generation rates from Trip Generation, 10th Edition, (ITE, 2017), unless otherwise noted. Combined, the future projects are estimated to generate approximately 86,588 daily weekday trips, of which 10,588 vehicles per hour (vph) will occur during the morning peak hour and 11,108 vph during the evening peak hour. The peak hour future Project traffic volumes for the analyzed intersections are illustrated in Figure 11 of the Traffic Impact Analysis (Appendix J).

The geographic distribution of the traffic generated by the related projects is dependent on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of population from which the employees and potential patrons of the proposed developments are drawn, and the location of the projects in relation to the surrounding street system. The trip generation estimates were assigned to the local street system using the trip distribution pattern described above, or taken from existing traffic studies when available.

Background Shifts Due to Reconfiguration of Burbank Boulevard Interchange

As part of the Interstate 5 reconstruction, the interchange at Burbank Boulevard is being reconfigured to provide on- and off-ramps for both northbound and southbound travel. Currently the interchange at Burbank Boulevard does not include a northbound on-ramp. The study used the City model and existing counts to estimate background shifts. Background shifts related to the new interchange are shown in Appendix B of the Traffic Impact Analysis (see Appendix J).

Future Base Intersection Improvements

As part of the I-5 reconstruction, the Burbank Boulevard interchange ramps are being reconfigured. The lane geometry changes associated with the Burbank Boulevard interchange improvements were incorporated in the future scenarios.

The San Fernando Boulevard and Burbank Boulevard intersection will be improved as well. The existing signal provides split phasing for each intersection approach. With the signal improvements, the signal will operate with protected left-turn phasing. The signal phasing improvement was incorporated in the future scenarios. In addition, the intersection will be reconfigured to add a second southbound right turn lane on San Fernando Boulevard. These changes were incorporated into the future scenarios.

b. Project Traffic Generation and Distribution Methodology

Development of traffic generation estimates for the proposed Project involves the use of a three-step process: trip generation, trip distribution, and traffic assignment. For the purposes of this report, the terms “traffic” and “trips” generally refer to vehicle trips.

Project Traffic Generation

The proposed Project consists of retail, restaurants, residential units, and a hotel. Trip generation rates from the Institute of Transportation Engineers (ITE) using the Trip Generation, 10th Edition, (ITE, 2017), in conjunction with the City of Burbank, were used to estimate trip making characteristics for these land uses. In case of trips to the hotel and residential units, the ITE trip generation equations were used instead of the linear trip generation rate. For all other land uses, the ITE trip generation rate has been used.

The total number of Project trips have been reduced by attributing a portion of the trips to and from the mixed-use site using transit, in consultation with the City of Burbank. The total number of trips have also been reduced by the expected internal capture of the proposed Project. Internal capture refers to trips generated by mixed use developments where trips to or from two land uses in the proposed Project are made by just one vehicle trip entering or leaving the Project site. Such trips may include those made by residents patronizing the on-site retail before or after their commute to work. Internal capture results in a lower number of total vehicles entering and leaving the Project site, which in turn reduces the total number of vehicles on the roadway network.

The proposed Project, following the application of the trip generation credits described above, would generate approximately 5,261 net daily trips, including 314 and 398 trips in the AM and PM peak hours, respectively. Table 4.12-5 shows the trip generation for the Project.

Project Traffic Distribution

The geographic distribution of the traffic generated by the proposed Project depends on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of population from which the employees and potential patrons of the proposed development are drawn, and the location of the Project in relation to the surrounding street system.

The City's Travel Demand Model was used to develop the Project trip distribution and represents a localized version of the regional Southern California Association of Governments (SCAG) model. The distribution pattern illustrated in Figure 4-12-2 was applied for Project traffic, under both existing and future conditions.

Project Traffic Assignment

The traffic generated by the proposed Project was assigned to the street network using the distribution patterns. Appendix B of the Traffic Impact Analysis (see Appendix J) illustrates how Project-generated trips were assigned in the peak hours for the Existing plus Project scenario and the Future plus Project scenario. The assignment of Project volumes differs between the existing and future conditions due to the opening of the reconfigured ramps for Interstate 5 at Burbank Boulevard.

c. Intersection Level of Service Methodology

Signalized Intersections

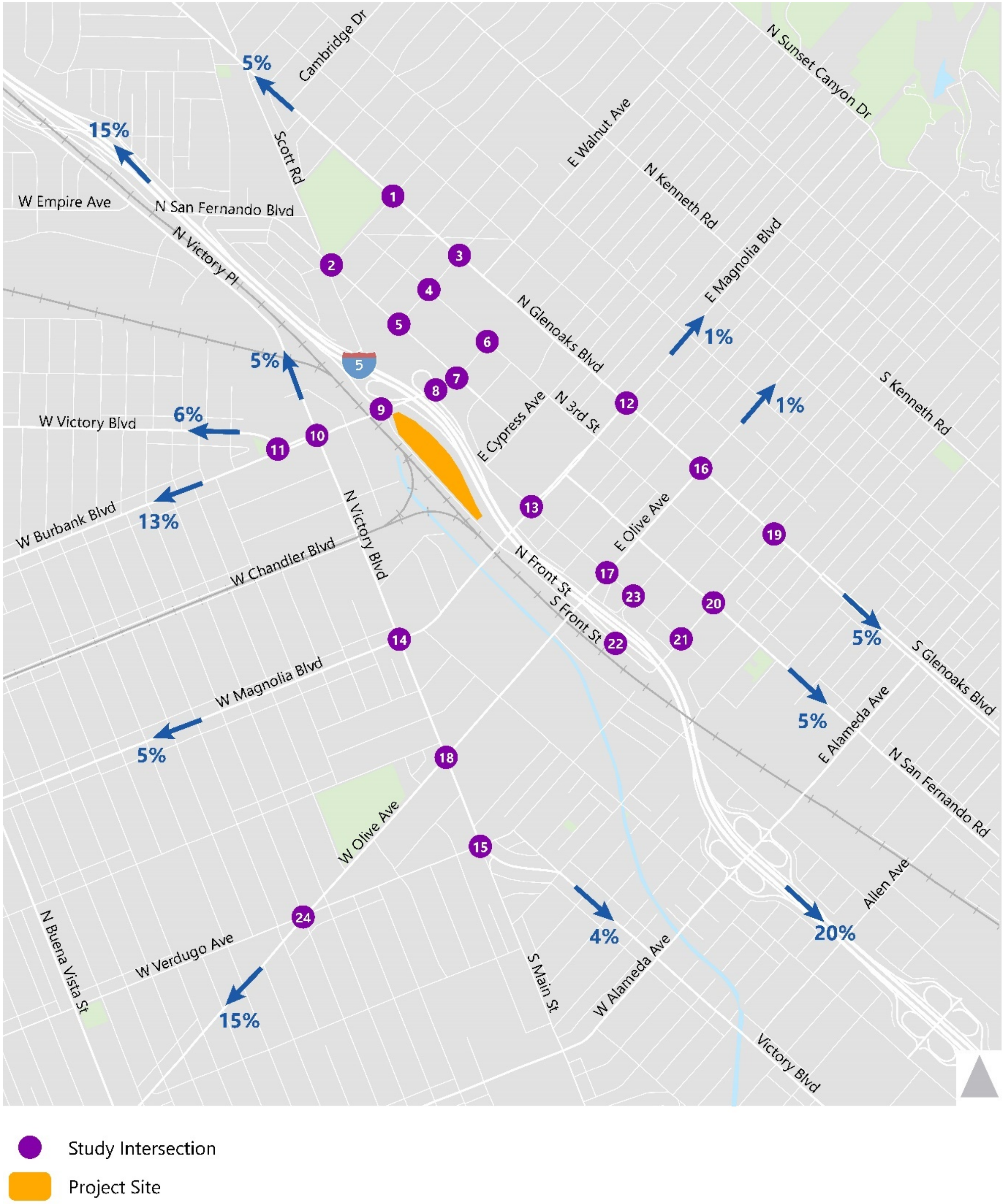
Level of service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent, nearly free-flow conditions at LOS A to overloaded, stop-and-go conditions at LOS F. LOS D is typically recognized as the minimum acceptable LOS in urban areas. LOS definitions for signalized intersections are detailed in Table 4-12-1.

Table 4-12-1 Level of Service Definitions for Signalized Intersections

Level of Service	Description	V/C Ratio
A	**Excellent.** No vehicle waits longer than one red light and no approach phase is fully used.	0.000-0.600
B	**Very Good.** An occasional approach phase is fully utilized; many drivers begin to feel somewhat what restricted within groups of vehicles.	0.601-0.700
C	**Good.** Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	0.701-0.800
D	**Fair.** Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	0.801-0.900
E	**Poor.** Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	0.901-1.000
F	**Failure.** Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.	> 1.000

Source: Transportation Research Circular No. 212, Interim Materials on Highway Capacity, Transportation Research Board, 1980

Figure 4-12-2 Project Trip Distribution



Source: Fehr and Peers, 2018

The study intersections within the City of Burbank were analyzed according to the City's traffic study policies and procedures. The City of Burbank requires the use of Critical Movement Analysis (CMA) methodology (Transportation Research Circular No. 212, Interim Materials on Highway Capacity, Transportation Research Board, 1980) to evaluate intersection operations. The CMA method of intersection capacity analysis determines the intersection volume-to-capacity (V/C) ratio and corresponding LOS for turning movements and intersection characteristics at signalized intersections.

The City of Burbank's timing and interconnected network of signals on major corridors provides improved signal coordination that allows for increased traffic flow. This system is in place on major arterials within the study area. A 0.02 V/C reduction was applied in locations where the network is active, with the exception of intersection on Glenoaks Boulevard, where a 0.05 V/C reduction was applied, as that corridor is now running a newer adaptive signal control that responds to traffic volumes in real time to further improve vehicle throughput. LOS worksheets are included in Appendix B of the Transportation Impact Analysis (Appendix J).

Unsignalized Intersections

For the stop-controlled intersections, the City of Burbank requires application of the Highway Capacity Manual (HCM) (Transportation Research Board, 2000) methodology to evaluate capacity and performance. The HCM operational method determines the average stopped delay experienced per vehicle (i.e., delay resulting from initial deceleration, queue move-up time, time actually stopped, and final acceleration). At 4-way stop-controlled intersections, the reported delay is the average delay experienced by all vehicles at an intersection across an entire hour. At side-street stop-controlled intersections, delay is evaluated separately for each individual movement, and the reported delay is the worst-case delay experienced at the intersection across an entire hour.

Levels of service definitions for unsignalized intersections are provided in. LOS worksheets for signalized and unsignalized intersections are included in Appendix B of the Traffic Impact Analysis (Appendix J).

Table 4.12-2 Unsignalized Intersection Level of Service Definitions (HCM)

Level of Service (V/C ≤ 1.0)	Average Control Delay Per Vehicle (sec.)
A	≤ 10.0
B	> 10.0 to 15.0
C	> 15.0 to 25.0
D	> 25.0 to 35.0
E	> 35.0 to 50.0
F	> 50.0
Source: Highway Capacity Manual, Transportation Research Board, 2010	

d. Roadway Segment Analysis Methodology

For informational purposes, the Project-generated daily increase in traffic was compared to the projected daily traffic with the Project to evaluate the percent increase over a 24-hour period.

e. Traffic Signal Warrant Analysis Methodology

The term “signal warrant” refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. The Traffic Impact Analysis uses the signal warrant criteria presented in the latest edition of the Federal Highway Administration’s Manual on Uniform Traffic Control Devices (MUTCD), as amended by the MUTCD 2012 California Supplement.

4.12.3 Existing Conditions

Existing Intersection Levels of Service

The traffic volumes presented in Appendix B of the Traffic Impact Analysis (see Appendix J), were analyzed using the methodology described above to determine the current operating conditions at the existing analyzed intersections. The calculation is expressed as a volume-to-capacity (V/C) ratio for signalized intersections, and in delay in terms of seconds per vehicle for unsignalized intersections located in the City of Burbank. Table 4.12-3 summarizes the existing LOS for the 24 study intersections. Detailed intersection traffic analysis LOS calculations are provided in Appendix B of the Traffic Impact Analysis. As indicated, one intersection is projected to operate at LOS E during both peak hours: I-5 Southbound Off-Ramp/Front Street and Burbank Boulevard. The remaining study intersections operate at LOS D or better under existing peak hour traffic conditions.

Table 4.12-3 Existing (2018) Intersection Level of Service

No.	Intersection	Intersection Control	Peak Hour	Existing (2018) V/C or Delay	Existing (2018) LOS
1	N Glenoaks Boulevard and Amherst Drive	Signalized	AM	0.629	B
			PM	0.544	A
2	N San Fernando Boulevard and Amherst Drive	Signalized	AM	0.687	B
			PM	0.689	B
3	N Glenoaks Boulevard and Delaware Road	Signalized	AM	0.669	B
			PM	0.694	B
4	N 3rd Street and Delaware Road	AWSC	AM	12.1	B
			PM	14.0	B
5	N San Fernando Boulevard and Delaware Road	Signalized	AM	0.386	A
			PM	0.528	A
6	N 3rd Street and E Burbank Boulevard	Signalized	AM	0.588	A
			PM	0.607	B
7	N San Fernando Boulevard and Burbank Boulevard	Signalized	AM	0.745	C
			PM	0.722	C
8	I-5 NB Off-Ramp and Burbank Boulevard	Signalized	AM	0.498	A
			PM	0.582	A

No.	Intersection	Intersection Control	Peak Hour	Existing (2018)	
				V/C or Delay	LOS
9	I-5 Southbound Off-Ramp/N Front Street and W Burbank Boulevard	Signalized	AM	0.905	**E**
			PM	0.983	**E**
10	N Victory Place and W Burbank Boulevard	Signalized	AM	0.780	C
			PM	0.869	D
11	W Victory Boulevard and W Burbank Boulevard	Signalized	AM	0.502	A
			PM	0.494	A
12	N Glenoaks Boulevard and E Magnolia Boulevard	Signalized	AM	0.652	B
			PM	0.671	B
13	N 1st Street and E Magnolia Boulevard	Signalized	AM	0.488	A
			PM	0.753	C
14	Victory Boulevard and W Magnolia Boulevard	Signalized	AM	0.783	C
			PM	0.874	D
15	Victory Boulevard and W Verdugo Avenue	Signalized	AM	0.616	B
			PM	0.584	A
16	S Glenoaks Boulevard and E Olive Avenue	Signalized	AM	0.713	C
			PM	0.689	B
17	S 1st Street and E Olive Avenue	Signalized	AM	0.599	A
			PM	0.709	C
18	S Victory Boulevard and W Olive Avenue	Signalized	AM	0.806	D
			PM	0.841	D
19	S Glenoaks Boulevard and E Verdugo Avenue	Signalized	AM	0.663	B
			PM	0.643	B
20	S San Fernando Boulevard and E Verdugo Avenue	Signalized	AM	0.604	B
			PM	0.702	C
21	S 1st Street/Ikea Way and E Verdugo Avenue	Signalized	AM	0.585	A
			PM	0.636	B
22	S Front Street and I-5 Southbound Ramps	Signalized	AM	0.508	A
			PM	0.610	B
23	S 1st Street/Ikea Way and E Angeleno Avenue	Signalized	AM	0.367	A
			PM	0.524	A
24	Olive Avenue/Sparks Road and W Verdugo Avenue [1]	Signalized	AM	0.663	B
			PM	0.755	C

AWSC All-way stop controlled intersections

[1] 5/6-legged intersection, v/c calculated by hand

Source: Fehr and Peers, 2018

Existing Congestion Management Program Locations

According to the Los Angeles County Metropolitan Transportation Authority's (Metro) 2010 *Congestion Management Program* (2010 CMP), those proposed projects, which meet the following criteria, shall be evaluated:

- All congestion management program (CMP) arterial monitoring intersections where the proposed Project will add 50 or more trips during either the AM or PM peak hours of adjacent street traffic.
- All CMP mainline freeway monitoring locations where the proposed Project will add 150 or more trips, in either direction, during either the AM or PM peak hours.

Arterial Monitoring Stations

None of the study area intersections are CMP arterial monitoring locations. The CMP arterial monitoring stations closest to the proposed Project site are located at Victory Boulevard & Woodman Avenue (approximately seven miles west of the Project site) and Ventura Boulevard & Lankershim Boulevard (approximately four miles south of the Project site). Based on the Project trip distribution and trip generation, the Project is not expected to add 50 peak hour vehicle trips through the CMP arterial monitoring station. Project trips are anticipated to disperse among the transportation network due to the extended distance between the Project site and the monitoring station. The proposed Project is not expected to add enough new traffic to exceed the arterial analysis criteria of 50 vehicle trips at the abovementioned location. Therefore, no further CMP arterial analysis is required.

Freeway Monitoring Stations

Regional access to the Project site is provided by Interstate 5, State Route (SR) 170, and SR 134 Freeways. Interstate 5 lies directly north and east of the site, State Route 170 lies approximately 5 miles to the west of the site, and SR-134 lies approximately 2 miles south of the site. The CMP freeway monitoring stations closest to the Project site include the following:

- I-5 Freeway north of Burbank Boulevard Burbank Ramps (north of the Project site)
- I-5 Freeway at Osborne Street, north of SR-170 (approximately seven miles north of the site)
- I-5 Freeway south of Colorado Boulevard Exit (approximately four south miles from the site)
- SR-134 at Forman Avenue (approximately southwest miles from the site)
- SR-134 east of Central Avenue (approximately southeast miles from the site)
- SR-170 south of Sherman Way (approximately five west miles from the site)

Existing Public Transit Service

Two commuter rail lines and 10 bus lines currently serve the Project area. These transit lines are described below and consist of Metrolink commuter rail, Los Angeles County Metropolitan Transportation Authority (Metro) bus lines, BurbankBus lines, and Glendale Beelines:

METROLINK ANTELOPE VALLEY LINE

The Metrolink Antelope Valley Line provides service from Lancaster in the Antelope Valley to Union Station in Downtown Los Angeles with stops in Palmdale, Vincent Grade/Acton, Via Princessa, Santa

Clarita, Newhall, Sylmar/San Fernando, Sun Valley, Hollywood Burbank Airport, Downtown Burbank, and Glendale. The closest station to the Project site is Downtown Burbank. Service is provided seven days per week. Weekday morning and afternoon peak hour headways are 20 to 50 minutes.

METROLINK VENTURA COUNTY LINE

The Metrolink Ventura County Line provides service from East Ventura to Los Angeles Union Station with stops in Oxnard, Camarillo, Moorpark, Simi Valley, Chatsworth, Northridge, Van Nuys, Bob Hope Airport, Downtown Burbank, and Glendale. The closest station to the Project site is Downtown Burbank. Service is provided on weekdays. Weekday morning and afternoon peak hour headways are 20 to 40 minutes.

METRO 92

Line 92 is a north/south line that travels from Sylmar to Echo Park via Pacoima, Sun Valley, Burbank, Glendale, Glassell Park, Silverlake, and Downtown Los Angeles. Major stops include Burbank Town Center, Downtown Burbank Metrolink Station, Glendale Galleria, Glendale Metrolink Station, and Civic Center/Grand Park. Line 92 provides local service seven days per week. Weekday service hours are from 5:00 AM to 10:00 PM. Morning and afternoon peak hour headways on Line 92 are 20 minutes.

METRO 94/794

Line 94/794 is a north/south line that travels from Sylmar to Downtown Los Angeles via San Fernando, Pacoima, Sun Valley, Burbank, and Glendale. Line 94/794 stops at the Sylmar/San Fernando and Sun Valley Metrolink Stations, Hollywood Burbank Airport, and Los Angeles Union Station. Within the study area, Line 94/794 travels along San Fernando Road in the Project study area. Line 94 provides local service seven days per week. Weekday service hours are from 4:30 to 2:00 AM. Peak hour headways on Line 94 are 15 to 20 minutes in the morning and 20 to 30 minutes in the afternoon. Line 794 provides rapid service on weekdays only between 4:30 AM to 9:30 PM. Peak hour headways on Line 794 are approximately 20 to 30 minutes in the morning and 20 minutes in the afternoon. The combined frequency on Line 94/794 is 15 minutes.

METRO 96

Line 96 is a north/south line that travels from Downtown Burbank Metrolink Station to Downtown Los Angeles via Glendale, Glassell Park, and Cypress Park. Major stops include Downtown Burbank Metrolink Station, Burbank Town Center, Los Angeles Zoo, Autry Museum of the American West, and Silver Lake Library. Line 96 provides local service seven days per week. Weekday service hours are from 4:30 AM to 9:30 PM. Morning and afternoon peak hour headways on Line 96 are 30 minutes.

METRO 154

Line 154 is an east/west line that provides service between Tarzana and Downtown Burbank via Reseda, Encino, Van Nuys, and North Hollywood. Line 154 travels along Burbank Boulevard and Oxnard Street. Major stops include the Van Nuys Orange Line station, the North Hollywood Red and Orange Line stations, and Downtown Burbank Metrolink Station. Service is provided on weekdays only between 5:15 AM and 8:00 PM. Peak hour headways on Line 154 are 50 minutes in the morning and 60 minutes in the afternoon.

METRO 155

Line 155 is an east/west line that provides service from Sherman Oaks to Downtown Burbank via Valley Village, Toluca Lake, and Universal City. Line 155 travels primarily along Riverside Drive and Olive Avenue. Transfer is available to the Metro Red Line at Universal City station, and to Metrolink at the Downtown Burbank Metrolink station. Service is provided between 6:00 AM and 8:00 PM, seven days per week. Peak hour headways on Line 155 are 25 to 40 minutes in the morning and 30 to 45 minutes in the afternoon.

METRO 164

Line 164 is an east/west line that provides service from West Hills to Downtown Burbank via Woodland Hills, Canoga Park, Reseda, Lake Balboa, Van Nuys, and North Hollywood. Line 164 travels primarily along Victory Boulevard. Major stops include the Warner Center Orange Line station and the Downtown Burbank Metrolink Station. Service is provided seven days per week, with weekday service provided between 4:30 AM and 11:00 PM. Peak hour headways on Line 164 are 20 to 40 minutes in the morning and 15 to 30 minutes in the afternoon.

METRO 165

Line 165 is an east/west line that provides service from West Hills to Downtown Burbank via Woodland Hills, Canoga Park, Reseda, Lake Balboa, Van Nuys, and North Hollywood. Line 165 travels primarily along Vanowen Street. Major stops include the Warner Center Orange Line Station and the Bob Hope Airport Metrolink and Downtown Burbank Metrolink Stations. Service is provided seven days per week, with weekday service provided between 4:30 AM and 11:00 PM. Peak hour headways on Line 164 are 20 to 40 minutes in the morning and 15 to 30 minutes in the afternoon.

METRO 183

Line 183 is an east/west line that provides service from Sherman Oaks to Glendale via Van Nuys, Valley Glen, Studio City, North Hollywood, Universal City, and Burbank. Within the study area, Line 183 travels primarily along Magnolia Boulevard. Major stops include the North Hollywood Red and Orange Line station, the Downtown Burbank Metrolink and Glendale Metrolink stations. Service is provided seven days per week, with weekday service provided between 5:00 AM and 10:00 PM. Peak hour headways on Line 183 are 30 minutes in the morning and 45 to 55 minutes in the afternoon.

BURBANK BUS METROLINK/MEDIA DISTRICT

This line begins and ends at the Downtown Burbank Metrolink Station and travels along Olive Avenue, Buena Vista Street, Alameda Avenue, Bob Hope Drive, and Riverside Drive. Service is provided all-day on weekdays only with 12 minutes headways.

GLENDALE BEELINE 12

Line 12 is a north/south express line that provides service from the Glendale Metrolink Station to the Downtown Burbank Metrolink Station. The line travels primarily along Flower Street in the study area. Service is provided from 6:00 AM – 9:30 AM and 3:00 PM – 6:30 PM, Monday through Friday. Peak hour headways are 15 to 30 minutes in the morning and 20 minutes in the afternoon.

Existing Bicycle Facilities

The existing facilities include a bicycle lane fronting the Project site along Front Street from Burbank Boulevard to Verdugo Avenue. There is also a bicycle lane in the Project vicinity on 3rd Street from Burbank Boulevard to Verdugo Avenue. There is a bicycle route (Class III facility) on Burbank Boulevard between Victory Boulevard and 3rd Street. There are also existing facilities along San Fernando Road, Angeleno Avenue, Verdugo Road, Ikea Way, and Providencia Avenue.

There are several bicycle lanes and bicycle routes planned throughout the study area, including the extension of the bicycle path along San Fernando Road, the extension of the Chandler Bikeway to the Downtown Burbank Metrolink Station, and a Class I Burbank Channel Bikeway from the Downtown Burbank Metrolink Station to Alameda Avenue; Class II Facilities on 3rd Street, Olive Avenue north of 3rd Street Burbank Boulevard from Victory Boulevard to 3rd Street, 3rd Street between Burbank Boulevard and Amherst Drive, and Magnolia Boulevard from 3rd Street to Victory Boulevard; and Class III Facilities on Olive Avenue, Glenoaks Boulevard, and Verdugo Avenue. The proposed facilities come from the City of Burbank's General Plan and Bicycle Master Plan.

4.12.4 Regulatory Setting

This section describes applicable federal, state, and local laws, ordinances, regulations, and standards governing transportation and traffic, which must be adhered to before and during implementation of the proposed Project.

State Regulations

California Department of Transportation (Caltrans)

Caltrans publishes a document entitled *Guide for the Preparation of Traffic Impact Studies* (Guide), which provides guidelines and recommended elements of traffic studies for projects that could potentially impact State facilities such as State Route highways and freeway facilities. This is a State-level document that is used by each of the Caltrans District offices.

The Guide defines when traffic studies should be conducted to address impacts to State facilities, but does not define quantitative impact standards. The Guide states that Measures of Effectiveness are used to evaluate Caltrans facilities and that the agency strives to maintain a LOS value of C on its facilities. However, the Guide states that the appropriate target LOS varies by facility and congestion level and is defined differently by Caltrans depending on the analyzed facility.

State Senate Bill (SB) 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 CEQA 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 (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 will result in a change in the metrics for determining impacts relative to the transportation network through the development of new methodologies for traffic analyses for CEQA documents to 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.

Currently, environmental review of transportation impacts focuses on the delay that vehicles experience at intersections and on roadway segments, which is often measured using LOS. Mitigation for increased delay often involves widening a roadway or the size of an intersection, which increases capacity and may, therefore, increase automobile use and emissions and discourage alternative forms of transportation. Under SB 743, the focus of transportation analysis will shift from driver delay to reduction of greenhouse gas emissions, creation of multimodal networks, and promotion of a mix of land uses.

Among other things, SB 743 requires that the Office of Planning and Research (OPR) prepare revisions to the State CEQA Guidelines criteria for determining the significance of transportation impacts of projects within transit priority areas. OPR will submit the proposed changes to the Secretary of the Natural Resources Agency to certify and adopt. In August 2014, OPR released a report entitled "Updating Transportation Impacts Analysis in the CEQA Guidelines" for public comment. The report contained a new proposed Section 15064.3 to the State CEQA Guidelines as well as proposed amendments to Appendix F (Energy Conservation) and Appendix G (Initial Study Checklist) of the State CEQA Guidelines. The comment period closed November 21, 2014 and OPR reviewed and considered comments to determine if revisions were needed. OPR conducted many months of intensive engagement with the public, public agencies, environmental organizations, development advocates, industry experts, and many others, regarding the analysis of transportation impacts. On January 20, 2016, OPR released a Notice of Availability for the Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA. The comment period closed on February 29, 2016. After substantial study and public comment throughout the process, OPR submitted a set of final revisions to the Natural Resources Agency in November 2017. The subsequent "rulemaking" process is anticipated to take approximately six months and SB 743 is expected to go into effect in 2018. Beginning January 1, 2020, the provisions of the OPR guidance shall apply statewide.

Local Regulations

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The Southern California Association of Governments (SCAG) is an association of local governments and agencies that serves as a Metropolitan Planning Organization (MPO), a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities. SCAG is responsible for developing long-range regional transportation plans, including the regional Sustainable Communities Strategy and associated growth forecasts, regional transportation improvement programs, regional housing needs allocations and a portion of the South Coast Air Quality management plans (SCAG 2018).

SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long range regional transportation and land use network plan that looks ahead 20+ years and provides a vision of the region's future mobility and housing needs with economic, environmental and public health goals. The RTP/SCS identifies major challenges as well as potential opportunities associated with growth, transportation finances, the future of airports in the region, and pending transportation system deficiencies that could result from regional growth. SCAG adopted its current RTP/SCS in April 2016 (SCAG 2016). Major goals of the 2016-2040 RTP/SCS include:

1. Align the plan investments and policies with improving regional economic development and competitiveness.
2. Maximize mobility and accessibility for all people and goods in the region.
3. Ensure travel safety and reliability for all people and goods in the region.
4. Preserve and ensure a sustainable regional transportation system.
5. Maximize the productivity of our transportation system.
6. Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).
7. Actively encourage and create incentives for energy efficiency, where possible.
8. Encourage land use and growth patterns that facilitate transit and active transportation.
9. Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.

Congestion Management Program (CMP)

In Los Angeles County, the Intersection Capacity Utilization (ICU) intersection analysis methodology is used to analyze CMP operations. In June 1990, the passage of the Proposition 111 gas tax increase required urbanized areas in the state with a population of 50,000 or more to adopt a CMP. Metro is the Congestion Management Agency for the County. Metro has been charged with the development, monitoring, and biennial updating of Los Angeles County's CMP, which is intended to address the impact of local growth on the regional transportation system. The CMP Highway System includes specific roadways, including state highways, and CMP arterial monitoring locations/intersections. The CMP is also the vehicle for proposing transportation projects that are eligible to compete for the state gas tax funds.

New projects within Burbank must comply with the Los Angeles County CMP. Appendix D-1 of the CMP includes Transportation Impact Assessment (TIA) guidelines. The TIA guidelines require analysis at monitored street intersections and segments, including freeway on- or off-ramp intersections where a project is expected to add 50 or more peak-hour vehicle trips and all CMP mainline freeway monitoring locations where the proposed project will add 150 or more trips, in either direction, during either the AM or PM peak hours. If a project does not add, but merely shifts trips at a given monitoring location, the CMP analysis is not required. An evaluation of transit impacts is required by the CMP for all projects for which an EIR will otherwise be prepared.

Metro's 2014 Short Range Transportation Plan

Metro's 2014 Short Range Transportation Plan (SRTP) is a 10-year action plan that guides programs and projects through 2024. It advances Metro towards the long-term goals identified in the 2009 LRTP. The 2009 LRTP identifies the short-term challenges, provides an analysis of Metro's financial resources, proposes action plans for the public transportation and highway modes, and includes other project and program initiatives. Additionally, the 2009 LRTP addresses sustainability, future funding strategies, and measures of the Plan's performance.

Burbank Municipal Code

The Burbank Municipal Code (BMC) Title 6, Chapter 1 includes provisions for traffic control devices, restrictions, and allowances for turning movements, pedestrian crosswalks, parking restrictions, truck routes for commercial vehicles with three or more axles, public transit zones, speed limits, curb markings, bicycle parking, and many other regulations for design and traffic control features.

BMC Section 10-1-628 and 10-1-1408 contains the following parking requirements for the land uses that comprise the proposed project:

- General – Retail = 3.3 parking spaces per 1,000 square feet
- Residential – Studio (500 square feet or less) = 1.25 parking spaces per dwelling unit
- Residential – Studio/1-bedroom (greater than 500 square feet) = 1.75 parking spaces per dwelling unit
- Residential – 2 and 3 bedroom = 2 parking spaces per dwelling unit
- Residential – Guest = 0.25 parking spaces per dwelling unit
- Hotels and Motels = 1 parking space per room
- Restaurant = 5 parking spaces per 1,000 square feet

Road improvement plans for projects are reviewed by the City's Public Works Department for compliance with BMC requirements for street, driveway, and parking designs, and traffic control measures such as signage and signals. Traffic enforcement as required by the BMC is regulated by the City's Police Department.

Burbank2035 Mobility Element

The City's Mobility Element in the Burbank2035 General Plan establishes goals and policies for the citywide transportation system. The following goals and policies apply to the proposed Project:

Goal 1: Balance

Burbank's transportation system ensures economic vitality while preserving neighborhood character.

> **Policy 1.4:** Ensure that future land uses can be adequately served by the planned transportation system.

Goal 2: Sustainability

Burbank's transportation system will adapt to changing mobility and accessibility needs without sacrificing today's community values.

> **Policy 2.1:** Improve Burbank's alternative transportation access to local and regional destinations through land use decisions that support multimodal transportation.

> **Policy 2.4:** Require new projects to contribute to the City's transit and/or non-motorized transportation network in proportion to its expected traffic generation.

Goal 3: Complete Streets

Burbank's complete streets will meet all mobility needs and improve community health.

Policy 3.2: Complete city streets by providing facilities for all transportation modes.

Policy 3.3: Provide attractive, safe street designs that improve transit, bicycle, pedestrian, and equestrian connections between homes and other destinations.

Policy 3.4: All street improvements should be implemented within the existing right-of-way. Consider street widening and right-of-way acquisition as methods of last resort.

Policy 3.5: Designs street improvements so they preserve opportunities to maintain or expand bicycle, pedestrian, and transit systems.

Goal 5: Bicycle and Pedestrian Mobility

Burbank fosters pedestrian and bicycle travel as healthy, environmentally sound methods to reduce vehicle trips and improve community character.

Policy 5.1: Maximize pedestrian and bicycle safety, accessibility, and education throughout Burbank to create neighborhoods where people choose to walk or ride between nearby destinations.

Policy 5.2: Implement the Bicycle Master Plan by maintaining and expanding the bicycle network, providing end-of-trip facilities, improving bicycle/transit integration, encouraging bicycle use, and making bicycling safer.

Policy 5.3: Provide bicycle connections to major employment centers, shopping districts, residential areas, and transit connections.

Policy 5.4: Ensure that new commercial and residential developments integrate with Burbank's bicycle and pedestrian networks.

Policy 5.5: Require new development to provide land necessary to accommodate pedestrian infrastructure, including sidewalks at the standard widths in Table M-2 of the General Plan.

Goal 7: Parking

Burbank's public and private parking facilities are well managed and convenient.

Policy 7.2: Design commercial and residential parking standards to limit new vehicle trips, incentivize transit use, and promote non-motorized transportation.

Goal 8: Transportation Demand Management

Burbank manages transportation resources to minimize congestion.

Policy 8.3: Require multi-family and commercial development standards that strengthen connections to transit and promote walking to neighborhood services.

Burbank Bicycle Master Plan

To promote bicycle travel, the City adopted a Bicycle Master Plan in 2009 to encourage bicycling and ensure that adequate facilities are maintained within the City to serve bicycle riders of all ages and skill sets. The City recognizes that a safe and effective bikeway network enhances the quality of life for residents and visitors to the City. The Bicycle Master Plan incorporates the planning of routes and facilities into the circulation network, promotes bicycling as a primary form of travel to reduce traffic, and prioritizes investments in bicycle infrastructure.

Burbank Transportation Management Organization (BTMO)

The Burbank Transportation Management Organization (BTMO) is a private-sector nonprofit organization formed to formally bring together employers, developers, building owners, and other stakeholders to collectively establish policies, programs, and services that address local transportation and air quality issues and concerns. More specifically, the BTMO develops, coordinates, and implements cost effective transportation management programs that comply with traffic congestion and clean air requirements; improve mobility and access to Burbank businesses for employees, customers, vendors, and visitors; and enhances the community commitment to traffic mitigation and clean air. Businesses with 25 or more employees who are located in the Burbank Media District or Downtown Burbank are required to join the BTMO.

4.12.5 Impact Analysis

a. Definition of Level of Service (LOS) and Significance Thresholds

City of Burbank

Signalized intersections within the City of Burbank's were analyzed using the following criteria:

- The increase in the V/C ratio from future base conditions to future base plus project conditions is 0.020 or more with the intersection operating at LOS D after the addition of project traffic, or;
- The increase in the V/C ratio from future base conditions to future base plus project conditions is 0.010 or more with the intersection operating at LOS E after the addition of project traffic, or;
- The increase in the V/C ratio from future base conditions to future base plus project conditions is 0.005 or more with the intersection operating at LOS F after the addition of project traffic.

The City of Burbank's impact criteria for unsignalized intersections use delay-based LOS and percent increase in number of project trips travelling through the intersection. An impact is triggered in accordance with the following parameters shown in Table 4.12-4.

Table 4.12-4 Unsignalized Intersection Level of Service Parameters

Level of Service	Final Average Control Delay per Vehicle (seconds)	Project-Related Increase in vehicle trips through intersection
D	> 25.0 to 35.0	Two percent
E	> 35.0 to 50.0	One percent
F	> 50.0	Five or more project trips

Source: Highway Capacity Manual, Transportation Research Board, 2010

CMP Significant Impact

The CMP traffic impact analysis guidelines establish that a significant project impact occurs when a certain threshold is exceeded. If the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C ≥ 0.02), causing LOS F (V/C > 1.00), a significant impact would occur. If the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C ≥ 0.02).

Definition of Significant Impact

A traffic impact is considered significant and immitigable if the Project both: i) contributes measurable traffic to, and ii) substantially and adversely changes the LOS at any off-site location projected to experience deficient operations under foreseeable cumulative conditions, where feasible improvements consistent with the General Plan cannot be constructed.

CEQA Significance Criteria

Appendix G of the CEQA Guidelines contains the Environmental Checklist form that was used during the preparation of this EIR. Accordingly, a project may create a significant adverse environmental impact if it would:

1. Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit;
2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment);
5. Result in inadequate emergency access;
6. Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities;
7. Construction of the proposed project would substantially affect vehicular traffic, bicycles and pedestrians, transit, or emergency access.

Thresholds 1, 2, 4, 5, 6, and 7 are discussed below under T-1 through T-7, respectively. As discussed in the Initial Study, with respect to Threshold 3, the Hollywood Burbank Airport is approximately two miles northwest of the Project site; however, the Project site is located outside of the Airport Influence Area and runway protection zones (County of Los Angeles 2003). Therefore, the Project would not present any impediments to air traffic and would not affect air traffic patterns. No impact to air traffic would occur and further analysis of this issue is not warranted. Additionally, pursuant to SB 743, parking impacts are not considered a significant impact. Based on City of Burbank code requirements, the Project requires 1,463 parking spaces. The Project would provide the required number of spaces by City code requirements. Further analysis of this issue is not warranted.

Based on these significance thresholds and criteria, the Project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the Project conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?

IMPACT T-1 THE PROPOSED PROJECT WOULD GENERATE NEW TRIPS AT STUDY AREA INTERSECTIONS. THE PROPOSED PROJECT WOULD HAVE SIGNIFICANT IMPACTS AT TWO STUDY INTERSECTIONS UNDER EXISTING PLUS PROJECT CONDITIONS AND FOUR STUDY INTERSECTIONS UNDER FUTURE PLUS PROJECT CONDITIONS. IMPLEMENTATION OF MITIGATION WOULD MITIGATE THE TRAFFIC IMPACT AT VICTORY BOULEVARD AND OLIVE AVENUE TO A LESS THAN SIGNIFICANT LEVEL. HOWEVER, MITIGATION FOR THE TRAFFIC IMPACT AT BURBANK BOULEVARD AND I-5 SOUTHBOUND OFF-RAMPS/FRONT STREET WOULD NOT REDUCE THE IMPACT TO A LESS THAN SIGNIFICANT LEVEL. THIS IMPACT WOULD BE SIGNIFICANT AND UNAVOIDABLE.

"Trip generation analysis" is the process for determining the number of vehicle trips that a specific proposed land use would add to local roadways. In case of trips to the hotel and residential units, the ITE trip generation equations were used instead of the linear trip generation rate. For all other land uses, the ITE trip generation rate has been used. Trip generation rates used to estimate traffic generated by the Project are shown in Table 4.12-5. As shown, the Project would generate approximately 5,261 net daily trips, including 314 in the AM peak hour trips and 398 PM peak hour trips.

Table 4.12-5 Project Trip Generation

			Estimated Trip Generation						
		ITE	Daily	AM Peak Hour Trips			PM Peak Hour Trips		
Land Use	Size	Code	Trips[1]	In	Out	Total	In	Out	Total
Proposed Land Uses									
Mid-Rise Apartments[2]	573 du	221	3,121	49	140	189	144	93	237
Less: Internal capture[3]			(31)	(1)	(2)	(3)	(2)	(5)	(7)
Less: Walk/transit/bike credit[4]			(312)	(5)	(14)	(19)	(14)	(9)	(23)
Total Trips			2,778	43	124	167	128	79	207
Retail/Gallery Space	1.067 tsf	820	40	1	0	1	2	2	4
Less: Internal capture[3]			(5)	0	0	0	(1)	(1)	(2)
Less: Walk/transit/bike credit[4]			(2)	0	0	0	0	0	0
Total Driveway Trips			33	1	0	1	1	1	2
Hotel[5]	307 rooms	310	2,567	87	61	148	104	100	204
Less: Internal capture[3]			(26)	0	(1)	(1)	(5)	(1)	(6)
Less: Walk/transit/bike credit[4]			(257)	(9)	(6)	(15)	(10)	(10)	(20)
Total Driveway Trips			2,284	78	54	132	89	89	178
High-Turnover (Sit-Down) Restaurant	1.800 tsf	932	202	10	8	18	11	7	18
Less: Internal capture[3]			(26)	(2)	(1)	(3)	(3)	(3)	(6)
Less: Walk/transit/bike credit[4]			(10)	(1)	0	(1)	(1)	0	(1)
Total Driveway Trips			166	7	7	14	7	4	11
Total Driveway Trips			**5,261**	**129**	**185**	**314**	**225**	**173**	**398**

du = Dwelling Unit; tsf = thousand square feet

[1] Source for trip generation rates: *Trip Generation Manual, 10th Edition*, Institute of Transportation Engineers (ITE), 2017.

[2] ITE code 221 Multifamily Housing Mid-Rise was used with the General Urban/Suburban setting rate. Daily Equation: T = 5.45(X) - 1.75 AM Equation: Ln(T) = 0.98 Ln(X) - 0.98 PM Equation: Ln(T) = 0.96 Ln(X) - 0.63

[3] Internal capture represents the percentage of trips between land uses that occur within the site. Transportation Research Board (TRB) National Cooperative Highway Research Program (NCHRP) Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments, 2011.

[4] A 5-10% walk/transit/bike credit was applied to account for the number and frequency of local bus service within walking distance of the Project.

[5] AM Equation: T = 0.50(X) - 5.34 PM Equation: T = 0.75(X) - 26.02Source: Fehr and Peers, 2018

a. Project Trip Distribution and Assignment

The Project-generated trips were distributed in the study area roadway network. The traffic generated by the proposed Project was assigned to the street network using the distribution patterns shown in Figure 4-12-2.

Existing Plus Project Traffic Conditions

This section presents the Existing plus Project traffic volumes and the resulting LOS conditions at each of the study intersections. Detailed intersection traffic analysis LOS calculations are provided in the Transportation Impact Analysis, see Appendix J.

Intersection Traffic Volumes and Level of Service

The peak hour Project trips estimated in Table 4.12-5 were added to the existing (Year 2018) traffic volumes to estimate Existing plus Project traffic volumes. Existing plus Project traffic volumes presented in the Traffic Impact Analysis, Figure 9, *Peak Hour Traffic Volumes and Lane Configurations Existing + Project Conditions (2018),* were analyzed to determine the projected V/C ratios or delay and LOS for each of the analyzed intersections under this scenario. Table 4.12-6 summarizes the Existing plus Project LOS for study intersections.

Table 4.12-6 Existing (2018) + Project Intersection Level of Service Analysis

			Existing (2018)		Existing (2018) + Project		Impacts	
No.	**Intersection**	**Peak Hour**	**V/C or Delay**	**LOS**	**V/C or Delay**	**LOS**	**Change in V/C or Delay**	**Significant?**
1	N Glenoaks Boulevard and Amherst Drive	AM	0.629	B	0.630	B	0.001	No
		PM	0.544	A	0.546	A	0.002	No
2	N San Fernando Boulevard and Amherst Drive[1]	AM	0.687	B	0.699	B	0.012	No
		PM	0.689	B	0.708	C	0.019	No
3	N Glenoaks Boulevard and Delaware Road	AM	0.669	B	0.672	B	0.004	No
		PM	0.694	B	0.698	B	0.003	No
4	N 3rd Street and Delaware Road	AM	12.1	B	12.2	B	0.1	No
		PM	14.0	B	14.2	B	0.2	No
5	N San Fernando Boulevard and Delaware Road	AM	0.386	A	0.387	A	0.001	No
		PM	0.528	A	0.538	A	0.010	No
6	N 3rd Street and E Burbank Boulevard	AM	0.588	A	0.596	A	0.008	No
		PM	0.607	B	0.619	B	0.012	No
7	N San Fernando Boulevard and Burbank Boulevard	AM	0.745	C	0.752	C	0.007	No
		PM	0.722	C	0.742	C	0.020	No
8	I-5 NB Off-Ramps and Burbank Boulevard	AM	0.498	A	0.503	A	0.005	No
		PM	0.582	A	0.591	A	0.009	No
9	I-5 Southbound Off-Ramp/N Front Street and W Burbank Boulevard	AM	0.905	**E**	1.003	**F**	0.098	**Yes**
		PM	0.983	**E**	1.105	**F**	0.122	**Yes**
10	N Victory Place and W Burbank Boulevard	AM	0.780	C	0.804	D	0.024	**Yes**
		PM	0.869	D	0.897	D	0.028	**Yes**
11	W Victory Boulevard and W Burbank Boulevard	AM	0.502	A	0.512	A	0.010	No
		PM	0.494	A	0.505	A	0.011	No
12	N Glenoaks Boulevard and E Magnolia Boulevard	AM	0.652	B	0.654	B	0.002	No
		PM	0.671	B	0.676	B	0.005	No
13	N 1st Street and E Magnolia Boulevard	AM	0.488	A	0.488	A	0.000	No
		PM	0.753	C	0.754	C	0.001	No
14	Victory Boulevard and W Magnolia Boulevard	AM	0.783	C	0.795	C	0.012	No
		PM	0.874	D	0.889	D	0.015	No

No.	Intersection	Peak Hour	Existing (2018) V/C or Delay	Existing (2018) LOS	Existing (2018) + Project V/C or Delay	Existing (2018) + Project LOS	Impacts Change in V/C or Delay	Impacts Significant?
15	Victory Boulevard and W Verdugo Avenue	AM	0.616	B	0.618	B	0.002	No
		PM	0.584	A	0.586	A	0.001	No
16	S Glenoaks Boulevard and E Olive Avenue	AM	0.713	C	0.714	C	0.001	No
		PM	0.689	B	0.691	B	0.002	No
17	1st Street/Ikea Way and E Olive Avenue	AM	0.599	A	0.599	A	0.000	No
		PM	0.709	C	0.709	C	0.000	No
18	S Victory Boulevard and W Olive Avenue	AM	0.806	D	0.822	D	0.016	No
		PM	0.841	D	0.845	D	0.004	No
19	S Glenoaks Boulevard and E Verdugo Avenue	AM	0.663	B	0.667	B	0.004	No
		PM	0.643	B	0.648	B	0.005	No
20	S San Fernando Boulevard and E Verdugo Avenue	AM	0.604	B	0.612	B	0.008	No
		PM	0.702	C	0.715	C	0.013	No
21	1st Street/Ikea Way and E Verdugo Avenue	AM	0.585	A	0.591	A	0.006	No
		PM	0.636	B	0.646	B	0.010	No
22	S Front Street and I-5 Southbound Ramps	AM	0.508	A	0.517	A	0.009	No
		PM	0.610	B	0.618	B	0.008	No
23	1st Street and E Angeleno Avenue	AM	0.367	A	0.367	A	0.000	No
		PM	0.524	A	0.524	A	0.000	No
24	Olive Avenue/Sparks Street and W Verdugo Avenue [1]	AM	0.663	B	0.672	B	0.009	No
		PM	0.755	C	0.767	C	0.012	No

[1] 5/6-legged intersection, v/c calculated by hand
Source: Fehr and Peers, 2018.

As indicated in Table 4.12-6, I-SB Off-Ramp/Front Street and Burbank Boulevard (Intersection No. 9) is projected to operate at LOS F during both peak hours, which exceeds the City's LOS D standard. The remaining study intersections would operate at LOS D or better under existing plus Project peak hour traffic conditions.

After applying the City of Burbank's significant threshold criteria, the proposed Project would result in significant impacts to two study intersections under Existing plus Project conditions: Intersection No. 9 (I-5 Southbound Off-Ramp/Front Street and Burbank Boulevard) (AM and PM); and Intersection No. 10 (Victory Place and Burbank Boulevard) (AM and PM).

Future Plus Project Traffic Conditions

To evaluate the potential impacts of the proposed Project on Future Base (Year 2022) conditions, it was necessary to develop estimates of future traffic conditions in the area both without and with Project traffic. First, estimates of traffic growth were developed for the study area to forecast future conditions without the Project. These forecasts included traffic increases as a result of both regional ambient traffic growth and traffic generated by specific developments in the vicinity of the Project (related projects). These projected traffic volumes, identified herein as the Future Base conditions, represent the future study year conditions without the proposed Project. The traffic generated by the proposed Project was then estimated and assigned to the surrounding street system. The Project traffic was added to the Future Base to form the Future plus Project traffic conditions, which were analyzed to determine the incremental traffic impacts attributable to the Project itself.

Combined, the future projects are estimated to generate approximately 86,588 daily weekday trips, of which 10,588 vehicles per hour (vph) would occur during the morning peak hour and 11,108 vph during the evening peak hour. A significant portion of these trips would be attributed development of the Studio Master Plans, specifically the Warner Brothers Studio located at 4000 Warner Boulevard (See Table 6, Related Projects Trip Generation Estimates, of the Transportation Impact Analysis [Appendix J], Related Project No. 17). Development of the Warner Brothers Studio is anticipated to generate approximately 19,150 net daily trips, including 3,110 net peak hour AM trips and 3,293 net peak hour PM trips.

The opening year for the Warner Brothers Studio is 2027. The opening year for all the other future development projects is not known in all cases and frequently changes. All future development projects were assumed to be built and operational by the Project's buildout year of 2022. This would make the Future Base (Year 2022) conditions conservative from a traffic impacts perspective.

Intersection Traffic Volumes and Level of Service

The peak hour future Project and ambient growth traffic volumes for the analyzed intersections are illustrated in Appendix B of the Transportation Impact Analysis (see Appendix J).

Table 4.12-7 summarizes the Future Base LOS. As indicated, 19 of the 24 study intersections are projected to operate at LOS D or better during the morning and/or afternoon peak hours. The following four intersections would operate at LOS E or worse during one or both peak hours: Intersection No. 9 (I-5 Southbound Off-Ramp/Front Street and Burbank Boulevard); No. 10 (Victory Place and Burbank Boulevard); No. 14 (Victory Boulevard and Magnolia Boulevard); and No. 18 (Victory Boulevard and Olive Avenue).

The Project-generated traffic volumes were added to the 2022 Future Base traffic volumes develop Future plus Project peak hour traffic volumes. Future plus Project traffic volumes during the AM and PM peak hours are shown in Appendix B of the Transportation Impact Analysis (see Appendix J).

The resulting Future plus Project peak hour traffic volumes were analyzed to determine the projected future operating conditions with the addition of the proposed Project traffic. Additionally, Table 4.12-7 summarizes the Future plus Project LOS. As indicated, 19 of the 24 study intersections would operate at LOS D or better during the morning and/or afternoon peak hours. The following four intersections would operate at LOS E or worse during one or both peak hours: Intersection No. 9 (I-5 Southbound Off-Ramp/Front Street and Burbank Boulevard); No. 10 (Victory Place and Burbank Boulevard); No. 14 (Victory Boulevard and Magnolia Boulevard) and No. 18 (Victory Boulevard and Olive Avenue).

Table 4.12-7 Future (2022) + Project Intersection Level of Service Analysis

			Future Base (2022)		Future (2022) + Project		Impacts	
No.	Intersection	Peak Hour	V/C or Delay	LOS	V/C or Delay	LOS	Change In V/C or Delay	Significant?
1	N Glenoaks Boulevard and Amherst Drive	AM	0.673	B	0.674	B	0.001	No
		PM	0.617	B	0.618	B	0.001	No
2	N San Fernando Boulevard and Amherst Drive[1]	AM	0.715	C	0.721	C	0.006	No
		PM	0.723	C	0.730	C	0.007	No
3	N Glenoaks Boulevard and Delaware Road	AM	0.711	C	0.714	C	0.003	No
		PM	0.770	C	0.773	C	0.003	No
4	N 3rd Street and Delaware Road	AM	12.6	B	12.7	B	0.1	No
		PM	14.8	B	15.0	B	0.2	No
5	N San Fernando Boulevard and Delaware Road	AM	0.419	A	0.420	A	0.001	No
		PM	0.572	A	0.573	A	0.001	No
6	N 3rd Street and E Burbank Boulevard	AM	0.623	B	0.632	B	0.009	No
		PM	0.648	B	0.660	B	0.012	No
7	N San Fernando Boulevard and Burbank Boulevard	AM	0.690	B	0.696	B	0.006	No
		PM	0.799	C	0.808	D	0.009	No
8	I-5 NB Off-Ramps and Burbank Boulevard	AM	0.723	C	0.738	C	0.015	No
		PM	0.760	C	0.784	C	0.024	No
9	I-5 Southbound Off-Ramp/N Front Street and W Burbank Boulevard	AM	1.019	**F**	1.140	**F**	0.121	**Yes**
		PM	0.992	**E**	1.092	**F**	0.100	**Yes**
10	N Victory Place and W Burbank Boulevard	AM	0.847	D	0.871	D	0.024	**Yes**
		PM	0.948	**E**	0.977	E	0.029	**Yes**
11	W Victory Boulevard and W Burbank Boulevard	AM	0.542	A	0.553	A	0.011	No
		PM	0.537	A	0.548	A	0.011	No
12	N Glenoaks Boulevard and E Magnolia Boulevard	AM	0.695	B	0.697	B	0.002	No
		PM	0.725	C	0.727	C	0.002	No
13	N 1st Street/Ikea Way and E Magnolia Boulevard	AM	0.598	A	0.598	A	0.000	No
		PM	0.832	D	0.833	D	0.001	No
14	Victory Boulevard and W Magnolia Boulevard	AM	0.901	**E**	0.914	**E**	0.013	**Yes**
		PM	1.019	**F**	1.034	**F**	0.015	**Yes**
15	Victory Boulevard and W Verdugo Avenue	AM	0.672	B	0.675	B	0.003	No
		PM	0.649	B	0.651	B	0.002	No
16	S Glenoaks Boulevard and E Olive Avenue	AM	0.757	C	0.781	C	0.002	No
		PM	0.769	C	0.793	C	0.002	No
17	South First Street and E Olive Avenue	AM	0.677	B	0.677	B	0.000	No
		PM	0.855	D	0.855	D	0.000	No
18	S Victory Boulevard and W Olive Avenue	AM	0.892	D	0.908	**E**	0.016	**Yes**
		PM	1.008	**F**	1.011	**F**	0.003	No

			Future Base (2022)		Future (2022) + Project		Impacts	
No.	Intersection	Peak Hour	V/C or Delay	LOS	V/C or Delay	LOS	Change In V/C or Delay	Significant?
19	S Glenoaks Boulevard and E Verdugo Avenue	AM	0.704	C	0.708	C	0.004	No
		PM	0.704	C	0.713	C	0.009	No
20	S San Fernando Boulevard and E Verdugo Avenue	AM	0.653	B	0.661	B	0.008	No
		PM	0.749	C	0.762	C	0.013	No
21	South Ikea Way and E Verdugo Avenue	AM	0.644	B	0.650	B	0.006	No
		PM	0.694	B	0.704	C	0.010	No
22	S Front Street and I-5 Southbound Ramps	AM	0.552	A	0.568	A	0.016	No
		PM	0.658	B	0.672	B	0.014	No
23	South First Way and E Angeleno Avenue	AM	0.403	A	0.403	A	0.000	No
		PM	0.545	A	0.545	A	0.000	No
24	Olive Avenue/Sparks Road and W Verdugo Avenue[1]	AM	0.715	C	0.724	C	0.009	No
		PM	0.777	C	0.788	C	0.011	No

[1] 5/6-legged intersection, v/c calculated by hand
Source: Fehr and Peers, 2018

As shown in Table 4.12-7, the proposed Project would result in significant traffic impacts at four study intersections under Future plus Project conditions: No. 9 (I-5 Southbound Ramps/Front Street and Burbank Boulevard) (AM and PM); No. 10 (Victory Place and Burbank Boulevard) (AM and PM); No. 14 (Victory Boulevard and Magnolia Boulevard) (AM and PM); and No. 18 (Victory Boulevard and Olive Avenue) (AM only).

b. Freeway Ramp Queuing Adjacent to Project Site

A freeway ramp queuing analysis was conducted at three freeway ramp terminal intersections under the Existing and Existing plus Project conditions, and the Future and Future plus Project conditions. The Synchro traffic analysis software was used to implement the HCM methodology to calculate the 95th percentile queues at and compare them with the available vehicle storage on these ramps. Traffic signal-related information such as phasing and timing plans (minimum green, maximum green, gap, etc.) were obtained from the City of Burbank for each location and the morning and evening peak hour traffic volumes from this study were used. Additional detail such as turn pocket lengths and ramp lengths was coded based on scaled distances from on-line aerial photographs. Detailed queue calculations are provided in Appendix D of the Traffic Impact Analysis. Based on the analysis, none of the ramps would experience queuing greater than the available storage during any of the four scenarios.

Mitigation Measures

Mitigation Measure Analysis

This section discusses the mitigation measures proposed to mitigate the Project's significant impacts under Existing plus Project and/or Future plus Project conditions and their effectiveness. Significant impacts were identified at two locations under Existing plus Project conditions and four locations under Future plus Project conditions.

The mitigation program for the Project includes measures to increase the capacity and/or efficiency of the roadway system at impacted locations. Opportunities for physical and operational mitigation measures such as restriping of intersection approaches to add turn lanes and improving traffic control devices or signal phasing were investigated. The emphasis was to identify physical and/or operational improvements that could be implemented efficiently and maintain consistency with Burbank2035 General Plan (Burbank2035) goals.

Burbank2035 provides the City with a framework for determining the feasibility of intersection improvements based upon right-of-way constraints or instances where the physical layout of intersection improvements causes a conflict between Burbank2035 Goals and Policies and the City's LOS D standard.

The screening analysis used in Burbank2035 and in this analysis relies on the following four overarching City policy groups that support Burbank2035: Any transportation improvement should (1) be achievable within the existing right-of-way; (2) be in conformity with the existing scale and design of the location they serve; (3) allow for complete streets; and (4) maintain pedestrian opportunities. These four overarching policies are supported by Burbank2035 through several policies in the Land Use and Mobility Element. The relationship between the policy-based screening framework and the Burbank2035 Goals and Policies is further described below.

1. **Right-of-Way Needs**

   A policy conflict is triggered if any right-of-way acquisition is needed to implement the proposed mitigation, assuming lane width minimum and 6-foot sidewalks.

   Supporting Burbank2035 Policies

   Mobility Element

   - **Policy 1.2:** Recognize that Burbank is a built-out city and wholesale changes to street rights-of-way are infeasible.
   - **Policy 3.4:** All street improvements should be implemented within the existing right-of-way. Consider street widening and right-of-way acquisition as a method of last resort.

2. **Scale and Design**

   A policy conflict is triggered if the scale and design goes beyond the Maximum Acceptable Mitigations 'template' identified in the Burbank2035 FEIR, or if the mitigation needed increases the existing travel-way width (measured from curb-to-curb) along a "residential/mixed-use" area.

   Supporting Burbank2035 Policies

   Mobility Element

   - **Policy 1.5:** Design transportation improvements to be compatible with the scale and design of existing infrastructure.

3. **Complete Streets**

   A conflict is triggered if the mitigation increases the travel-way width along the intersection so as to narrow existing sidewalks, decrease bike lane widths, or greatly disturb transit/bus stop locations.

Supporting Burbank2035 Policies

Mobility Element

- **Policy 3.2:** Complete city streets by providing facilities for all transportation modes

Land Use Element

- **Policy 4.1:** Maintain complete streets that create functional places meeting the needs of pedestrians, bicyclists, wheelchair users, equestrians, and motorists.

4. Pedestrian Opportunities

A conflict is triggered if the proposed mitigation requires sidewalks to go below the minimum sidewalk width standards specified in Table M-2 of the Mobility Element.

Supporting Burbank2035 Policies

Mobility Element

- **Policy 3.3:** Provide attractive, safe street designs that improve transit, bicycle, pedestrian, and equestrian connections between homes and other destinations
- **Policy 5.5:** Require new development to provide land necessary to accommodate pedestrian infrastructure, including sidewalks at the standard widths specified in Table M-2

Land Use Element

- **Policy 4.5:** Require pedestrian-oriented areas to include amenities such as sidewalks of adequate width, benches, street trees and landscaping, decorative paving, art, kiosks, and restrooms.

Under Burbank2035, a mitigation measure is considered to have significant land use impacts when the proposed improvement conflicts with the “Right-of-Way Needs” policies or with two or more of the “Scale and Design,” “Complete Streets,” or “Pedestrian Opportunities” policies. The following mitigation measures were evaluated against the policy-based screening analysis discussed above. And shown in Table 4.12-9 presents the LOS results for Existing plus Project with Mitigations and Table 4.12-10 represents the LOS results for Future plus Project with Mitigations.

Mitigation Analysis – Existing Plus Project Scenario

I-5 SOUTHBOUND OFF-RAMP/N FRONT STREET AND BURBANK BOULEVARD (INTERSECTION #9)

In order to partially mitigate the impact at I-5 SB Off-Ramp/N Front Street and Burbank Boulevard, the northbound approach would have to be restriped. The existing right-turn lane on northbound Front Street would be converted to a left/right-turn lane to provide one left turn lane and one shared left-right lane. This partial mitigation does not require additional right-of-way or violate any of the policy-based screening analysis. This mitigation does not completely reduce the project’s impact to less than significant, and therefore a residual impact would remain at this location. Further, this intersection is under the jurisdiction of Caltrans and would therefore require Caltrans approval. Therefore, because the mitigation results in a residual significant impact and because it requires approval from an outside jurisdiction other than the City of Burbank, the impact is considered significant and unavoidable.

VICTORY PLACE AND BURBANK BOULEVARD (INTERSECTION #10)

In order to mitigate the impact at Victory Place and Burbank Boulevard to a less than significant level, it would have to be widened and restriped at the eastbound approach. Burbank Boulevard would be converted from an eastbound right-turn lane to a through/right-turn lane. This would provide two left-turn lanes, three through lanes, one through/right-turn lane in the eastbound direction.

The existing curb-to-curb width on Burbank Boulevard on the receiving end at this intersection is approximately 103 feet, which is not wide enough to accommodate an additional eastbound through receiving lane. In order to accommodate this mitigation, the street would need to be at widened to at least 113 feet, which would require eliminating the sidewalk on the south side of the Burbank Boulevard Bridge, or widening the bridge. Therefore, this mitigation conflicts with the Complete Streets and Pedestrian Opportunities portions of the policy-based screening analysis. The mitigation would also conflict with the Scale and Design Portion of the policy-based screening analysis, because the four through lanes would exceed the Maximum Acceptable Mitigations (MAMS) template identified in the Burbank2035 FEIR. Therefore, mitigation measure is not considered feasible and the impact is considered significant and unavoidable.

Mitigation Analysis – Future Plus Project Scenario

I-5 SOUTHBOUND OFF-RAMP/N FRONT STREET AND BURBANK BOULEVARD (INTERSECTION #9)

The same partial mitigation used in the Existing plus Project condition to reduce the Project's incremental increase in V/C at I-5 Southbound Off-Ramp/N Front Street and Burbank Boulevard could also be used to partially reduce the Project's incremental increase in V/C under the Future plus Project condition. However, this intersection is under the jurisdiction of Caltrans and would therefore require Caltrans approval. Therefore, because the mitigation results in a residual significant impact and because it requires approval from an outside jurisdiction other than the City of Burbank, the impact is considered significant and unavoidable.

VICTORY PLACE AND BURBANK BOULEVARD (INTERSECTION #10)

The same mitigation used in the Existing plus Project condition to reduce the Project's incremental increase in V/C to a level below significance at Victory Place and Burbank Boulevard could also be used to reduce the Project's incremental increase in V/C to a level below significance under the Future plus Project condition. As stated above, this mitigation would require eliminating the sidewalk on the south side of the Burbank Blvd Bridge, or widening the bridge, which would require Right-of-Way acquisition. In addition, it also conflicts with the Complete Streets, the Scale and Design, and the Pedestrian Opportunities portions of the policy-based screening analysis and is therefore considered infeasible. Therefore, the cumulative impact at this location is considered significant and unavoidable.

The following intersection can be mitigated to less than significant because physical mitigation measures were identified that are physically feasible and pass policy-based screening analysis and/or mitigated by optimizing CSCS:

VICTORY BOULEVARD AND MAGNOLIA BOULEVARD (INTERSECTION #14)

To mitigate the significant impact at Victory Boulevard and Magnolia Boulevard, a Burbank2035 General Plan mitigation measure was analyzed that would restripe the northbound and southbound approaches to provide two exclusive left-turn lanes, two through lanes, and one exclusive right-turn lane. This mitigation measure would reduce the Project's incremental increase in V/C to a level below significance under Future plus Project conditions. To construct this improvement, the northbound and southbound approaches of Victory Boulevard would have to be widened by 13 feet on each side of Magnolia Boulevard. This would require property acquisition of approximately 7 to 12 feet for at least 300 feet on both sides of Victory Boulevard north and south of Magnolia Boulevard to provide the required right-of-way for the additional lanes while maintaining minimum 10-foot sidewalk widths. Because additional right-of-way is required, this improvement conflicts with the Right-of-Way portion as well as the Complete Streets portion of the policy-based screening analysis. Therefore, this mitigation is considered infeasible.

An alternate mitigation was evaluated by optimizing Burbank's Citywide Signal Control System (CSCS) which accounts for optimized traffic signal timing, coordination, time-of-day coordination plans, and adaptive control. These improvements would be implemented along the Victory Boulevard corridor between Burbank Boulevard and Alameda Avenue and would have to be completed prior to the Project opening date. To implement adaptive signal control, the City's traffic signal control hardware would need to be programmed to upgrade eight traffic signals along the corridor to have adaptive control, and additional traffic loop detectors and traffic monitoring hardware would need to be installed. This mitigation measure reduces the Project's incremental increase in V/C to a level below significance under Future plus Project conditions, which would fully mitigate the Project's cumulative impact.

The City is prioritizing the completion of the CSCS system over street widening. Completing CSCS at this location implements a portion of a mitigation identified in the Burbank2035 FEIR. Also, Policy 3.4 of the Burbank2035 Mobility Element considers street widening as methods of last resort. Therefore, this mitigation is selected to mitigate this intersection. With implementation of this mitigation, impacts would be reduced to less than significant.

VICTORY BOULEVARD AND OLIVE AVENUE (INTERSECTION #18)

To mitigate the significant impact at Victory Boulevard and Olive Avenue, two mitigations discussed in the Burbank2035 General Plan mitigation measure were analyzed: (1) optimize the Citywide Signal Control System (CSCS) and (2) physically widen the eastbound, westbound, and southbound approaches to provide two left-turn lanes, two through lanes, and one right-turn lane. The physical mitigation measure would require widening the eastbound, westbound, and southbound approaches by 6 feet on both sides of the street for approximately 300 feet, while maintaining minimum 10-foot sidewalks. This mitigation would reduce the Project's incremental increase in V/C to a level below significance under Future plus Project conditions. The physical mitigations described do not conflict with the goals and policies identified in Burbank2035; therefore, this mitigation is considered feasible.

While the physical mitigation is feasible and mitigates the Project impact, an alternate mitigation was evaluated by optimizing Burbank's Citywide Signal Control System (CSCS) which accounts for optimized traffic signal timing, coordination, time-of-day coordination plans, and adaptive signal control. These improvements would be implemented along the Victory Boulevard corridor between Burbank Boulevard and Alameda Avenue and would have to be completed prior to the Project opening date. To implement adaptive signal control, the City's traffic signal control hardware would need to be programmed to upgrade eight traffic signals in the corridor to adaptive control, and additional traffic loop detectors and traffic monitoring hardware would need to be installed. This mitigation measure reduces the Project's incremental increase in V/C to a level below significance under Future plus Project conditions.

The City is prioritizing the completion of the CSCS system over street widening. Completing CSCS at this location implements a portion of a mitigation identified in the Burbank2035 FEIR. Also, Policy 3.4 of the Burbank2035 Mobility Element considers street widening as methods of last resort. Therefore, this mitigation is selected to mitigate this intersection. With implementation of this mitigation, impacts would be reduced to less than significance.

The following intersections are considered to have significant and unavoidable impacts under Future plus Project conditions:

I-5 Southbound Off-Ramp/N Front Street and Burbank Boulevard (Intersection #9)

The same partial mitigation used in the Existing plus Project condition to reduce the Project's incremental increase in V/C at I-5 Southbound Off-Ramp/N Front Street and Burbank Boulevard could also be used to partially reduce the Project's incremental increase in V/C under the Future plus Project condition. However, a residual significant impact would remain at this location and implementation would require approval by Caltrans. For these reasons, the impact is considered significant and unavoidable.

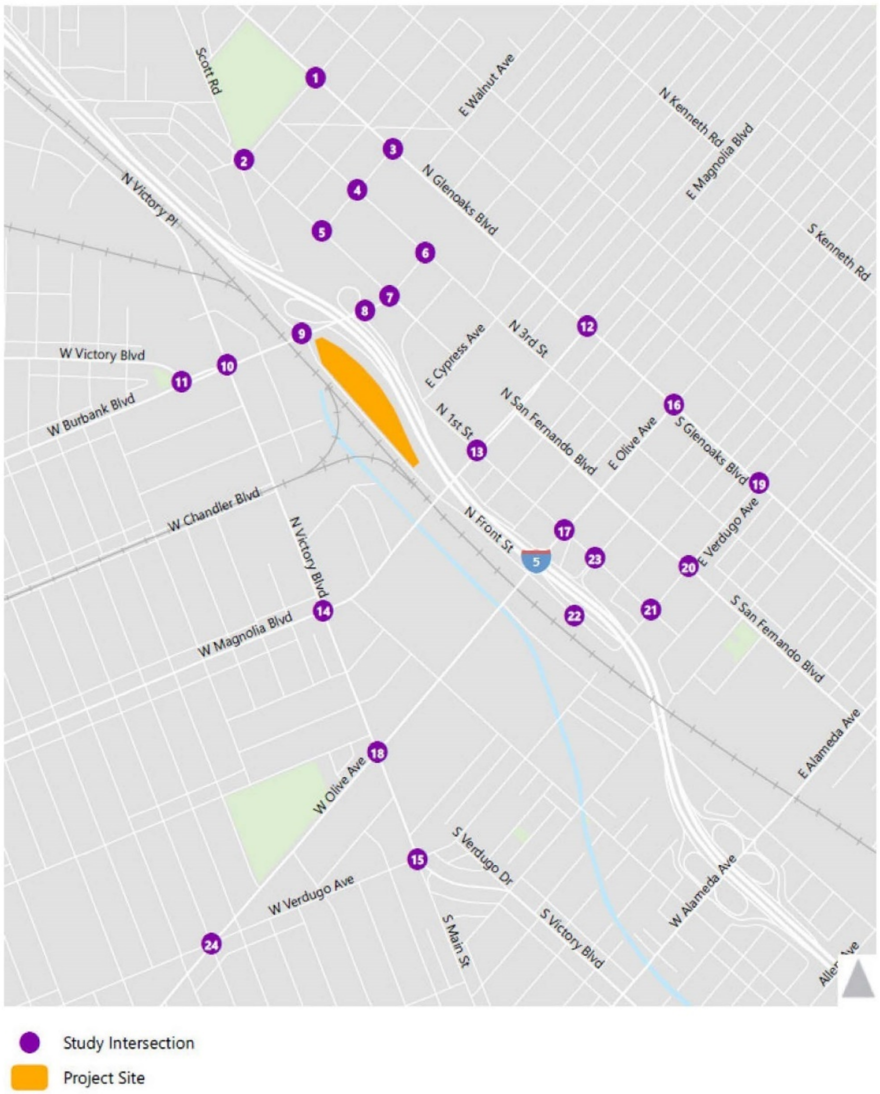
Victory Place and Burbank Boulevard (Intersection #10)

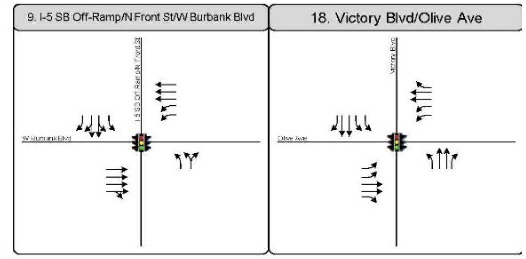
The same mitigation used in the Existing plus Project condition to reduce the Project's incremental increase in V/C to a level below significance at Victory Place and Burbank Boulevard could also be used to reduce the Project's incremental increase in V/C to a level below significance under the Future plus Project condition. As stated above, this mitigation would require eliminating the sidewalk on the south side of the Burbank Blvd Bridge, or widening the bridge, which would require Right-of-Way acquisition. In addition, it also conflicts with the Complete Streets, the Scale and Design, and the Pedestrian Opportunities portions of the policy-based screening analysis. Therefore, the cumulative impact at this location is considered significant and unavoidable.

Mitigation Conceptual Drawings

Lane configurations with feasible physical mitigations were drawn to show potential conditions. A conceptual drawing of the partial mitigation was developed for Intersection No. 9 (I-5 Southbound Ramps/Front Street and Burbank Boulevard) is shown in Figure 4.12-4. A conceptual drawing of the mitigation was developed for Intersection No. 18 (Olive Avenue and Victory Boulevard) is shown in Figure 4.12-5. HCM LOS analysis of the proposed partial mitigation is shown for informational purposes in Table 4.12-10 with analysis sheets shown in Appendix C of the Transportation Impact Analysis (see Appendix J).

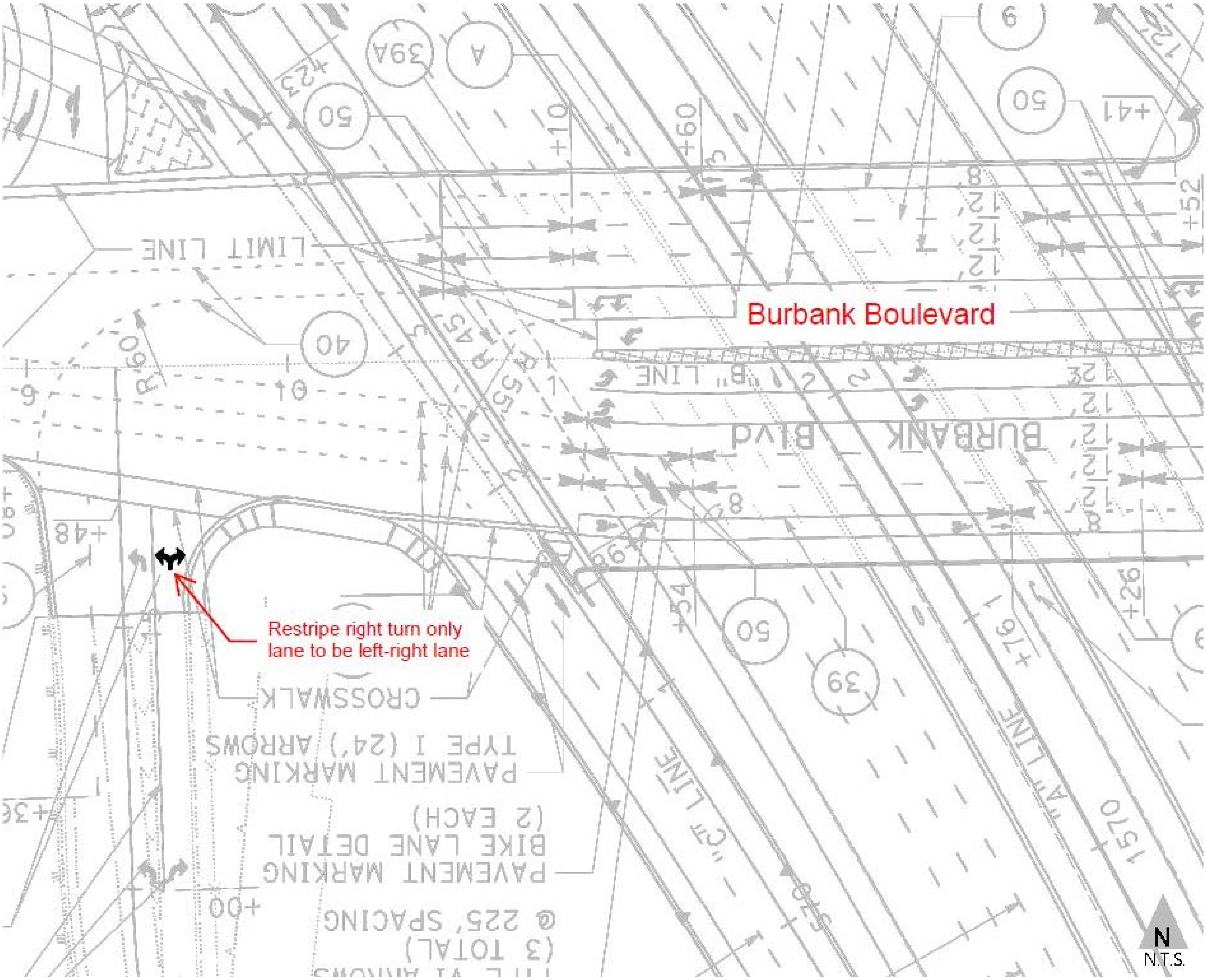
Figure 4.12-3 Proposed Mitigation Lane Configurations Future + Project Condition





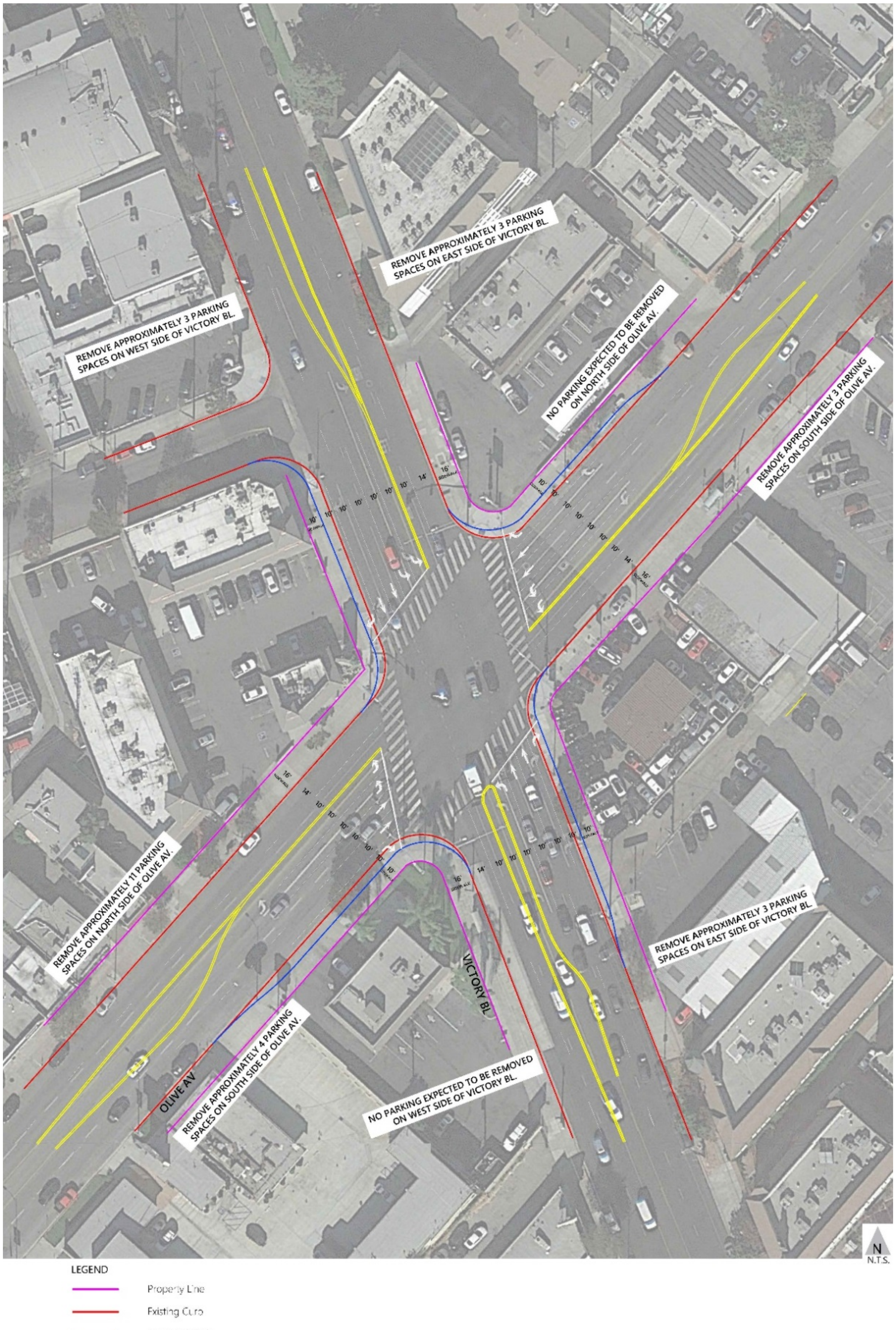
Source: Fehr and Peers, 2018

Figure 4.12-4 Burbank Boulevard Conceptual Partial Mitigation



Source: Fehr and Peers, 2018

Figure 4.12-5 Olive Avenue and Victory Boulevard Conceptual Mitigation



Source: Fehr and Peers, 2018

Table 4.12-8 Physical Mitigation Policy-Based Screening Analysis

No.	Intersection	Project or Future Impact?	Physical Mitigation Conflicts with General Plan Policies: Right-of-way (6' min. sidewalk)	Scale and Design	Complete Streets	Pedestrian Opportunities	Conflicts with ROW or Two Policies
9	I-5 Southbound Off-Ramp/N Front Street and W Burbank Boulevard[1]	Project and Future	No	No	No	No	No
10	N Victory Place and W Burbank Boulevard	Project and Future	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
14	Victory Boulevard and W Magnolia Boulevard	Future	**Yes**	No	**Yes**	No	**Yes**
18	S Victory Boulevard and W Olive Avenue[2]	Future	No	No	**Yes**	No	No

[1] Mitigation for this intersection is a partial mitigation

[2] Mitigation for this intersection is not a physical mitigation

Source: Fehr and Peers, 2018

Table 4.12-9 Existing (2018) + Project with Mitigation Intersection Level of Service Analysis

			Existing (2018)		Existing (2018) + Project		Impacts		Existing (2018) + Project with Mitigation		Impacts	
No.	Intersection	Peak Hour	V/C	LOS	V/C	LOS	Change in V/C	Significant?	V/C	LOS	Change in V/C	Significant?
9	I-5 Southbound Off-Ramp/N Front Street and W Burbank Boulevard[1]	AM	0.905	**E**	1.003	**F**	0.098	**Yes**	0.931	**E**	0.026	**Yes**
		PM	0.983	**E**	1.105	**F**	0.122	**Yes**	1.028	**F**	0.045	**Yes**
10	N Victory Place and W Burbank Boulevard[2]	AM	0.780	C	0.804	D	0.024	**Yes**	0.794	C	0.014	No
		PM	0.869	D	0.897	D	0.028	**Yes**	0.870	D	0.001	No

[1] Partial mitigation. Impact significant and unavoidable.

[2] Mitigation not feasible. Impact remains significant and unavoidable.

Source: Fehr and Peers, 2018

Table 4.12-10 Future (2022) + Project with Mitigation Intersection Level of Service Analysis

			Future Base (2022)		Future (2022) + Project		Impacts		Future (2022) + Project with Mitigation		Impacts	
No.	**Intersection**	**Peak Hour**	**V/C**	**LOS**	**V/C**	**LOS**	**Change in V/C**	**Significant?**	**V/C**	**LOS**	**Change in V/C**	**Significant?**
9	I-5 Southbound Off-Ramp/N Front Street and W Burbank Boulevard[1]	AM	1.019	**F**	1.140	**F**	0.121	**Yes**	1.060	**F**	0.041	**Yes**
		PM	0.992	**E**	1.092	**F**	0.100	**Yes**	1.003	**F**	0.011	**Yes**
10	N Victory Place and W Burbank Boulevard[2]	AM	0.847	D	0.871	D	0.024	**Yes**	0.862	D	0.015	No
		PM	0.948	**E**	0.977	**E**	0.029	**Yes**	0.951	**E**	0.003	No
14	Victory Boulevard and W Magnolia Boulevard[2] *Burbank2035 mitigation*	AM	0.901	**E**	0.914	**E**	0.013	**Yes**	0.865	D	-0.036	No
		PM	1.019	**F**	1.034	**F**	0.015	**Yes**	0.939	**E**	-0.080	No
14	Victory Boulevard and W Magnolia Boulevard *CSCS mitigation*	AM	0.901	**E**	0.914	**E**	0.013	**Yes**	0.888	D	-0.013	No
		PM	1.019	**F**	1.034	**F**	0.015	**Yes**	1.004	**F**	-0.015	No
18	S Victory Boulevard and W Olive Avenue *Burbank2035 mitigation*	AM	0.892	D	0.908	**E**	0.016	**Yes**	0.850	D	-0.042	No
		PM	1.008	**F**	1.011	**F**	0.003	No	0.903	**E**	-0.105	No
18	S Victory Boulevard and W Olive Avenue *CSCS mitigation*	AM	0.892	D	0.908	**E**	0.016	**Yes**	0.882	D	-0.010	No
		PM	1.008	**F**	1.011	**F**	0.003	No	0.969	**E**	-0.039	No

[1] Partial mitigation. Impact significant and unavoidable.
[2] Mitigation not feasible. Impact remains significant and unavoidable.
Source: Fehr and Peers, 2018

Table 4.12-11 Mitigation HCM Intersection Level of Service Analysis

No.	Intersection	Peak Hour	Existing (2018)		Existing + Project		Existing + Project + Mitigations		Change in Delay	Future (2022)		Future + Project		Future + Project + Mitigation		Change in Delay
			Delay	LOS	Delay	LOS	Delay	LOS		Delay	LOS	Delay	LOS	Delay	LOS	
9	I-5 Southbound Off-Ramp/ N Front Street and W Burbank Boulevard	AM	55.8	E	72.4	E	62.0	E	-10.4	81.5	F	95.5	F	86.9	F	-8.6
		PM	66.3	E	98.5	F	88.4	F	-10.1	77.0	E	99.8	F	89.8	F	-10.0
18	S. Victory Boulevard and W. Olive Avenue Burbank 2035 *mitigation*	AM	39.6	D	40.0	D	37.2	D	-2.8	48.4	D	48.9	D	44.9	D	-4.0
		PM	64.9	E	60.7	E	58.4	E	-2.3	86.4	F	78.2	E	79.7	E	1.5

Source: Fehr and Peers, 2018.

Mitigation Measures

One mitigation measure can fully mitigate the Project impact at Victory Boulevard and Olive Avenue. The Project impacts at Victory Boulevard and Magnolia Avenue and Victory Boulevard and Olive Avenue are able to be fully mitigated under Future plus Project conditions. One partial mitigation is recommended at Burbank Boulevard and the I-5 southbound off-ramps/Front Street but the intersection would remain significant and unavoidable under Existing plus Project and Future plus Project conditions. The remaining mitigation measure at Victory Place and Burbank Boulevards is not considered feasible and the impacted intersections would be considered significant and unavoidable under Existing plus Project and Future plus Project conditions.

T-1a I-5 Southbound Off-Ramp/N Front Street and Burbank Boulevard

Restripe I-5 Southbound Off-Ramp/N Front Street and Burbank Boulevard at the northbound approach. Convert the existing right-turn lane on northbound Front Street to a left/right-turn lane to provide one left turn lane and one shared left-right lane.

T-1b Victory Boulevard and Olive Avenue and Victory Boulevard and Magnolia Avenue

Optimize Burbank's Citywide Signal Control System (CSCS) along the Victory Boulevard corridor between Burbank Boulevard and Alameda Avenue before the Project opening date. The City's traffic signal control hardware shall be programmed to upgrade eight traffic signals in the corridor to adaptive control, and additional traffic loops and traffic monitoring hardware shall be installed.

Significance After Mitigation

Under existing plus Project conditions with mitigation, Intersection No. 9 (I-5 Southbound Off Ramp/N. Front Street and Burbank Boulevard) would operate at a LOS E and LOS F in the AM and PM peak hours, respectively, and result in a change in V/C of 0.026 and 0.045 in the AM and PM peak hours, respectively. Intersection No. 10 (Victory Place and Burbank Boulevard) would operate at a LOS C and LOS D in the AM and PM peak hours, respectively, and result in a change in V/C of 0.014 and 0.001 in the AM and PM peak hours, respectively. The mitigation for the Intersection No. 9 passes the policy-based screening analysis, but the impact remains significant and unavoidable under Existing plus Project conditions because the mitigation is partial and does not reduce the impact to less than significant. Project impacts at Intersection 10 are considered significant and unavoidable under Existing plus Project conditions since the mitigation measure does not pass the policy-based screening analysis.

Under future plus Project conditions with mitigation, Intersection No. 9 would operate at a LOS F in both the AM and PM peak hours, and result in a change in V/C of 0.041 and 0.011 in the AM and PM peak hours, respectively. Intersection No. 10 would operate at a LOS D and LOS E in the AM and PM peak hours, respectively, and result in a change in V/C in 0.015 and 0.003 in the AM and PM peak hours, respectively. With implementation of Burbank2035 mitigation, intersection No. 14 (Victory Boulevard and Magnolia Boulevard) would operate at a LOS D and E in the AM and PM peak hours, respectively, and result in a change in V/C of -0.036 and -0.080 in the AM and PM peak hours, respectively. With implementation of CSCS mitigation, intersection No. 14 would operate at a LOS D and F in the AM and PM peak hours, respectively, and result in a change in V/C of -0.013 and -0.015 in the AM and PM peak hours, respectively. With implementation of Burbank2035 mitigation, intersection No. 18 (Victory Boulevard and Olive Avenue) would operate at a LOS D and LOS E in the

AM and PM peak hours, respectively, and would result in a V/C of -0.042 and -0.105, respectively. With implementation of CSCS mitigation, intersection No. 18 would operate at a LOS D and LOS E in the AM and PM peak hours, respectively, and would result in a V/C of -0.010 and -0.039, respectively. The impacts at Intersection No. 14 and 18 can be fully mitigated under Future plus Project conditions.

As noted above, partial mitigation at Burbank Boulevard and the I-5 southbound off-ramps/Front Street would be implemented, but impacts at that intersection would remain significant and unavoidable under Existing plus Project and Future plus Project conditions. The remaining mitigation measure at Victory Place and Burbank Boulevards is not considered feasible and the impacted intersections would be considered significant and unavoidable under Existing plus Project and Future plus Project conditions.

Threshold 2:	Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

IMPACT T-2 THE PROPOSED PROJECT WOULD NOT ADD ENOUGH NEW TRAFFIC TO EXCEED THE ARTERIAL OR FREEWAY ANALYSIS CRITERIA ESTABLISHED IN THE LOS ANGELES COUNTY CMP. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Congestion Management Program Analysis

Arterial Monitoring Analysis

None of the study area intersections are CMP arterial monitoring locations. The CMP arterial monitoring stations closest to the proposed Project site are located at Victory Boulevard and Woodman Avenue (approximately seven miles west of the Project site) and Ventura Boulevard and Lankershim Boulevard (approximately four miles south of the Project site). Based on the Project trip distribution and trip generation, the Project would not add 50 peak hour vehicle trips through the CMP arterial monitoring station. Project trips are anticipated to disperse among the transportation network due to the extended distance between the Project site and the monitoring station. The proposed Project would not add enough new traffic to exceed the arterial analysis criteria of 50 vehicle trips at the above-mentioned location. Therefore, no further CMP arterial analysis is required.

Freeway Analysis

Regional access to the Project site is provided by Interstate 5, State Route (SR) 170, and SR 134 Freeways. Interstate 5 lies directly north and east of the site, State Route 170 lies approximately 5 miles to the west of the site, and SR-134 lies approximately 2 miles south of the site. The CMP freeway monitoring stations closest to the Project site include the following:

- I-5 Freeway north of Burbank Boulevard Burbank Ramps (north of the Project site)
- I-5 Freeway at Osborne Street, north of SR-170 (approximately seven miles north of the site)
- I-5 Freeway south of Colorado Boulevard Exit (approximately four south miles from the site)
- SR-134 at Forman Avenue (approximately southwest miles from the site)

- SR-134 east of Central Avenue (approximately southeast miles from the site)
- SR-170 south of Sherman Way (approximately five west miles from the site)

The Project would generate an estimated 314 trips in the AM peak hour and 398 trips in the PM peak hour. Based on the Project distribution patterns shown in Figure 4-12-2, approximately 15 percent of Project traffic is expected to travel through the monitoring station at Interstate-5 Freeway north of Burbank Boulevard Burbank Ramps, resulting in approximately 47 additional trips during the AM peak hour and 60 additional trips during the PM peak hour. For all other monitoring stations, fewer than 150 trips would be added during the AM or PM peak hours in either direction at any of the freeway segments in the vicinity of the study area. Because fewer than 150 trips would be added during the AM or PM peak hours in either direction at any of the freeway segments near the study area, no further analysis of the freeway segments is required for CMP purposes.

Mitigation Measures

No mitigation measures are required.

Threshold 4:	Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

IMPACT T-3 PROJECT DRIVEWAYS WOULD PROVIDE ADEQUATE SITE ACCESS AND WOULD NOT CREATE HAZARDOUS TRAFFIC CONDITIONS. THEREFORE, IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT WOULD BE LESS THAN SIGNIFICANT.

The proposed Project includes five driveways along Front Street. Primary vehicular access to the site would be from two residential driveways and one hotel driveway. The northernmost driveway is an outbound only driveway that would provide loading access for the residential units as well as emergency access. The southernmost driveway would be used by both residents and hotel guests as a secondary access point. All driveways would be unsignalized, except for the hotel driveway which would be signalized primarily to facilitate bicycle and pedestrian access to the 2-way Class IV cycle track planned to be built along the west side of Front Street.

The proposed Project does not include turn restrictions at any of the driveways. Sidewalks are provided along Front Street on the east side of the street, fronting the Project site. These sidewalks would be widened to 15 feet per dedication to the City.

All driveways are projected to operate at LOS B or better under Existing plus Project and Future plus Project conditions. The LOS worksheets for driveways are provided in Appendix D of the Transportation Impact Analysis (see Appendix J). Therefore, the proposed driveways would provide adequate access to the Project site and safe ingress and egress conditions for pedestrians. Impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Threshold 5:	Would the project result in inadequate emergency access?

IMPACT T-4 THE PROPOSED PROJECT DOES NOT INCLUDE DESIGN FEATURES THAT WOULD IMPEDE EMERGENCY VEHICLE ACCESS. IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT WOULD BE LESS THAN SIGNIFICANT.

Emergency vehicle access is required to provide access by fire, police, and other emergency vehicles into the Project site. Providing adequate emergency vehicle access ensures that these vehicles are able to easily and quickly respond to service calls. Emergency vehicles would access the site via the southernmost driveway that leads to a fire truck access lane on the eastern perimeter of the Project site. An outbound only driveway exists at the northern edge of the Project site, specifically for emergency and service vehicles only. To access this driveway, a fire truck would be required to exit this driveway heading southbound from the Project site as the design of the driveway restricts the truck turning radius from allowing fire trucks to exit and turn right from the site headed on Front Street.

The California Fire Code establishes the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Burbank Fire Department conducts safety inspections in accordance with the California Fire Code to ensure compliance.

The proposed internal roadways that provide fire access, referred to as fire apparatus access roads, would comply with the California Fire Code and are discussed within Section 503.1. Fire apparatus access roads shall extend to within 150 feet of all portions of the facility, shall be no less than 20 feet wide, and would include turning radius that meet the discretion of the local fire code official. For fire apparatus access roads with dead ends where the length of the street is greater than 150 feet, an approved area for turning around fire apparatuses shall be provided. Based on the site plan for the Project, all internal streets comply with the California Fire Code, with the exception of the outbound only driveway at the northern edge of the property which does not meet the truck turning radius for right-turns. Fire trucks would only be able to turn left from the driveway headed south on Front Street. The City's Fire Department has reviewed the plans and provided approval of driveway access for emergency vehicles. Therefore, potential impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Threshold 6:	Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?

IMPACT T-5 THE PROJECT WOULD NOT CONFLICT WITH APPLICABLE POLICIES ASSOCIATED WITH PUBLIC TRANSIT; HOWEVER, THE PROPOSED PROJECT WOULD RESULT IN DISRUPTIONS TO THE LOCAL ACTIVE TRANSPORTATION SYSTEM INCLUDING BICYCLE AND PEDESTRIAN ROUTES. IMPLEMENTATION OF MITIGATION WOULD REDUCE IMPACTS RELATED TO BICYCLE AND PEDESTRIAN SYSTEMS TO A LESS THAN SIGNIFICANT LEVEL.

Potential impacts to existing and planned transit service, bicycle facilities, and pedestrian facilities are discussed below.

Transit System

This section discusses impacts related to the transit system. This section evaluates whether impacts could include disruptions to existing transit service, interference with planned transit facilities, conflict with adopted transit system plans, guidelines, policies, or standards, or create demand for public transit above the available capacity.

DISRUPTIONS TO EXISTING TRANSIT SERVICE

A significant impact would occur if a project or project-related mitigation disrupts existing transit services or facilities. This includes disruptions on transit streets caused by proposed project driveways, impacts to transit stops/shelters, and impacts to transit operations from traffic improvements proposed or resulting from a project. Bus stops and ADA-accessible sidewalks and curb ramps that provide access to the bus stops are currently provided on Front Street. The proposed Project is not anticipated to impact existing transit services near the Project site. Therefore, impacts would be less than significant.

INTERFERENCE WITH PLANNED TRANSIT SERVICES

A significant impact occurs if a project interferes with planned transit services or facilities. Based on a review of available documents, including Burbank Bus's website and Metro's *Long Range Transportation Plan* (2009), there are no planned transit services that would be impacted by the development of the project site. Therefore, the impact is less than significant.

Regional Transit Impact Analysis

Potential increases in transit person trips generated by the proposed Project were estimated. Appendix B-4 of the 2010 CMP provides a methodology for estimating the number of transit trips expected to result from a proposed Project based on the projected number of vehicle trips. This methodology assumes an average vehicle ridership (AVR) factor of 1.4 in order to estimate the number of person trips to and from the Project and then provides guidance regarding the percentage of person trips assigned to public transit depending on the type of use (commercial/other versus residential) and the proximity to transit services. Appendix B-4 of the 2004 CMP recommends observing the fixed-route local bus services within ¼ mile of the Project site and express bus routes and rail service within two miles of the Project site.

The Project site is served by a high level of public transit. The Project is located approximately ¼ mile from the existing Burbank Metrolink Station. Six Local Metro bus routes, one BurbankBus route, and one Glendale Beeline route have a bus stop at the Downtown Burbank Metrolink Station.

As part of the trip generation estimates, a combined transit, walk, and bicycle credit of 10% was taken for the hotel and residential land uses and a 5% credit was taken for the retail and restaurant land uses, in consultation with the City of Burbank. Excluding the transit credit, the proposed Project would have an estimated increase in vehicle trip generation of approximately 349 net vehicle trips during the AM peak hour and 442 during the PM peak hour. Applying the CMP guidelines by converting the vehicle trips to person trips by multiplying by a 1.4 AVR and applying the transit credit would result in approximately 49 new transit person trips during the weekday AM peak hour and 62 during the PM peak hour.

Given the frequency of the transit service in close proximity to the Project site, the transit capacity is over 5,700 persons in each the AM and PM peak periods. Of this capacity, approximately 60% is provided by the Downtown Burbank Metrolink Station, and 40% is provided by existing bus service.

The proposed Project would use approximately 1% of available transit capacity during the peak hours. Based on this estimate, the Project's impact would be less than significant.

Consistency with Adopted Transit System Plans, Guidelines, Policies, or Standards

A significant impact would occur if a project conflicts or creates inconsistencies with adopted transit system plans, guidelines, policies, or standards.

2016-2040 RTP/SCS CONSISTENCY

As discussed above under Regulatory Setting, the goals of the 2016-2040 RTP/SCS focus on mobility, a strong economy and sustainability. The RTP/SCS aims to balance future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. The 2016-2040 RTP/SCS is intended to help guide transportation and land use decisions and public investments (SCAG 2016).

The proposed Project would involve the construction of a mixed-use transit-oriented development that would include two residential buildings and a hotel building (refer to the Regulatory Setting above for the goals of the RTP/SCS). The Project would include a retail gallery with a pedestrian link to Burbank Boulevard, at the northern portion of the site, and a publicly accessible, privately-maintained open space plaza with a pedestrian bridge to Magnolia Street on the southern portion of the Project site. The proposed Project would be located approximately 0.25 mile west of Downtown Burbank and approximately 0.2 mile north of the Downtown Burbank Metrolink Station, which would promote transit-oriented development. Additionally, the proposed Project would provide bicycle parking and add a bike lane along Front Street to provide improved bicycle access for Project, local residents, and employees. These amenity spaces and links to the adjacent Burbank Town Center would enhance pedestrian connections from the proposed Project to Downtown Burbank. Therefore, consistent with the goals identified in SCAG's 2040 RTP/SCS, the proposed Project would protect the environment and health of residents by improving air quality and encouraging active transportation (e.g., bicycling and walking) and encourage land use and growth patterns that facilitate transit and active transportation.

GENERAL PLAN CONSISTENCY

As discussed above under Regulatory Setting, the General Plan includes policies supporting the development of alternative transportation programs. The proposed Project would support land use decisions that encourage multimodal transportation. Additionally, the proposed Project would be located in an area that could be accessed by local and regional transit service that provides service to major employment centers, shopping districts, regional transit centers, and residential areas.

The proposed Project would be located in close proximity to Downtown Burbank and the Downtown Burbank Metrolink Station. The mixed-use residential, hotel and retail components of the proposed Project, and proximity to the Downtown Burbank Metrolink Station, would promote transit-oriented development. Additionally, the proposed Project would provide bicycle parking and would add a bike lane along Front Street to provide improved bicycle access for Project and area residents and employees. The Project would construct a plaza and pedestrian bridge that connects to Magnolia Street and retail gallery at Burbank Boulevard, which would provide connections to the adjacent Burbank Town Center and enhance pedestrian connections to Downtown. Therefore, the proposed Project would be consistent with this policy.

The proposed Project would not result in any significant impacts to increased inconsistencies with the goals and policies associated with transit usage. Therefore, the impact is less than significant.

Bicycle Network Project Impacts

This section reviews project-related impacts on the bicycle network in the study area. Potential impacts include disruptions to existing facilities, interference with planned facilities, and conflicts with adopted plans, guidelines, policies, or standards relating to bicycles.

DISRUPTIONS TO EXISTING FACILITIES

A significant impact would occur if a project disrupts existing bicycle facilities. Bicycle facilities planned within the study area include on-street bicycle lanes along Glenoaks Boulevard, 3rd Street, San Fernando Boulevard, 1st Street (Ikea Way), Front Street, Chandler Boulevard, Burbank Boulevard, Olive Avenue, and Magnolia Boulevard. Neither the Project nor planned mitigations would interfere with existing bicycle facilities. Thus, the Project impact is not significant.

INTERFERENCE WITH PLANNED BICYCLE FACILITIES

A significant impact would occur if a project interferes with planned bicycle facilities. This includes failure to dedicate rights-of-way for planned on- and off-street bicycle facilities included in an adopted Bicycle Specific Plan or to contribute towards construction of planned bicycle facilities along the project frontage. Bicycle facilities planned within the study area include on-street bike lanes along 1st Street/Ikea Way, Magnolia Boulevard, Front Street, and Chandler Boulevard. Neither the proposed Project nor planned mitigation would interfere with the planned facilities. Thus, impacts would be less than significant.

CONFLICTS WITH ADOPTED BICYCLE PLANS, GUIDELINES, POLICIES, OR STANDARDS

A significant impact would occur if the Project conflicts or creates inconsistencies with adopted bicycle system, plans, guidelines, policies, or standards. In 2009, the City of Burbank adopted a Bicycle Master Plan. The Bicycle Master Plan recognized the importance of the bicycle as a viable means of transportation and provided specific recommendations for facilities and programs for the next 25 years. Policy 2 of the Bicycle Master Plan requires that the City provide bicycle-friendly connections to major employment centers. The Project plans to construct a raised and protected bi-directional Class IV bicycle facility from Burbank Boulevard to the Downtown Burbank Metrolink Station along the east side of North Front Street. This facility would connect bicyclists to the Downtown Burbank Metrolink Station. The Project's connection to the Downtown Burbank Metrolink Station would introduce new bicycle trips that would be required to cross North Front Street from the Project site, where there are currently no existing signalized intersections or crossings. Because of the high posted speed limit of 40 miles per hour (mph) on North Front Street and the increased bicyclist activity at this location due to the Project, the Project creates a significant impact at this location.

Project bicycle trips travelling between the Downtown Burbank Metrolink Station and the Project site would need to cross North Front Street to access the station. To mitigate the bicycle network impact, a crosswalk and rapid rectangular flashing beacons (RRFB) should be installed at the Downtown Burbank Metrolink Station northernmost driveway to facilitate access for bicyclists to cross from the eastern side of North Front Street to the western side of North Front Street where the station is located. The Project applicant would be responsible for the installation of the crosswalk and RRFB at the Downtown Burbank Metrolink Station northern driveway.

Pedestrian Network Project Impacts

This section reviews project-related impacts on the pedestrian network in the study area. Potential impacts include disruptions on existing facilities, interference with planned facilities, and conflicts with adopted plans, guidelines, policies, or standards relating to pedestrians.

Disruptions to Existing Facilities

A significant impact occurs if a project disrupts existing pedestrian facilities. This can include adding new vehicular, pedestrian, or bicycle traffic at locations experiencing pedestrian safety concerns including: reduction in the number of pedestrian-acceptable gaps at unsignalized crossings or queues spilling back through pedestrian crossings.

Pedestrian walkways exist near the Project site along Front Street, Burbank Boulevard, Victory Place and Victory Boulevard. The pedestrian network would be maintained along these ways. Along Front Street, there is currently a six-foot sidewalk along the eastern side of the street. This sidewalk would be widened to 11-feet along the Project site per dedication to the City by the Project. There is currently no sidewalk along the western side of Front Street. The Project would introduce new pedestrian trips, some of which would need to cross the eastern side of Front Street to access the Downtown Burbank Metrolink Station on the western side of Front Street. There are no existing signalized intersections along Front Street between the Project site and the Downtown Burbank Metrolink Station that would connect the east side and the west side of the street. There is one pedestrian crossing south of the Magnolia Boulevard overcrossing facilitated through curb ramps, but no crosswalk striping or signage is present and there is no sidewalk on the west side of Front Street. Because of the high posted speed limit of 40 mph on Front Street and the increased pedestrian activity at this location due to the Project, the Project creates a significant pedestrian impact at this location.

Project pedestrian trips travelling between the Downtown Burbank Metrolink Station and the Project site need to cross Front Street to access the station. To mitigate the pedestrian network impact, a pedestrian crosswalk should be installed south of Magnolia Boulevard at the Downtown Burbank Metrolink Station northernmost driveway with RRFBs. The project applicant would be responsible for the installation of the pedestrian crosswalk with appropriate signage, ADA ramps, and RRFBs at the Downtown Burbank Metrolink Station northern driveway.

There are also existing ADA curb ramps that provide access to Front Street at the northern part of the Downtown Burbank Metrolink Station directly south of the Magnolia Boulevard overcrossing. These ramps are intended to provide ADA and pedestrian access from the east side of the street to the west side of the street. However, it is not facilitated by any signage or striping and has poor sight lines for visibility by motorists. The existing ADA curb ramps should be removed at this location.

The widened sidewalk along the eastern edge of Front Street should be extended south of the Project site to the Downtown Burbank Metrolink Station. The Project applicant would be responsible for the installation of the pedestrian crosswalk, ADA ramps, and RRFBs.

Interference with Planned Pedestrian Facilities

A significant impact occurs if a project interferes with planned pedestrian facilities. In existing or planned urbanized areas, main streets, or pedestrian districts, this can include impacts to the quality of the walking environment. No planned pedestrian facilities would be affected by the proposed Project. Impact would be less than significant.

CONFLICTS WITH ADOPTED PEDESTRIAN PLANS, GUIDELINES, POLICIES, OR STANDARDS

A significant impact occurs if a project conflicts or creates inconsistencies with adopted pedestrian system plans, guidelines, policies, or standards. The proposed Project does not conflict with adopted pedestrian system plans, guidelines, policies, or standards.

Mitigation Measures

T-5a Bicycle and Pedestrian Access

A Class IV cycle track shall be installed on the eastern side of Front Street along with an 11 foot pedestrian path of travel from the Project site to the Downtown Burbank Metrolink Station's northernmost driveway. The Project shall install ADA curb ramps, crosswalks, and RRFBs at the northernmost driveway of the Downtown Burbank Metrolink Station in order to provide access to the station for pedestrians and bicyclists.

T-5b ADA Access

A pedestrian crosswalk shall be installed at Front Street at the northernmost driveway of the Downtown Burbank Metrolink Station directly south of the Magnolia Boulevard overcrossing. The crosswalk shall include appropriate signage and a rectangular rapid flashing beacon (RRFB). The widened sidewalk along the eastern edge of Front Street shall be extended south of the Project site to the Downtown Burbank Metrolink Station.

Significance After Mitigation

Implementation of Mitigation Measures T-5a and T-5b would minimize the pedestrian impacts at Project site to a less than significant level.

Threshold 7:	Would the construction of the proposed Project substantially affect vehicular traffic, bicycles and pedestrians, transit or emergency access?

IMPACT T-6 CONSTRUCTION ACTIVITIES FOR THE PROPOSED PROJECT WOULD RESULT IN TRAFFIC IMPACTS DUE TO LANE CLOSURES ALONG FRONT STREET, HAUL TRUCK TRAFFIC, EQUIPMENT AND MATERIAL DELIVERIES, WORKER TRAFFIC, AND WORKER PARKING. IMPACTS ASSOCIATED WITH CONSTRUCTION OF THE PROPOSED PROJECT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

As discussed in Subsection 2.7.5 of Section 2, *Project Description*, construction is anticipated to begin in September 2019 and is expected to last approximately five years. The Project is anticipated to be constructed in three phases. Construction hours are Monday through Friday: 7:00 AM to 7:00 PM, Saturdays: 8:00 AM to 5:00 PM, in accordance with the City of Burbank Building Code Requirements and Construction Regulations.

Truck Routes

When the Burbank Bridge is scheduled to be under construction between July 2019 and October 2020, the following haul truck route would be utilized:

- Outbound trucks would head north on Front Street to Burbank Boulevard to Victory Boulevard to the I-5 Freeway to access the two landfill sites.

- Inbound trucks would head south on the I-5 Freeway and exit on Front Street and continue straight to the Project site.
- When the Burbank Bridge is available for use, the following haul truck route would be utilized:
- Outbound trucks would head north on Front Street over the Burbank Bridge to San Fernando Boulevard to the I-5 Freeway to access the two landfill sites.
- Inbound trucks would head south on the I-5 Freeway and exit on Front Street and continue straight to the Project site.

Temporary Traffic Impacts

Construction traffic impacts on roadway facilities would be significant if the construction creates prolonged impact due to lane closure, need for temporary signals, emergency vehicle access, traffic hazards to bicycles and pedestrians, damage to the roadbed, truck traffic on roadways not assigned as truck routes, and other similar impediments to circulation.

TRUCK TRAFFIC

During construction, haul trucks would regularly travel to and from the Project site for activities that would include, but not be limited to removal debris and fill, delivery of equipment and materials, and worker traffic. Up to 59 haul truck trips per day are anticipated during site preparation and 73 haul truck trips per day are expected during grading. Approximately 201 equipment/deliveries/vendor truck trips per day are expected to occur during the building construction phases. The increase in truck traffic could potentially have a significant traffic impact on local roadways. In addition, lane closures are anticipated along Front Street during construction. Since travel lane closures during construction are anticipated, the temporary construction impacts on the roadway network would be considered significant.

PEDESTRIAN AND VEHICLE ACCESS TO EXISTING LAND USES

The existing land uses near the vicinity of the construction site would remain open throughout construction. Pedestrian and vehicular access to properties located nearby to the Project site would be open and unobstructed for the duration of construction. Since Project construction would not block any vehicle or pedestrian access to other parcels fronting the construction area, impacts would be less than significant.

TRANSIT

Bus stops are not located on Front Street. Construction is not anticipated to affect bus operations as construction and staging is not immediately adjacent to any bus stops. Therefore, the construction impacts on transit operations would be less than significant.

PARKING

On-street parking is not permitted on Front Street along the Project frontage. As the construction of the Project would not result in the loss of any on-street parking, construction impacts on on-street parking would be less than significant.

CONSTRUCTION EMPLOYEES

The number of construction workers would vary throughout the construction period with the building construction phases generating the highest number of trips. Site preparation is expected to involve up to 9 workers and grading is expected to involve up to 8 workers. The building construction phases are expected to involve up to a total of 470 workers per day. During the site preparation and grading phases and the first portion of the building construction while the parking garage is under construction, it is anticipated that construction employees would be parked offsite, with the off-street location to be identified at a later date. Once the subterranean parking structure component of the Project is complete, construction workers would park in the garage.

Mitigation Measures

T-6 Construction Management Plan

Prior to issuance of any grading and/or demolition permits, whichever occurs first, a Construction Management Plan (CMP) shall be submitted for review and approval by the City Traffic Engineer and Building Official. The requirement for a Construction Management Plan shall be incorporated into the Project specifications and subject to verification by the City Traffic Engineer and Building Official prior to final plan approval. The Construction Management Plan shall, at a minimum, address the following:

- Traffic control for any street closure, detour, or other disruption to traffic circulation.
- Identify the routes that construction vehicles shall utilize for the delivery of construction materials (i.e., lumber, tiles, piping, windows, etc.), to access the site, traffic controls and detours, and proposed construction phasing plan for the Project.
- Require the Project Applicant to keep all haul routes clean and free of debris, including but not limited to gravel and dirt as a result of its operations. The Project Applicant shall clean adjacent streets, as directed by the City Traffic Engineer (or representative of the City Traffic Engineer), of any material which may have been spilled, tracked, or blown onto adjacent streets or areas.
- Hauling or transport of oversize loads shall be allowed between the hours of 9:00 a.m. and 3:00 p.m. only, Monday through Friday, unless approved otherwise by the City Traffic Engineer. No hauling or transport shall be allowed during nighttime hours, weekends, or Federal holidays.
- Use of local streets shall be prohibited unless otherwise provided for in the CMP.
- Haul trucks entering or exiting public streets shall at all times yield to public traffic.
- If hauling operations cause any damage to existing pavement, streets, curbs, and/or gutters along the haul route, the Project Applicant shall be fully responsible for repairs. The repairs shall be completed to the satisfaction of the City Traffic Engineer.
- All construction-related parking and staging of vehicles shall be kept out of the adjacent public roadways and shall occur on-site or at a nearby site approved by the City Traffic Engineer as part of the CMP.
- The Construction Management Plan shall meet standards established in the current California Manual on Uniform Traffic Control Device as well as City of Burbank requirements.

Significance After Mitigation

Mitigation Measure T-6 would minimize traffic interference from construction activities and potential parking impacts. Implementation of these measures would reduce impacts to a less than significant level.

c. Cumulative Impacts

A complete analysis of the project's contribution to cumulative impacts (future conditions) is discussed and included under Impact T-1.

d. Significant Unavoidable Impacts

Despite compliance with mitigation measures, the proposed Project would result in significant and unavoidable impacts regarding the following:

- I-5 Southbound (SB) Off Ramp/Front Street and Burbank Boulevard (Intersection #9)
- Victory Place & Burbank Boulevard (Intersection #10)

If the City of Burbank approves the Project, the City shall be required to make findings in accordance with CEQA Guidelines Section 15091 and adopt a Statement of Overriding Considerations in accordance with CEQA Guidelines Section 15093.

4.13 Utilities and Service Systems

This section analyzes potential impacts of the Project to utilities and service systems, and evaluates the construction and operation impacts associated with the Project. This section is based on a review of existing available pertinent information and maps, relevant regulatory information, and technical studies prepared for the Project, which are summarized below. Topics addressed in this section include wastewater, water supply, and solid waste facilities. Stormwater facilities and water quality are discussed in detail in Section 4.7, *Hydrology and Water Quality*. Rincon Consultants, Inc. prepared a Water Supply Assessment (WSA) to determine whether the identified water supply or water supplier will be able to meet projected demands for the Project, in addition to existing and planned future uses, over a 20-year projection and with consideration of normal, dry, and multi-dry water years. The WSA is incorporated into the analysis presented below and presented in Appendix K. A Sewer Capacity Analysis was prepared by the City of Burbank to determine whether adequate infrastructure is available or would be required in order to service the Project. The Sewer Capacity Analysis is provided in Appendix L. A Hydrology Report was prepared by Fuscoe Engineering in November 2017 and was revised in 2018. The Hydrology report discusses existing and proposed on and offsite hydrological conditions, and is provided as Appendix H of this EIR. Energy and electrical systems are discussed in Section 5, *Other CEQA Required Discussions.*

4.13.1 Setting

a. Wastewater Collection and Treatment

Wastewater generated in Burbank, including the Project site, is collected and conveyed by approximately 230 miles of underground pipelines ranging in diameter from six inches to 30 inches. The City's wastewater conveyance system also includes two pump stations and 19 diversion manholes. Additionally, the Los Angeles 48-inch North Outfall Sewer (NOS) line runs from west to east through the southern portion of the City. A small number of flows go directly to the NOS. Wastewater flows to the Burbank Water Reclamation Plant (BWRP) that has a design capacity of 12.5 million gallons per day (MGD) and currently treats approximately 9 MGD (BWP 2016, City of Burbank 2013, City of Burbank 2018). The BWRP produces a disinfected tertiary effluent that is discharged to either the Burbank Western Channel or to the City's recycled water distribution system for non-potable use. The discharged tertiary effluent meets discharge limitations identified in its National Pollutant Discharge Elimination System (NPDES) permit issued by the Los Angeles Regional Water Quality Control Board (RWQCB). The BWRP's effluent also meets the most stringent water quality criteria for recycled water, as defined in the California Code of Regulations, Title 22, Division 4, Chapter 3 requirement as Disinfected Tertiary Recycled Water. The City of Burbank Department of Public Works is responsible for maintaining, replacing, and upgrading the City's sewer collection system.

According to the Sewer Capacity Analysis, existing sewer lines are located within most of the public streets adjacent to the Project Site. As discussed in the Sewer Capacity Analysis, per the previously approved Interstate 5 widening project plans, the 8-inch sewer line located north of the proposed development will be removed, and a portion of the 30-inch sewer north of the site would be relocated during Project implementation. Collectively existing and proposed facilities are sufficient to serve the sewer capacity requirements of the proposed project.

b. Water Supply

The Project site is currently vacant and does not generate demand for water, but domestic water service for the Project site would be provided by Burbank Water and Power (BWP), a local water supplier that provides water to customers in Burbank. Figure 4.13-1 shows BWP's service area.

The City of Burbank's water comes from two sources: local groundwater from the San Fernando Valley Groundwater Basin (San Fernando Basin) and water purchased from Metropolitan Water District of Southern California (Metropolitan), a regional wholesaler. Figure 4.13-2 shows the boundaries of the San Fernando Basin. Water purchased from Metropolitan is imported from the Colorado River Aqueduct and the State Water Project. BWP does not have ownership rights to the naturally occurring groundwater underneath the City of Burbank. However, BWP receives a right to pump groundwater through groundwater credits. As discussed further in the Section 5.2 of the WSA (see Appendix K) Groundwater provided by BWP is managed in accordance with Upper Los Angeles River Adjudication Judgment, administered by the Upper Los Angeles River Area Watermaster as the Watermaster. The adjudication Judgment limits production from the San Fernando Basin to ensure the long-term reliability of the basin. In addition, BWP uses recycled water to meet some of its water needs such as outdoor irrigation and power plant cooling. Table 4.13-1 summarizes BWP's current and projected water resources.

Burbank's water demand has declined since the early 1970s. BWP estimates that potable water demand will continue to decline between 2020 and 2040, primarily due to water conservation. Regulatory orders and management agencies ensure the sustainability and reliability of water supplies currently used in the City of Burbank. Additionally, local water suppliers identify potential future supply sources to augment water supplies and further insulate the region from hydrological uncertainty.

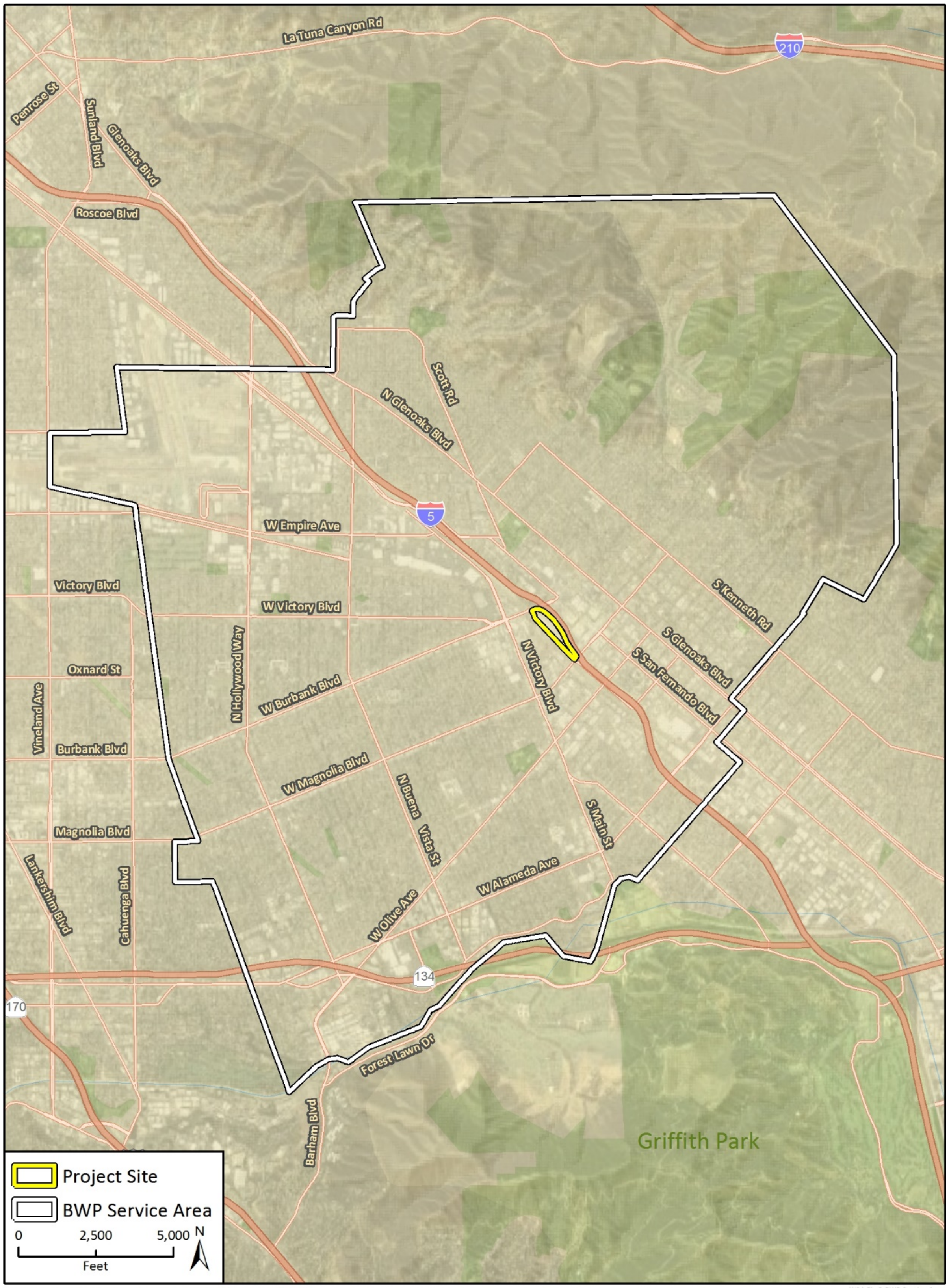
BWRP also produces a disinfected tertiary effluent that is approved for all uses including full body contact, with the exception of human consumption. Up to 10,000 AF of recycled water per year is available for reuse, and can be used in one of three ways:

- Flowed via gravity pipeline to the BWP campus
- Pumped into the recycled water distribution system
- Discharged to the Burbank Wester Channel adjacent to the BWRP

Recycled water produced at the BWRP is used for power production, landscape irrigation, and evaporative cooling. BWP is currently seeking grant funding to study the feasibility of both indirect and direct potable reuse for the use of BWP's excess recycled water. (BWP 2016)

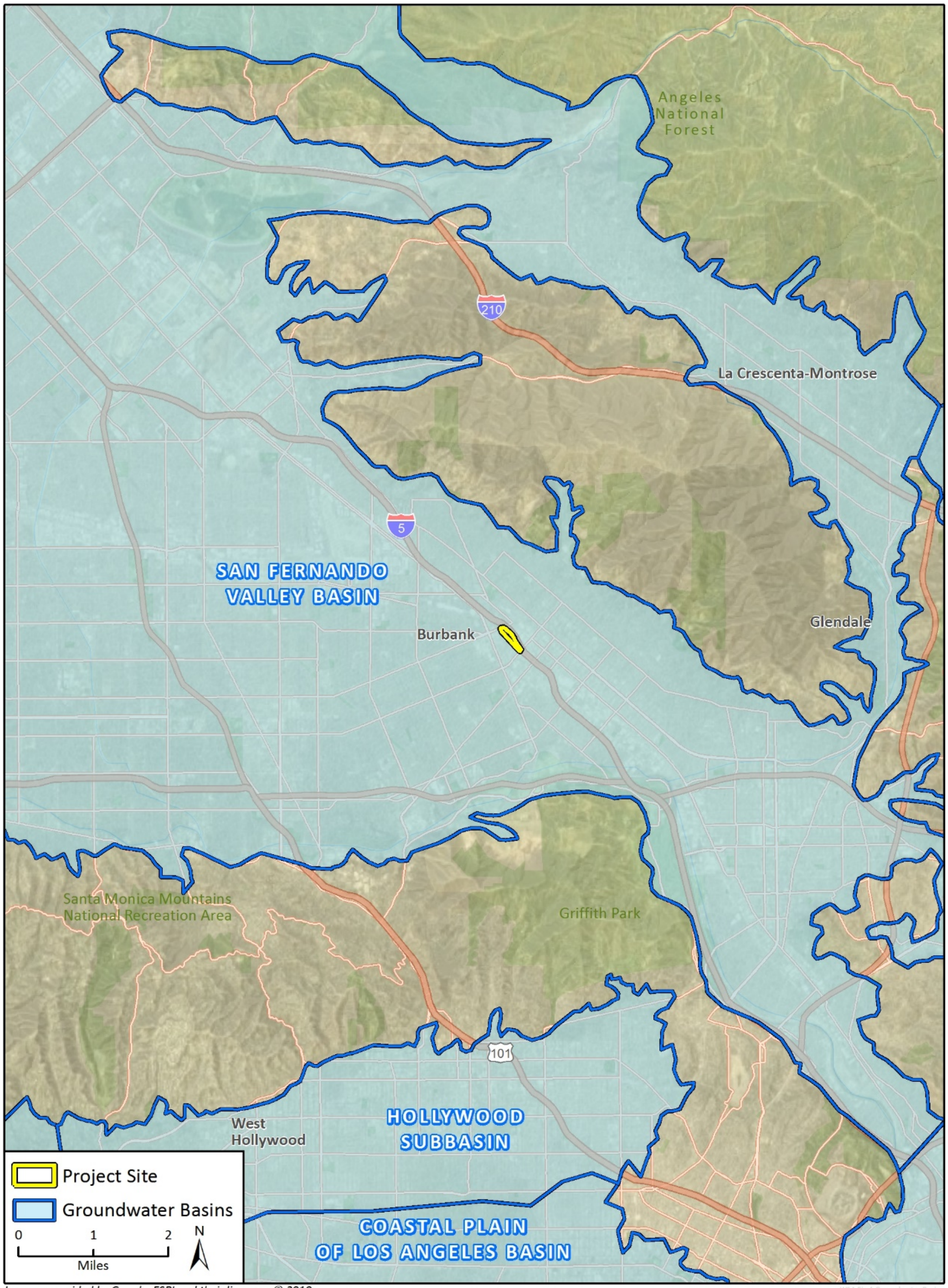
The majority of BWP's water supply comes from Metropolitan imports. Metropolitan's projected demands for Burbank are shown in Table 4.13-2. These projected demands are higher than BWP's projections. Therefore, Metropolitan will have enough water to meet BWP's future demands.

Figure 4.13-1 Burbank Water and Power Service Area



Imagery provided by Google, ESRI and their licensors © 2018.

Figure 4.13-2 Groundwater Basins



Imagery provided by Google, ESRI and their licensors © 2018;
Additional data provided by Los Angeles County, 2017.

Table 4.13-1 Burbank Water Supplies – Current and Projected

Water Supplies (acre-feet)	2015	2020	2025	2030	2035	2040
Potable						
Metropolitan Treated Potable	4,765	7,894	7,383	7,011	6,493	6,303
Supplier-Produced Groundwater	10,277	11,000	11,000	11,000	11,000	11,000
Total	15,042	18,894	18,383	18,011	17,493	17,303
Non-Potable						
Metropolitan Replenishment	7,350	6,300	4,700	4,800	4,900	4,900
Recycled Water	2,463	3,327	5,047	5,047	5,047	5,047
Potable Total	9,813	9,627	9,747	9,847	9,947	9,947

Source: BWP, 2016

Table 4.13-2 Metropolitan's Projected Demands for Burbank

Source	2020	2025	2030	2035	2040
Treated Potable	7,926	7,675	7,604	7,589	7,725
Untreated Groundwater Replenishment	5,900	5,898	5,877	5,892	5,844

Units in acre-feet per year (AFY)
Source: BWP, 2016

Metropolitan estimates future water demands for Burbank and the entire region using its Econometric Demand Model, developed by the Brattle Group. BWP utilizes Metropolitan's projections to provide the basis for dry-year reliability planning. As shown in Table 4.13-3, Metropolitan projects 100 percent reliability for full-service water demands through the year 2040. Since Metropolitan expects to meet demands, and since BWP's groundwater and recycled water supplies should be reliable in dry years, the supplies meet the demands. (BWP 2016)

Table 4.13-3 Water Supply and Demand in Single and Multiple Dry Years (AF)

Year-Type	2020	2025	2030	2035	2040
Normal Year	28,521	28,130	27,858	27,440	27,250
Single Dry Year	28,473	28,082	27,811	27,394	27,204
Multiple Dry Year 1st, 2nd, and 3rd Year Supply	28,448	28,470	28,183	27,741	27,531

Units in acre-feet (AF)
Source: BWP, 2016

The following water supply-related projects are also underway:

- Expanded water recycling
- Conservation measures
- North Hollywood Operable Unit (NHOU) wells
- Potable reuse feasibility study (BWP 2016)

Lockheed-Martin is leading an effort to pipe nearby NHOU off-line wells to be treated. BWP is currently pursuing grant funding to study the feasibility of both direct and indirect potable reuse. BWP anticipates that recycled water will play an integral role in future water supplies (BWP 2016).

c. Solid Waste

The Street and Solid Waste Division of the Burbank PWD is responsible for the collection of solid waste, green waste, recyclables, and bulky items. City solid waste collection crews service all single-family residences, 50 percent of multifamily residences, and approximately 10 percent of the City's commercial/industrial refuse customers. Businesses and larger multifamily residences can use City solid waste and recycling services as well, or hire a private waste collection and hauling company. Overall the City provides solid waste collection services to 50 percent of multifamily residences and 10 percent of business located within the City (City of Burbank 2019).

Solid waste generated by the City in 2017 was hauled to 16 different landfills that have a combined remaining capacity of 919,314,615 cubic yards (cy) (e.g., 367,725,846 tons). The City generated approximately 88,540 tons of solid waste in 2017, with approximately 37 percent of that waste hauled to the Burbank Landfill (City of Burbank 2018; Cal Recycle 2017). The City owns and operates the Burbank Landfill, located in the Verdugo Hills at the eastern edge of Burbank. The facility is located on 86 acres, 48 of which are used for disposal. The landfill has a maximum permitted capacity of 5,933,365 cy and as of 2016, had a remaining capacity of 4,920,312 cy (approximately 83 percent of the maximum permitted capacity). The maximum permitted intake is 240 tons (436 cy) per operating day and average intake is approximately 105 tons (191 cy) per day. Burbank Landfill has an expected closure year of 2053. One hundred percent of the intake at the landfill is from Burbank (City of Burbank 2013, LA County 2017). Residential trash collected by the City is deposed of at this facility. Solid waste collected by private waste haulers, which typically provide municipal solid waste disposal service to multifamily residential units and commercial/industrial users, can be transported to any number of landfills, although the City has little control over the landfills private haulers may contract with to collect solid waste.

The City also owns the Burbank Recycle Center, which houses a materials recovery facility and buyback/drop off center. This facility provides a used oil center, composting information, and a learning center. The Burbank Recycle Center is a private/public partnership with Burbank Recycling Inc. that collects and diverts wastes that contribute to the Burbank Landfill capacity (City of Burbank 2013).

In 2015, the California Department of Resources Recycling and Recovery (CalRecycle) estimated that the annual per capita disposal rate for the City of Burbank was 4.6 pounds per person per day for residents and 3.2 pounds per person per day for employees. Both figures are below CalRecycle's target amounts of 7.6 pounds per person per day for residents and 6.1 pounds per person per day for employees (CalRecycle 2015). Because the Project site is vacant, no solid waste is currently generated on-site.

As discussed in Section 4.7, *Hazards and Hazardous Materials*, the Project site currently has contaminated soil that requires mitigation. The Project is also located on a site included on lists of hazardous materials sites on government databases, as well as contains potential ACMs and an unmarked oil pipeline. Hazardous waste would be sent to the Kettleman Hills Hazardous Waste Facility that is a 1,600-acre hazardous waste and municipal solid waste disposal facility located southwest of Kettleman City on State Route 41 in the western San Joaquin Valley. The facility is permitted for the direct landfill of California hazardous waste, Toxic Substances Control Act-regulated polychlorinated biphenyl (PCB) waste and Resource Conservation and Recovery Act (RCRA) wastes (that naturally meet treatment standards) (WM 2015). The facility is regulated and inspected by the United States Environmental Protection Agency(U.S. EPA), California Department of Toxic Substances Control (DTSC), Central Valley Regional Water Quality Control Board (RWQCB), Kings County Department of Public Health, San Joaquin Valley Air Pollution District (SJVAPD), and CalRecycle. It has a remaining capacity of six million cy. Permits are currently pending to expand the existing hazardous waste landfill to allow more years of disposal and to develop a new hazardous waste landfill on currently undeveloped land to open after the existing landfill reaches capacity (WM 2018).

d. Stormwater

There is an existing City-owned storm drain system in the Project area that will accommodate stormwater runoff across the Project site. The storm drain system runs along the (former/vacated) extension of Cypress Avenue. City-referenced plans indicate that the existing system is comprised of reinforced concrete pipe (RCP) that is 42 inches in diameter. The existing storm drain system ultimately discharges into Los Angeles County Flood Control District (LACFCD) Burbank Western Channel (Appendix H).

Stormwater runoff across the Project site currently flows toward North Front Street, generally as sheet flow across the ground surface. From North Front Street, surface water flow is conveyed southeasterly in the roadway for several hundred feet to existing catch basins located below the Magnolia Boulevard bridge, where flows are then conveyed via existing pipelines to the Burbank Western Channel. This pipeline transmits flows approximately two miles to the Los Angeles River, which ultimately discharges to the Pacific Ocean (Appendix H).

4.13.2 Regulatory Setting

a. Wastewater

Federal Regulations

Clean Water Act

The objective of the Federal Water Pollution Control Act, commonly referred to as the Clean Water Act, is to restore and maintain the chemical, physical, and biological integrity of the nation's waters and maintain the integrity of wetlands. The Clean Water Act seeks to regulate point and nonpoint pollution sources, providing assistance to publicly owned treatment works (commonly known as wastewater treatment plants owned by a governmental agency for the improvement of wastewater treatment).

Furthermore, the National Pollutant Discharge Elimination System (NPDES) is a program created to implement the Clean Water Act. The State Water Resources Control Board (SWRCB) and the nine regional water quality control boards (RWQCBs) administer NPDES to regulate and monitor discharged waters and to ensure they meet water quality standards.

State Regulations

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) was enacted in 1969 by the State of California and includes provisions to address requirements of the Clean Water Act. The Porter-Cologne Act is broad in scope and addresses issues relating to the conservation, control, and utilization of the water resources of the State. The SWRCB and the RWQCBs are the principal State agencies with primary responsibility for the coordination and control of water quality. Porter-Cologne grants the RWQCBs authority to implement and enforce water quality laws, regulations, and plans to protect the groundwater and surface waters.

On May 2, 2006, the SWRCB adopted the Statewide General Waste Discharge Requirements for publicly owned sanitary sewer systems with greater than 1 mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in California. Under the Statewide General Waste Discharge Requirements, the owners of such systems must comply with the following requirements: (1) acquire an online account from the SWRCB and report all sanitary sewer overflows online; and (2) develop and implement a written Sewer System Management Plan (SSMP) to control and mitigate sanitary sewer overflows and make it available to any member of the public upon request in writing.

SSMP requirements are modeled on proposed Federal capacity, management, operations, and maintenance plans. The SSMP policy requires dischargers to provide adequate capacity in the sewer collection system, take feasible steps to stop sewer overflows, identify and prioritize system deficiencies, and develop a plan for disposal of grease, among other requirements. In addition, wastewater providers must now report sanitary sewer overflows to the Los Angeles Regional Water Quality Control Board, must keep internal records of these overflows, and must produce an annual report on overflows. Overflows from laterals on private property, if caused by an owner, are not required to be reported.

California Code of Regulations

The California Water Code requires the Department of Health Services (DHS) to establish water reclamation criteria. In 1975, the DHS prepared Title 22 to fulfill this requirement that regulates production/use of recycled water by establishing three categories of recycled water:

- Primary effluent, that typically includes grit removal and initial sedimentation or settling tanks;
- Adequately disinfected, oxidized effluent (secondary effluent), that typically involves aeration and additional settling basins; and
- Adequately disinfected, oxidized, coagulated, clarified, filtered effluent (tertiary effluent), that typically involves filtration and chlorination.

In addition to defining recycled water uses, Title 22 also defines requirements for sampling and analysis of effluent and requires specific design requirements for plants.

CCR Title 24, Part 5, establishes the California Plumbing Code that became effective January 1, 2014, that sets efficiency standards (i.e., maximum flow rates) for all new federally regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. Accordingly, the maximum flow rate for showerheads is 2.0 gallons per minute (GPM) at 80 pounds per square inch (psi) and for lavatory faucets is 1.5 GPM at 60 psi. In addition, all water closets (i.e., flush toilets) are limited to 1.6 gallons per flush (GPF) and urinals are limited to 0.5 GPF. In addition, Section 1605.3(h) establishes State efficiency standards for non-federally regulated plumbing fittings, including commercial pre-rinse spray valves.

CCR Title 24, Part 11, establishes planning and design standards for sustainable site development energy efficiency, water conservation, material conservation, and internal air contaminants. These provisions became effective January 1, 2011.

Local Regulations

Burbank Sewer System Management Plan

In compliance with SWRCP Order No. 2006-0003-DWQ, the City has adopted a Sewer System Management Plan (SSMP) that also include a Sanitary Sewer Overflow Emergency Response Plan. The SSMP addresses the operation, maintenance, design and performance of the City's sewers and provides an overflow emergency response plan and a system evaluation and capacity assurance plan to reduce the frequency and volume of sanitary sewer overflows. Implementation of the SSMP, requires the City to (1) properly fund, manage, maintain, and operate its sanitary sewer systems to prevent sanitary sewer overflows; (2) construct and maintain the collection system using trained staff possessing adequate knowledge, skills, and abilities, as demonstrated through validated programs, and (3) fully comply with SWRCB Order No. 2006-003-DWQ.

Burbank Sewer System Evaluation and Capacity Assurance Plan

The City had a Sewer System Evaluation and Capacity Assurance Plan (SSECAP) prepared in 2006 (Chapter 8 of the Burbank Sewer System Management Plan). The SSECAP directs the City to develop a dynamic hydraulic modeling package for infrastructure planning that is compatible with the City's existing wastewater data model. The SSECAP also identifies areas of future study that are cost-effective and technically feasible to address both potential capacity and operational constraints and are coordinated with other improvement projects. The plan contains the following key objectives:

- Properly fund, manage, operate, and maintain all parts of the wastewater collection system;
- Provide adequate capacity to convey peak sewer flows;
- Minimize the frequency of sanitary sewer overflows (SSOs); and
- Construct and maintain the collection system using trained staff possessing adequate knowledge, skills, and abilities as demonstrated through a validated program.

The SSECA and the City's capital improvement plan (CIP) provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event.

Burbank Municipal Code (BMC)

Title 8, Chapter 1, Article 1, Sewers, of the BMC establishes regulatory compliance for discharges to the publicly owned treatment works (POTW), sewer system and storm drain system for the City and ensures the City complies with all applicable State and Federal laws, including the Clean Water Act (33 United States Code 1251 et seq.) and the general pretreatment regulations (40 Code of Federal Regulations Part 403). Per BMC Section 8-1-301, to connect to the City's main sewer line, an excavation permit and a sewer connection permit must be obtained from the Burbank Public Works Department. For sewer construction entirely on private property, the owner must obtain a plumbing permit from the Building Department, and an excavation permit from the Burbank PWD.

b. Water

State Regulations

California Drought Update

On January 17, 2014, Governor Jerry Brown issued a Drought Declaration and requested a voluntary 20 percent reduction in urban water use statewide. At that same time, he also directed the State Board to adopt Emergency Regulations. As a result, on July 15, 2014, the State Board adopted Emergency Regulations for Statewide Urban Water Conservation. They became effective on July 28, 2014, and were documented in CCR Title 23, Sections 863–865.

To combat California's fourth consecutive year of drought, Governor Brown, on April 1, 2015, issued an Executive Order for mandatory statewide water reductions to reduce water usage by 25 percent by February 28, 2016. In the Executive Order, the Governor uses his authority to direct local water agencies to increase enforcement over wasteful use and to invest in new technologies that will make California more drought resilient.

The Governor's order directs the State Board to implement mandatory water reductions in cities and towns across California to reduce water usage by 25 percent compared to the amount used in 2013. The Executive Order establishes several provisions for water saving and increased enforcement against wasteful water use:

- The State Board shall impose restrictions to achieve a statewide 25 percent reduction in potable urban water usage, compared to amount used in 2013, through February 28, 2016;
- The Department of Water Resources (DWR) shall lead a statewide initiative to replace 50 million sf of lawns and ornamental turf with drought tolerant landscapes;
- The California Energy Commission, jointly with the Department of the Water Board, shall implement a time-limited statewide appliance rebate program to replace inefficient household devices;
- The State Board shall impose restrictions to require that commercial, industrial, and institutional uses implement water efficiency measures to reduce potable water usage;
- The State Board shall prohibit irrigation with potable water of ornamental turf on public street medians;
- The State Board shall prohibit irrigation with potable water outside of newly constructed homes/buildings that is not delivered by drip or microspray systems; and
- The State Board shall require urban water suppliers to provide monthly information on water usage, conservation, and enforcement on a permanent basis.

California Water Conservation Bill (Senate Bill X7-7)

The Water Conservation Bill, enacted in 2009, set an overall goal of reducing per capita urban water use in the State by 20 percent by December 31, 2020. The State is required make incremental progress toward this goal by reducing per capita water use by at least 10 percent by December 31, 2015. The bill requires urban water suppliers to reduce per capita water use 20 percent by 2020.

Urban water suppliers are required to establish water conservation targets for the years 2015 and 2020. Urban retail water suppliers are directed to include in their water management plans the baseline daily per capita water use, water use targets, interim water use targets, and compliance daily per capita water use.

Senate Bill 610

In 2001, California adopted Senate Bill (SB) 610, thereby amending California Water Code. Under this law, certain types of development projects are now required to provide detailed water supply assessments to planning agencies. Any Project that is subject to CEQA and would demand more than 75 AFY of water, or an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project, is subject to SB 610 and is required to prepare a WSA.

The primary purpose of a WSA is to determine whether the identified water supply or water supplier will be able to meet projected demands for the project, in addition to existing and planned future uses, over a 20-year projection and with consideration to normal, dry, and multi-dry water years.

The Project is subject to CEQA, includes more than 500 dwelling units, and is a mixed-use development. Therefore, a WSA was prepared in accordance with California Water Code (see Appendix L). The SB 610 requirements and their applicability to the Project are addressed in detail in Section 4 of the WSA that assesses the availability of identified water supplies under normal year, single-dry year, and multiple-dry year conditions.

Senate Bill 221

SB 221 also addresses water supply in the land use planning process and focuses on new residential subdivisions in nonurban areas. SB 221 requires that written verification from the water service provider be submitted indicating sufficient water supply is available to serve a proposed subdivision, or the local agency shall make a specified finding that sufficient water supplies are or will be available prior to completion of a project. SB 221 specifically applies to residential subdivisions of 500 units or more. In addition, Government Code Section 66473.7(i) exempts “any residential project proposed for a site that is within an urbanized area and has been previously developed for urban uses, or where the immediate contiguous properties surrounding the residential project site are, or previously have been, developed for urban uses, or housing projects that are exclusively for very low and low-income households.”

The Project does not propose development of 500 or more dwelling units in a nonurban area. Therefore, the Project is not subject to the requirements of SB 221.

Urban Water Management Act

The California Urban Water Management Planning Act (California Water Code Division 6, Part 2.6, Sections 10610–10656) requires that all public water suppliers that provide municipal and industrial water to more than 3,000 customers, or supply more than 3,000 AFY of water, adopt an UWMP. An UWMP is intended to forecast future water demand and supply under normal and dry conditions. The UWMP must include a description of existing and planned sources of water available to the water supplier; conservation efforts to reduce water demand; alternative sources of water; assessment of reliability and vulnerability of water supply; and water shortage contingency analysis. It must be updated every five years and submitted to the DWR for review.

The Urban Water Management Planning Act has been modified several times in response to the water shortages, droughts, and other factors. The Water Conservation Act of 2009 amended the Urban Water Management Planning Act to call for a statewide reduction of 20 percent in urban water use by the year 2020. An amendment in 2014 requires water suppliers to provide narrative descriptions of their water demand management measures and account for system water losses.

California Code of Regulations

CCR Title 24, Part 5, establishes the California Plumbing Code (last updated in 2013) that became effective January 1, 2014. The California Plumbing Code sets forth efficiency standards (i.e., maximum flow rates) for all new federally regulated plumbing fittings and fixtures, including showerheads and lavatory faucets.

CCR Title 22 regulates production and use of recycled water in California by establishing three categories of recycled water: (1) primary effluent, which that typically includes grit removal and initial sedimentation or settling tanks; (2) adequately disinfected, oxidized effluent (secondary effluent), which that typically involves aeration and additional settling basins; and (3) adequately disinfected, oxidized, coagulated, clarified, filtered effluent (tertiary effluent), which typically involves filtration and chlorination. In addition to defining recycled water uses, Title 22 also defines requirements for sampling and analysis of effluent and requires specific design requirements for plants.

CCR Title 24, Part 11, establishes planning and design standards for sustainable site development energy efficiency, water conservation, material conservation, and internal air contaminants. These provisions became effective January 1, 2011.

Local Regulations

Metropolitan Water District of Southern California Urban Water Management Plan (UWMP)

The California Water Code requires any municipal water supplier serving over 3,000 connections or 3,000 AFY to prepare an UWMP. Metropolitan is a regional wholesaler with no retail customers; it provides treated and untreated water directly to its 26 member agencies. Member agencies include 14 cities, 11 municipal water districts, and one county water authority. Metropolitan's service area covers the Southern California coastal plain, including the City of Burbank (Metropolitan 2016a).

Each of Metropolitan's qualifying member agencies is also responsible for implementing its own UWMP. Metropolitan's 2015 UWMP therefore does not explicitly discuss specific activities undertaken by its member agencies unless they relate to one of Metropolitan's programs. Metropolitan's 2015 UWMP describes and evaluates sources of supply, efficient uses, water recycling, and conservation activities across the Southern California region (Metropolitan 2016a).

Burbank Water and Power 2015 Urban Water Management Plan (UWMP)

The UWMP for BWP forecasts future water demands within the service area under average and dry year conditions, identifies future water supply projects, and evaluates future supply reliability. The UWMP discusses the provider's supply portfolio, including current and planned water conservation and recycling activities (BWP 2016).

Greater Los Angeles County Region Integrated Regional Water Management Plan (IRWMP)

The mission of the Greater Los Angeles County IRWMP is to address the water needs of the Region in an integrated and collaborative manner. BWP sits on the Steering Committee for the Upper Los Angeles River Area (ULARA). The first IRWMP for the Greater Los Angeles County Region was published in 2006, following a multi-year collaborative effort between water retailers, wastewater agencies, stormwater and flood managers, watershed groups, businesses, tribes, the agriculture community, and non-profits. It provided a mechanism for improving water resources planning in the Los Angeles Basin. In 2014, the IRWM group updated the IRWMP to comply with new State integrated planning requirements and update the content (Leadership Committee of the GLAC IRWMP 2014).

Metropolitan's Integrated Water Resources Plan – 2015 Water Tomorrow Update

The Project site is located within the services areas of BWP (discussed above) and Metropolitan. Metropolitan's Integrated Water Resources Plan was first developed in 1996 to establish targets for a diversified portfolio of supply investments. The 2015 Water Tomorrow Update is a plan to provide water supplies under a wide range of potential future conditions and risks. It identifies supply actions including recycled water, seawater desalination, stormwater capture, conservation, and groundwater cleanup to ensure local water supply reliability. The 2015 Water Tomorrow Update was adopted by Metropolitan's board of directors in January 2016 (Metropolitan 2016b).

Burbank 2035 General Plan

The Burbank2035 General Plan (adopted February 2013) is the primary mechanism for guiding future population growth and development in Burbank and provides a guide for land use decision-making. The General Plan's Open Space and Conservation Element addresses the conservation and enhancement of open space, parks, recreation, and natural resources within the City. The goals and policies of the Open Space and Conservation Element are intended to protect natural resources including water resources (City of Burbank 2013). The goal and policies applicable to water resources are presented below:

Goal 9: Water Resources

Adequate sources of high quality water provide for various uses within Burbank.

Policy 9.1: Meet the goal of a 20% reduction in municipal water use by 2020.

Policy 9.2: Provide public information regarding the importance of water conservation and avoiding wasteful water habits.

Policy 9.3: Offer incentives for water conservation and explore other water conservation programs.

Policy 9.4: Pursue infrastructure improvements that would expand communitywide use of recycled water.

Policy 9.5: Require on-site drainage improvements using native vegetation to capture and clean stormwater runoff

City of Burbank Sustainable Use Ordinance

Section 8-2, Article 3, Sustainable Water Use Ordinance, of the Burbank Municipal Code (BMC) established procedures for implementing and enforcing sustainable water use practices to mitigate the effect of a shortage of water resources. The ordinance establishes mandatory water use practices related to outdoor uses such as irrigation of outdoor landscaped areas, washing down of driveways and walkways, use of evaporative coolers (misters), and the filling or refilling of swimming pools and spas. The ordinance also establishes mandatory restrictions on service of drinking water at restaurants, hotels, and eating establishments if not requested by customers. The ordinance establishes six incremental stages of water use restrictions and penalties in order to discourage wasteful water use practices and achieve reduced water consumption and conservation during drought conditions.

c. Solid Waste

Assembly Bill 1327

The California Solid Waste Reuse and Recycling Access Act of 1991 or Assembly Bill (AB) 1327, as amended, requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, or institutional buildings; marinas; or residential buildings having five or more living units to provide an adequate storage area for the collection and removal of recyclable materials. The sizes of these storage areas are to be determined by the appropriate jurisdictions' ordinance. If no such ordinance exists with the jurisdiction, the CalRecycle model ordinance shall take effect. The City passed such an ordinance in 1997.

Assembly Bill 939 and Senate Bill 1016

The California Integrated Waste Management Act of 1989, or Assembly Bill (AB) 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of all solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. In 2006, SB 1016 updated the requirements. The new per capita disposal and goal measurement system moves the emphasis from an estimated diversion measurement number to using an actual disposal measurement number as a factor, along with evaluating program implementation efforts. These two factors will help determine each jurisdiction's progress toward achieving its AB 939 diversion goals. The 75 percent diversion requirement is now measured in terms of per-capita disposal expressed as pounds per person per day.

Assembly Bill 341

The purpose of AB 341 is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California. In addition to Mandatory Commercial Recycling, AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Construction and Demolition Waste Materials Diversion Program Requirements (SB 1374)

Construction and Demolition Waste Materials Diversion Requirements passed in 2002 added California Public Resources Code Section 42912. SB 1374 requires that jurisdictions include in their annual AB 939 report a summary of the progress made in diverting construction and demolition waste. The legislation also requires that CalRecycle adopt a model ordinance for diverting 50 to 75 percent of all construction and demolition waste from landfills.

Zero Waste California

Zero Waste California is a State program launched by CalRecycle in 2002 to promote a new vision for the management of solid waste. Zero waste provides that wasting resources is inefficient and that the efficient use of natural resources should be achieved. The concept requires maximizing existing recycling and reuse efforts, while ensuring that products are designed for the environment and have the potential to be repaired, reused, or recycled. The Zero Waste California program promotes the goals of market development, recycled product procurement, and research and development of new and sustainable technologies.

California Green Building Standards Code (CALGreen)

Effective January 1, 2017, the State's Green Building Code requires developers of newly constructed buildings to develop a waste management plan to divert 60 percent of the construction waste generated by project construction. Builders or developers are required to submit a construction waste management plan to the appropriate jurisdiction's enforcement agency. The City has adopted the 2016 CALGreen Code as part of its Municipal Code.

Local Regulations

County of Los Angeles Integrated Waste Management Plan

The County of Los Angeles Integrated Waste Management Plan (CoIWMP), approved by the CIWMB in June 1999, sets forth a regional approach for the management of solid waste through source reduction, recycling and composting, and environmentally safe transformation and disposal. The CoIWMP ensures that the waste management practices of cities and other jurisdictions in the County are consistent with the solid waste diversion goals of AB 939 through source reduction, recycling and composting programs, household hazardous waste management programs, and public education awareness programs. The plan calls for the establishment of 50 years of in-County permitted landfill capacity, as well as the County's support for the development of disposal facilities out of the County.

The County continually evaluates landfill needs and capacity through the preparation of the CoIWMP annual reports. Within each annual report, future landfill disposal needs over the next 15-year planning horizon are addressed, in part, by determining the available landfill capacity. The most recent annual report is the 2012 report, completed in August 2013.

As part of the CoIWMP, the County prepared the Countywide Siting Element, that identifies goals, policies, and strategies for the proper planning and siting of solid waste disposal and transformation facilities for the next 15 years. The latest Siting Element was approved by CalRecycle in 2016.

Burbank Municipal Code (BMC)

Title 4, Chapter 2, Article 1, *Solid Waste Management*, of the BMC establishes regulatory compliance for the collection, removal and disposal of garbage, solid waste, green waste, and recyclable material within the City.

Burbank Construction and Demolition Debris Diversion Ordinance

The Construction and Demolition Debris Ordinance was designed to meet the goals of the California Waste Management of 1989, that requires all cities and counties in the State to reduce the amount of waste materials deposited in landfills by 65 percent. The ordinance requires new building projects meeting specified size requirements to divert and recycle at least 65 percent of their construction and demolition debris. To obtain a building permit from the City, project proponents for projects meeting specified size requirements are required to complete a Waste Management Plan (WMP) that outlines how much scrap and debris would be generated during construction, what proportion of this debris would be diverted and how, and the final destination for both the diverted and non-diverted components of the construction debris (City of Burbank 2018a).

City of Burbank Sustainability Action Plan and Zero Waste Policy

In January 2008, the City Council adopted the Sustainability Action Plan to support the United Nations Urban Environmental Accords. The Sustainability Action Plan addresses the City's efforts toward providing a clean, healthy and safe environment. The Accords include 21 specific actions organized into seven urban themes designed to collectively address urban sustainability concerns. The themes include energy, waste reduction, urban design, urban nature, transportation, environmental health and water (City of Burbank 2008a). Action items related to waste include zero waste, manufacturer responsibility, and consumer responsibility. As part of the Sustainability Action Plan, the City adopted the Zero Waste Strategic Plan that includes a goal to achieve zero waste by 2040. The Zero Waste Plan includes four basic strategies, with a priority placed on "upstream" solutions to eliminate waste before it is created. The plan also includes actions to build on the City's traditional "downstream" recycling programs to fully utilize the existing waste diversion infrastructure (City of Burbank 2008b). The four basic strategies include:

1. Advocate for Manufacturer Responsibility for Product Waste and Support Elimination of Problem Materials
2. Adopt New Rules and Incentives to Reduce Waste
3. Expand and Improve Local and Regional Recycling and Composting
4. Educate, Promote, and Advocate a Zero Waste Sustainability Agenda

d. Stormwater

Federal, State, and local regulations pertaining to stormwater management, drainage, flooding, and water quality are discussed in Section 4.7, *Hydrology and Water Quality*.

4.13.3 Impact Analysis

a. Methodology and Significance Thresholds

For the purposes of this EIR, a utilities and service systems impact is considered significant if the Project would:

1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

3. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
4. Not have sufficient water supplies available to serve the project from existing entitlements and resources, so that new or expanded entitlements are needed;
5. Not 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;
6. Not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; and/or
7. Not comply with federal, State, and local statutes and regulations related to solid waste.

The Initial Study (Appendix A) determined that the Project could result in potentially significant impacts related to Thresholds 1 through 7; as such, all of these thresholds other than Threshold 3 are analyzed in this section of the EIR. Threshold 3 is addressed in Section 4.7, *Hydrology and Water Quality*.

Project-generated demands (e.g., water demand, wastewater, and solid waste generation) were calculated using utility rates per development unit (e.g., water use per dwelling unit). The wastewater and water demand calculations in the WSA use sewage generation factors developed by the City of Los Angeles (City of Los Angeles 2006). It is assumed that the amount of water required for the Project is equivalent to approximately 120 percent of the amount of wastewater generated by land uses included under the Project. This is a commonly used approach to estimate water supply demands for the purposes of a WSA. The WSA is presented in Appendix L.

The Project's air and greenhouse gas emissions were calculated using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., residential, hotel, parking, etc.), and location, to estimate a project's construction and operational emissions from new development. CalEEMod also estimates water demand by land use. According to the CalEEMod model, the Project would demand approximately 184 AFY of indoor and outdoor water.

However, since CalEEMod is designed primarily to quantify air and greenhouse gas emissions, the land use categories are more appropriately classified for those calculations. For example, all residential development associated with the Project is categorized in CalEEMod as "Apartments Mid Rise." The methodology used to calculate water demand in this WSA accounts for more specific water account types, and therefore reflects a more accurate total estimated water demand.

Solid waste generation rates were obtained from CalEEMod (see Appendix D). The Project's demands were then compared to existing and projected infrastructure capacities or supplies to determine whether there would be sufficient capacity or supplies to meet associated Project demands.

b. Project Impacts and Mitigation Measures

Threshold 1:	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
Threshold 2:	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
Threshold 5:	Not 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;

Impact U-1 THE PROPOSED PROJECT WOULD GENERATE UP TO 370,861 GPD OF WASTEWATER, WHICH IS APPROXIMATELY 10.6 PERCENT OF THE BWRP'S AVAILABLE CAPACITY OF 3.5 MGD. THEREFORE, THE BWRP WOULD BE ABLE TO ADEQUATELY TREAT PROJECT-GENERATED SEWAGE AND THE TREATMENT REQUIREMENTS OF THE RWQCB WOULD NOT BE EXCEEDED. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As indicated in the Table 4.13-4, total wastewater generation for the Project is estimated at 370,861 gpd (415 AFY). The BWRP has a design capacity of 12.5 mgd and currently treats approximately 9.0 mgd (BWP 2016, City of Burbank 2013, City of Burbank 2018). The projected wastewater generated by the Project represents approximately 10.6 percent of the plant's available capacity of 3.5 mgd. Therefore, the BWRP has sufficient available treatment capacity to serve the Project. The BWRP would be able to adequately treat project-generated sewage in addition to currently generated sewage, and the treatment requirements of the RWQCB would not be exceeded.

Table 4.13-4 Estimated Wastewater Generation

Account Type	Amount/Unit	Generation Rate	Wastewater Generation (GPD)	Peak Wastewater Generation (GPD)
Multi-Family Apartment/Condo	573 units	183 GPD/unit	104,859	262,148
Hotel, Motel, or Lodging	307 units	133.36 GPD/unit	40,942	102,354
Bar with Restaurant	2,423 sq. ft	0.65627 GPD/sq. ft.	1,590	3,975
Professional Offices	4,637 sq. ft	0.11012 GPD/sq. ft.	511	1,277
Retail Space	1,067 sq. ft	0.08539 GPD/sq. ft.	91	228
Fitness Club	3,433 sq. ft	0.10237 GPD/sq. ft.	351	879
Total Peak Wastewater Generation				**370,861**

gpd = gallons per day; AFY = acre-feet per year; BD = bedroom; BA = bathroom; sq. ft = square feet
[1] Source for water demand factors used in calculations: City of Burbank 2019

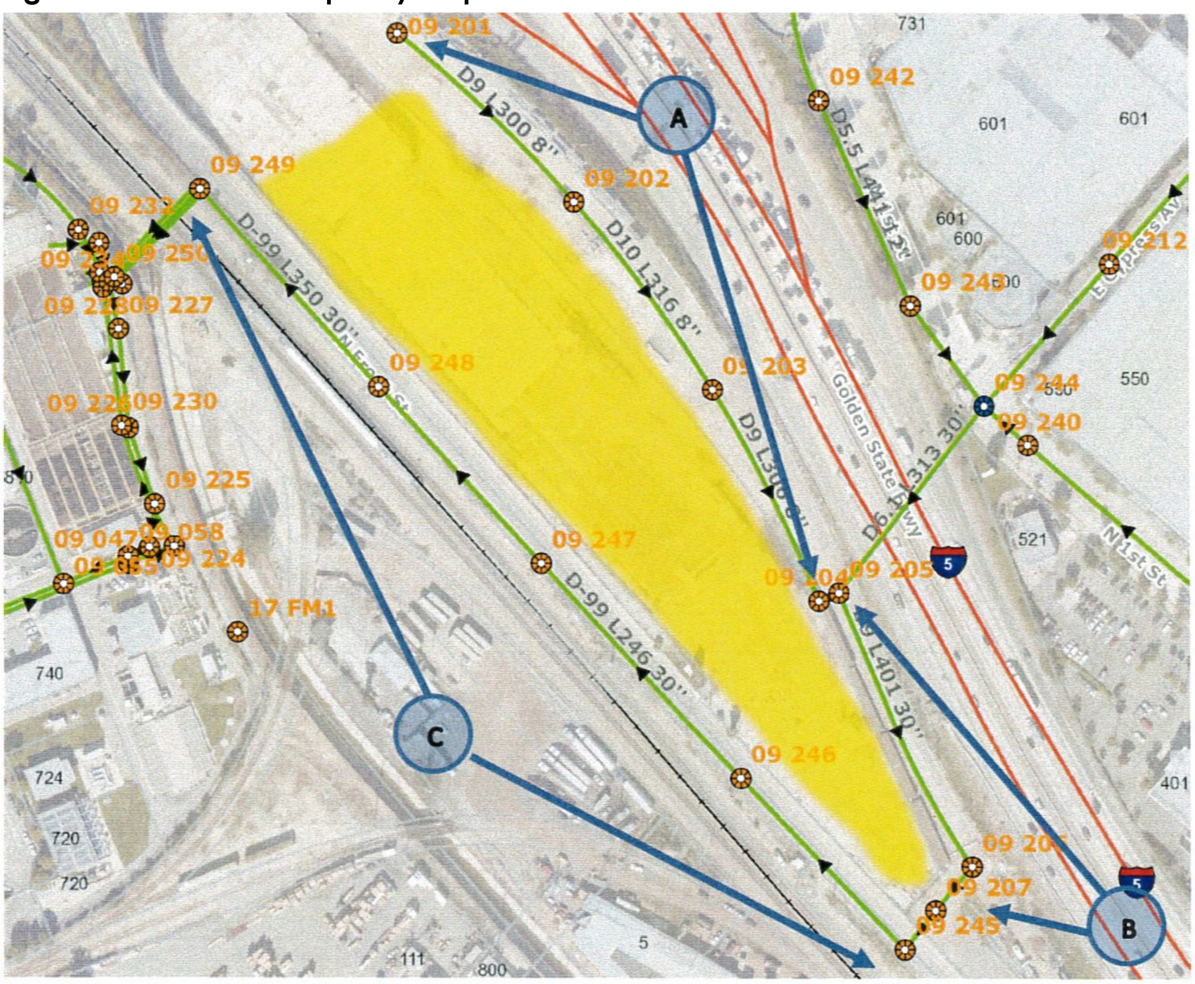
The City conducted a sewer capacity analysis (SCA) for the Project (see Appendix L), that concluded the Project development would not require additional improvements to the existing sewer infrastructure serving the Project site. The SCA notes that per the approved I-5 Freeway widening project plan that is not a part of the Project, the eight-inch sewer north of the Project site will be removed, and a portion of the 30-inch sewer north of the Project site will be relocated. These sewer reaches are marked as “A” and “B” respectively in the sewer capacity map provided in Figure 4.13-3.

The Project would connect to the City’s sanitary sewer system contingent that 1) sewer facility chargers (SFCs) are paid prior to issuance of a Building Permit; and 2) the Project would not generate wastewater exceeding a peak wastewater discharge of 270 gallons per minute (gpm), which is the current calculated peak discharge rate based on the development plans submitted to the City. Based on meeting these two conditions, connection to the City’s sanitary sewer system may occur along reach “C”, as shown in Figure 4.13-3 that is from maintenance hole (MH) 09-245 to MH 09-246 to MH 09-247 to MH 09-248 to MH 09-249. Based on the Project’s projected wastewater generation of 370,861 gpd, the average wastewater discharge would be approximately 82 gpm, which is well below the peak wastewater discharge threshold of 270 gallons per minute. Therefore, this segment of the sewer system has sufficient capacity to accommodate Project flows and impacts to wastewater systems would be less than significant.

Mitigation Measures

No mitigation measures are required.

Figure 4.13-3 Sewer Capacity Map



Source: City of Burbank 2018.

Threshold 4:	Would the project not have sufficient water supplies available to serve the project from existing entitlements and resources, so that new or expanded entitlements are needed?

Impact U-2 THE PROPOSED PROJECT WOULD REQUIRE APPROXIMATELY 498.5 ACRE-FEET PER YEAR (AFY) OF POTABLE WATER AND 130.4 AFY OF NON-POTABLE WATER, WHICH WOULD RESPECTIVELY REPRESENT 2.8 PERCENT AND 1.3 PERCENT OF THE TOTAL WATER SUPPLIES AVAILABLE TO THE CITY OF BURBANK IN 2040. BASED ON THE WATER DEMAND PROJECTIONS, WATER SUPPLIES ARE SUFFICIENT TO MEET THE PROJECTED WATER DEMAND OF THE PROPOSED PROJECT. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The Project would introduce a new mixed-use development containing residential, hotel, retail, and office space. Potable water for indoor uses would be provided via a 12-inch potable water main (approximately 2,000 linear feet) that will be installed in Front Street to accommodate the potable water services and fire hydrants for the Project. Non-potable water for outdoor uses would be provided off the existing 16-inch recycled water main in Front Street.

Indoor water demands were calculated using sewage generation factors developed by the City of Burbank Public Works (City of Burbank 2019); it is estimated that the amount of potable water required for the Project is equivalent to approximately 120 percent of the amount of wastewater generated by land uses included under the Project, that is a commonly used approach to estimate water supply demands for the purposes of a WSA (provided in Appendix L of this EIR). Table 4.13-5 shows the Project's total projected water demand by use type. It was estimated that the Project would require approximately 498.5 AFY of potable water and 130.4 AFY of non-potable water.

As discussed in the *Setting*, BWP utilizes Metropolitan's projections to provide the basis for dry-year reliability planning. As described in the WSA for the Project (see Appendix L), the Project is consistent with SCAG's growth forecasts that were used to calculate water demand forecasts in the BWP UWMP and Metropolitan UWMP; therefore, the current BWP UWMP accounts for the water demand of the Project. Additionally, as shown in Table 4.13-3, Metropolitan projects 100 percent reliability for full-service water demand through 2040. As shown below in Table 4.13-5, the Project's projected potable and non-potable water demand would represent approximately 2.8 percent and 1.3 percent, respectively, of BWP's projected water supply and demand for year 2040.

Table 4.13-5 Estimated Water Demand Projections and Availability

		2025 Supply Availability		2040 Supply Availability	
Project Water Demand	**Annual Demand**	**2025 Supply Availability**	**Project Demand Percentage**	**2040 Supply Availability**	**Project Demand Percentage**
Potable (Indoor)	498.5 AFY	18,383 AF	2.7%	17,303 AF	2.8%
Outdoor (Non-potable)	130.4 AFY	9,747 AF	1.3%	9,947 AF	1.3%

AFY = acre-feet per year; AF = acre-feet

Based on the water demand projections, the local water projected water supplies are sufficient to meet the water demand of the Project. Therefore, implementation of the Project would not require new or expanded entitlements for water supplies. Impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Threshold 6:	Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
Threshold 7:	Would the project comply with federal, state, and local statutes and regulations related to solid waste?

IMPACT U-3 THE PROPOSED PROJECT WOULD GENERATE AN ESTIMATED 1.3 TONS OF SOLID WASTE PER DAY, WHICH WOULD REPRESENT APPROXIMATELY ONE PERCENT OF THE REMAINING DAILY CAPACITY AT THE BURBANK LANDFILL. THEREFORE, SOLID WASTE GENERATED BY THE PROPOSED PROJECT WOULD BE SERVED BY A LANDFILL WITH SUFFICIENT CAPACITY. ALTHOUGH ADEQUATE CAPACITY IS AVAILABLE, TO HELP ENSURE THAT THE PROJECT WOULD MEET THE 75 PERCENT DIVERSION REQUIRED BY AB 341 BY YEAR 2020, MITIGATION IS REQUIRED TO ENSURE THE PROJECT PROVIDES RECYCLING MEASURES AND FACILITIES DURING OPERATION. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH IMPLEMENTATION OF MITIGATION.

Construction Solid Waste

Construction of the Project would generate construction waste. Additionally, operation of the proposed residential, hotel, and retail components would generate solid waste and recyclables in the long term. As calculated in CalEEMod (see Appendix D), construction activities associated with the Project would generate approximately 90,000 cy of graded material that would be exported from the Project site.

As discussed in detail in Section 4.6, *Hazards and Hazardous Materials*, the presence of elevated metals in shallow soil originating from historical industrial land uses would require some area of the soil to be managed and disposed of as California or federal hazardous waste. The soil affected by selected metals, volatile organic compounds (VOCs), and other contaminants of concern (COCs) will be excavated, stockpiled, profiled, and properly disposed of in accordance with the Soil Contingency & Management Plan (SCMP) prepared by the Project applicant (Appendix G). The SCMP would be required to be reviewed and approved by the Los Angeles RWQB.

An estimated 52,555 tons of excavated soil may require disposal as California hazardous waste. This is a conservative estimate. The volume of soil requiring disposal as Federal (RCRA) hazardous waste would depend on profiling data, but is estimated to be considerably less. Some of the soil that is not significantly contaminated may be suitable for unrestricted use. Some soil will be designated as nonhazardous waste. Metal- and other COC-affected soils would be transported to the Waste Management Kettleman Hills Hazardous Waste Facility, Class I. Assuming that soil weighs approximately 2,200 pounds (or 1.1 ton) per cy, approximately 47,777 cy of excavated soil may require disposal. As described in the Setting, Kettleman Hills is permitted to accept up to 8,000 tons per day and has a remaining capacity of 6 million cy. Assuming conservatively that all of the excavated soil is disposed of at the Kettleman Hills Landfill, the disposed soil could account for approximately 0.8 percent of the permitted remaining capacity.

Nonhazardous soil and other miscellaneous construction solid waste may be transported to the Burbank Landfill, the County's Azusa Land Reclamation Facility or one of the State-permitted Inert Debris Engineered Fill Operation facilities. The Burbank Landfill has a maximum permitted capacity of 5,933,365 cy and as of 2016, had a remaining capacity of 4,920,312 cy. Assuming all soil is nonhazardous, materials generated by construction activities could therefore account for approximately 9 percent of available landfill capacity at Burbank Landfill. The Azusa Land Reclamation Facility has a permitted daily intake cap of 6,500 tons, has an average daily intake of only 1,183 tons, and has a remaining design life of 153 years. Furthermore, per CALGreen and the Burbank Construction and Demolition Debris Diversion Ordinance, the Project would be required to implement a Waste Management Plan (WMP) during construction and divert a minimum of 60 percent of its construction debris from landfills, thereby minimizing the impact of Project construction on landfills. With compliance with this diversion requirement, adequate landfill capacity exists to accommodate Project construction solid waste, and construction solid waste impacts would be less than significant.

Operational Solid Waste

According to CalEEMod (Appendix D), and as shown in Table 4.13-6, operation of the Project would generate a net increase of approximately 1.3 of solid waste per day. This estimate is conservative since it does not factor in any recycling or waste diversion programs.

Table 4.13-6 Estimated Operational Solid Waste Generation

Land Use	Solid Waste Generation[1] (tons per year)	Solid Waste Generation (tons per day)
Apartments Mid Rise	263.58	0.722
Park	0.03	<0.0018
Restaurant	21.42	0.059
Hotel	168.08	0.460
Recreation (Pool Deck)	4.56	0.012
Retail	1.12	0.003
Total[2]	**458.79**	**1.26**

[1] Refer to CalEEMod Appendix D

[2] Numbers in table do not add exactly due to rounding.

The 16 landfills currently serving the City have a combined remaining capacity of 367,725,846 tons. As the Project would generate an estimated 459 tons/year of solid waste, that would represent approximately 0.0001 percent of the combined remaining capacity of the landfills serving the City, Project impacts on landfill capacity would be negligible. Even if all of the Project's solid waste was disposed of at the Burbank Landfill, the estimated 1.3 tons of daily solid waste generated by the Project would represent approximately one percent of the remaining 135 ton daily capacity at the Burbank Landfill. Therefore, adequate landfill capacity exists to accommodate Project operational solid waste disposal needs. Although adequate capacity is available, to help ensure that the Project would meet the 75 percent diversion required by AB 341 by year 2020, Mitigation Measure U-3 is required to ensure the Project provides recycling measures and facilities during operation. With the implementation of this mitigation measure, Project operational solid waste impacts would be less than significant.

Mitigation Measure

Implementation of Mitigation Measure U-3 is required to ensure that recycling facilities are provided on the site, and that future residents and tenants are given proper instructions on recycling materials.

U-3 Recycling Facilities, Measures, and Guidelines

As part of their lease or sales agreement, all Project tenants and owners (both residential and commercial) shall be required to recycle all qualifying items in accordance with the Burbank Recycling Center's guidelines, including their handbook titled "Materials Accepted in Your Recycling Bin or at the Recycling Center." The Project Applicant shall provide enclosed areas for recycling receptacles for the proposed development. The Project Applicant shall also provide recycling receptacles for the proposed development, and copies of the Burbank Recycling Center handbook to all Project tenants and owners (both residential and commercial).

Significance After Mitigation

With incorporation of Mitigation Measure U-3, the Project would adhere to all local regulations pertaining to solid waste disposal, and this impact would be less than significant.

c. Cumulative Impacts

Planned and pending development would increase water demand and wastewater and solid waste generation in Burbank. As described in Table 3-1 of Section 3, *Environmental Setting*, planned and pending projects in the City would add a total of approximately 2,080 residential units and over five million square feet of commercial space. The following section analyzes the water demand and wastewater and solid waste generation associated with planned and pending development from Section 3.

Wastewater

As indicated in Table 4.13-7, cumulative wastewater generation would total approximately 1.4 MGD. As indicated in Table 4.13-4, total wastewater generation for the Project is estimated at 370,861 GPD. The BWRP has a design capacity of 12.5 MGD and currently treats approximately 9 MGD (3.5 MGD of available capacity). Therefore, cumulative wastewater generation (approximately 1.4 MGD) combined with the Project would account for approximately 43 percent of the available capacity of the BWRP. Demand associated with cumulative development plus the Project water demand would, therefore, be within BWRP's capacity. The BWRP would be able to adequately treat Project-generated sewage in addition to current and projected generated sewage, and the treatment requirements of the RWQCB would not be exceeded.

Table 4.13-7 Estimated Cumulative Wastewater Generation

Land Use[1]	Development Statistics	Unit	Wastewater Generation Factor (daily)[2]	Wastewater Generation (GPD)
Retail	163,178	SF	80 GPD/1,000 SF	13,054
Hotel	1,208	room	130 GPD/room	157,040
Industrial	1,020,239	SF	80 GPD/1,000 SF	81,619
Multi-Family Residential	2,080	DU	160 GPD/du	332,800
Office	5,130,149	SF	150 GPD/1,000 SF	769,522
Restaurant	163,385	SF	300 GPD/1,000 SF	49,016
Schools	100	student	12 GPD/person	1,200
Total Wastewater Generation				**1,404,251**

SF: square feet; DU: dwelling unit; GPD = gallons per day; AFY: acre-foot per year

[1] For calculation purposes, it was assumed that amenity space, event space, shopping center and grocery store uses were calculated using the retail rate; restaurant uses were calculated using the restaurant (take out) rate; multi-family residential uses were calculated using the apartment (2 bedroom) rate; and creative office uses were calculated using the office rate.

[2] It can be assumed that water used by the site is approximately 120 percent of the wastewater generated by the site. This is a commonly used approach to estimate water supply demands for the purposes of a WSA. Generation factor source: City of Los Angeles 2006.

To the extent that new sewer pipeline upgrades would be necessary as planned and pending development occurs within the City, such upgrades would likely occur within existing utility easements and would not result in new areas of disturbance. Any such upgrades would be subject to subsequent environmental review, wherein potential impacts, if any, would be addressed accordingly. The Project is required to pay their fair share cost of any wastewater facilities impacts associated with the development and operation of the Project; these fair share costs come in the form of sewer facilities charges codified by the City in the City Fee Schedule and are charged on a per dwelling unit basis. The City would require that localized system deficiencies are adequately addressed by the responsible project. Any future upgrades would be designed in accordance with applicable provisions of the BMC and to the satisfaction of the City Engineer. Therefore, cumulative impacts to wastewater treatment and conveyance facilities would be less than significant.

Water

As indicated in Table 4.13-8, the cumulative increase in water demand would total approximately 1.68 MGD, or approximately 1,888 AFY. Metropolitan projects a future water demand of 7,725 AFY for Burbank by 2040; as previously noted, the Project is the type of development that has been accounted for in projections of citywide demand identified in the local UWMP. As indicated in Table 4.13-5, the total estimated potable water demand for the Project is approximately 498.5 AFY and as indicated in Table 4.13-8, cumulative potable water demand would total approximately 1,888 AFY; collectively, cumulative potable water demand would be approximately 2,386.5 AFY. This accounts for approximately 26 percent of the projected demand described in the 2015 UWMP. Therefore, demand associated with cumulative development plus the Project water demand would fall within Metropolitan’s projections. Metropolitan’s 2015 UWMP forecasts that water supplies will be available to meet the its projected future water demands during normal and multiple dry years, based on general growth estimates and supplier projections.

Table 4.13-8 Estimated Cumulative Water Demand

Land Use[1]	Development Statistics	Unit	Water Demand Factor (daily)[2]	Water Demand (GPD)	Water Demand (AFY)
Retail	163,178	SF	96 GPD/1,000 SF	15,665	18
Hotel	1,208	room	156 GPD/room	188,448	211
Industrial	1,020,239	SF	96 GPD/1,000 sf	97,943	110
Multi-Family Residential	2,080	DU	192 GPD/DU	399,360	447
Office	5,130,149	SF	180 GPD/1,000 SF	923,427	1,034
Restaurant	163,385	SF	360 GPD/1,000 SF	58,819	66
Schools	100	student	14.4 GPD/person	1,440	2
Total Water Demand				**1,685,101**	**1,888**

SF: square feet; DU: dwelling unit; GPD = gallons per day; AFY: acre-foot per year

[1] For calculation purposes, it was assumed that amenity space, event space, shopping center and grocery store uses were calculated using the retail rate; restaurant uses were calculated using the restaurant (take out) rate; multi-family residential uses were calculated using the apartment (2 bedroom) rate; and creative office uses were calculated using the office rate.

[2] Generation factor source: City of Los Angeles 2006.

As development occurs incrementally throughout the City, upgrades to water conveyance facilities may be required. The precise location and connection would need to be determined at the time development is proposed. Should any new connections or upgrades be required, such upgrades would be subject to subsequent environmental review. Any future line size modifications or connections would be designed in accordance with applicable provisions of the BMC and to the satisfaction of the City Engineer. Therefore, cumulative impacts to water conveyance facilities would be less than significant.

Solid Waste

Planned and pending development would also increase the generation of solid waste. Table 4.13-9 summarizes solid waste generation associated with the cumulative projects list in Section 3. Planned and pending development will yield approximately 22,958 tons per year of solid waste, or approximately 63 tons per day.

Table 4.13-9 Estimated Cumulative Solid Waste Generation

Land Use[1]	Development Statistics	Solid Waste Generation Factor (daily)[2]	Solid Waste Generation (ppd)	Solid Waste Generation (tons per day)
Commercial	83,568 SF	2.5 lbs/1,000 SF	209	0.104
Hotel	1,208 rooms	2 lbs/room	2,416	1.208
Industrial	1,020,239 SF	62.5 lbs/1,000 SF	63,765	31.882
Multi-Family Residential	2,080 DU	12.23/DU	25,438	12.719
Office	5,130,149 SF	6 lbs/1,000 SF	30,781	15.390
Restaurant	163,385 SF	5 lbs/1,000 SF	817	0.408
Schools	100 students	0.6 lb/person	6	0.003
Shopping Center	18,730 SF	2.5 lbs/100 SF	468	0.234
Supermarket	60,880 SF	3.12 lbs/100 SF	1,899	0.950
Total Solid Waste Generation[3]			**125,800**	**62.90**

ppd: pounds per day; SF: square feet

[1] For calculation purposes, it was assumed that amenity space and event space were calculated using the commercial rate.

[2] Generation factor source: CalRecycle 2016.

[3] Numbers in table may not add correctly due to rounding.

As shown in Table 4.13-9, the Project would generate a net increase of approximately 1.3 tons of solid waste per day. This estimate is conservative since it does not factor in any recycling or waste diversion programs. Combined, cumulative development and the Project would generate approximately 64 tons per day that would account for approximately 47 percent of the remaining daily available intake capacity of 135 tons at the Burbank Landfill. Therefore, the Burbank Landfill would have adequate capacity to accommodate the Project and planned and pending development in the City. Additionally, development projects would be required to comply with federal, State, and local statutes and regulations related to solid waste, such as AB 939, Title 4, Chapter 2, Article 1 of the BMC, and the City's Zero Waste Policy. Impacts related to solid waste and waste facilities would be less than significant.

5 Other CEQA Required Discussions

This section covers other topics required to be addressed under the CEQA Guidelines that are not covered in other parts of this EIR, including growth-inducing impacts and energy impacts as set forth in Appendix F of the CEQA Guidelines.

5.1 Growth Inducement

Section 15126(d) of the CEQA Guidelines requires a discussion of a proposed Project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The Project's growth inducing potential is therefore considered significant if Project-induced growth could result in significant physical effects in one or more environmental issue areas.

5.1.1 Population Growth

The Project includes development of 573 residential units that would directly induce population growth. As discussed in Section 4.10, *Population and Housing*, the Project would generate approximately 1,433 new residents based on the average household of 2.5 persons for the City of Burbank (California DOF 2018). As determined by the California DOF and SCAG, the current population of Burbank is approximately 107,149 and is projected to grow to 116,500 by 2035, an increase of about 9,351 persons. The Project is anticipated to be operational in 2024; therefore, the forecast for 2035 is used to evaluate sufficient accommodation of the growth in population triggered by the Project. The estimated population growth of 1,433 new residents under the Project is approximately 15 percent of the City's projected growth by 2035 and is accounted for in the growth projections.

The Project would also include approximately 206,367 square feet of commercial development in the form of a 205,300-square foot hotel with retail and restaurant uses and a 1,067-square foot retail gallery that would provide employment opportunities. Employment opportunities would likely be filled primarily by existing residents in the City or surrounding cities and would not directly induce population growth in the region. However, as shown in Table 5-1, if the commercial uses were entirely staffed by new employees that relocate to the area, this would generate an additional population growth of approximately 247 employees. When added to the anticipated residential population increase, the overall population increase generated would be 1,680. This combined increase is approximately 18 percent of the projected growth and is accounted for in the City's projected 2035 population increase of 9,351 persons.

Moreover, as discussed in Section 4.2, *Air Quality*, under Impact AQ-1, the population increase associated with the Project would be within SCAG's 2040 population forecast. As discussed in sections 4.2, *Air Quality*, and 4.5, *Greenhouse Gas Emissions*, of this EIR, the Project would generally be consistent with the regional goals contained in the Air Quality Management Plan (AQMP), the City's Greenhouse Gas Reduction Plan (GGRP), and Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG, 2012. Similarly, as discussed in Section 4.3, *Cultural*

Resources, Section 4.4, *Geology and Soils,* and Section 4.6, *Hazards and Hazardous Materials,* potentially significant impacts to cultural resources and geology and soils, and impacts from hazardous materials would be reduced to less than significant with implementation of mitigation measures. As discussed in the Initial Study (Appendix A), the Project involves infill development on a currently vacant site within an urbanized area that lacks significant scenic resources, native biological habitats, known cultural resource remains, surface water, or other environmental resources. Therefore, population growth associated with the Project would not result in significant long-term physical environmental effects.

5.1.2 Economic Growth

The Project would generate temporary employment opportunities during construction. Because construction workers would be expected to be drawn from the existing regional work force, construction of the Project would not be growth-inducing from a temporary employment standpoint. The Project would also add long-term employment opportunities associated with operation of commercial uses. As shown in Table 5-1, the Project would result in an increase of approximately 247 jobs. It is anticipated that long-term employment opportunities generated from commercial development under the Project would also draw workers from the existing regional work force.

Table 5-1 Employment Increase Resulting from Proposed Project

Commercial Land Use	Area	Employment Density[1]	Number of Employees
Hotel Space	4.7 acres (205,300 sf)	51.91 employees/acre	244
Retail Gallery Space	1,067 sf	424 sf/employee[2]	3
Total			247

[1] Source: SCAG 2001

[3] Employment density factor for other retail/services land use is used for the retail gallery space as this most closely reflects the activities of the retail gallery included in the proposed Project.

As shown in Table 4.10-2 under Section 4.10, *Population and Housing*, SCAG forecasts employment in the City to increase to 141,900 by 2035, which is an increase of 35,100 jobs from SCAG's 2012 estimate of 106,800 jobs. If all new employees were used to staff the proposed Project, the 247 employees generated would constitute approximately 0.7 percent of the projected employment growth in the City. Therefore, even if the Project did not draw workers from the existing work force, generated employment growth would be consistent with City growth forecasts and would not be substantially growth-inducing and the Project would not be expected to induce substantial economic expansion to the extent that direct physical environmental effects would occur.

The population associated with the Project would contribute to the local economy as demand for general goods increases that, in turn, could result in economic growth for various sectors, such as retail and services. However, the Project would be infill development in an existing urban area and would add approximately 1,433 new residents to the 107,149 current population of Burbank (an increase of approximately one percent). Therefore, the Project would not be expected to induce substantial economic expansion to the extent that direct physical environmental effects would result. Moreover, the environmental effects associated with any future development in or around

Burbank would be addressed as part of the CEQA environmental review for such development projects.

5.1.3 Removal of Obstacles to Growth

The Project site is located in an urbanized area that is served by existing infrastructure. As discussed in Section 4.13, *Utilities*, and Section 4.12, *Transportation and Traffic* of this EIR, existing water, sewer, drainage, and transportation infrastructure in Burbank would be adequate to serve the Project. Improvements to water, sewer, and drainage connection infrastructure could be needed, but would be sized to specifically serve the Project. In addition, although the Project would widen Front Street to include a turn lane and a bike lane, the new width would not present a substantial change to existing circulation and would be intended to accommodate expected traffic volumes and Project site access needs. No new roads would be required. Because the Project constitutes redevelopment within an urbanized area and does not require the extension of new infrastructure through undeveloped areas, Project implementation would not remove an obstacle to growth.

5.2 Energy Effects

Public Resources Code Section 21100(b)(2) and Appendix F of the CEQA Guidelines require that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful or unnecessary consumption of energy.

The Project would involve the use of energy during construction and operation. Energy use during construction would be in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate heavy equipment, light-duty vehicles, and machinery. In addition, temporary grid power may also be provided to any temporary construction trailers or electric construction equipment. Long-term operation of the Project would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting, and heating and cooling systems.

BWP would provide electricity service for the Project. BWP’s power mix consists of approximately 33 percent renewable energy sources (i.e., wind, geothermal, solar, low impact hydroelectric, and biomass) (BWP 2018). Natural gas service would be provided by Southern California Gas Company (SoCal Gas). According to SoCal Gas, sufficient amounts of natural gas are available to meet the country’s demand for more than 100 years (SoCal Gas 2016). New technologies also offer the potential to capture methane, the primary ingredient in natural gas, from existing waste stream sources to make a renewable form of natural gas.

California used 292,039 gigawatt-hours (GWh) of electricity in 2017 and 2,111 billion cubic feet of natural gas in 2017 (CEC 2018a and EIA 2019). Californians presently consume over 19 billion gallons of motor vehicle fuels per year (CEC 2018b).

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Further, the model identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user. Complete CalEEMod results and assumptions can be viewed in Appendix D.

5.2.1 Construction Energy Use

The Project would require site preparation (i.e., vegetation clearing and grading); pavement and asphalt installation; building construction; architectural coating; and landscaping and hardscaping. All construction would be typical for the region and building types. The total consumption of gasoline and diesel fuel during Project construction was estimated using the same assumptions and factors from CalEEMod Version 2016.3.2 that were used in estimating construction air emissions in Section 4.3, *Air Quality*. Table 5-2 presents the estimated construction energy consumption, indicating off-road construction equipment, vendor trips, and hauling trips would consume a total of approximately 742,000 gallons of diesel fuel over the Project construction period. Worker trips would consume a total of 784 gallons of gasoline over the Project's construction period. These would be consumed over a period of 47 months and would represent less than 0.01 percentage of the total energy used in the State.

Table 5-2 Estimated Fuel Consumption during Construction

Fuel Type	Gallons of Fuel	MMBtu
Diesel Fuel (Construction Equipment)[1]	766,441.12	97,693.68
Diesel Fuel (Hauling & Vendor Trips)[2]	111,548.06	1,471.96
Other Petroleum Fuel (Worker Trips)[3]	807.27	88.63
Total	878,796.45	97,930.27

[1] Fuel demand rate for construction equipment is derived from the total hours of operation, the equipment's horse power, and the equipment's fuel usage per horse power per hour of operation, which are all taken from CalEEMod outputs (see Appendix D). Fuel consumed for all construction equipment is assumed to be diesel fuel.

[2] Fuel demand rate for hauling and vendor trips (cut material imports) is derived from hauling and vendor trip number, hauling and vendor trip length, and hauling and vendor vehicle class from "Trips and VMT" Table contained in Section 3.0, *Construction Detail*, of the CalEEMod results (see Appendix D). The fuel economy for hauling and vendor trip vehicles is derived from the United States Energy Information Administration's (EIA) average fuel economy for heavy duty vehicle class in 2016 (6.4 mpg) (EIA 2018a). Fuel consumed for all hauling trucks is assumed to be diesel fuel.

[3] The fuel economy for worker trip vehicles is derived from the EIA's average fuel economy for all vehicles in 2016 (17.9 mpg) (EIA 2018b). Fuel consumed for all worker trips is assumed to be gasoline fuel.

Notes: CaRFG CA-GREET 2.0 fuel specification of 109,786 Btu/gallon used to identify conversion rate for fuel energy consumption for worker trips specified above (California Air Resources Board [CARB] 2015). Low-sulfur Diesel CA-GREET 2.0 fuel specification of 127,464 Btu/gallon used to identify conversion rate for fuel energy consumption for construction equipment specified above (CARB 2015). Totals may not add up due to rounding.

5.2.2 Operational Energy Use

The Project's estimated motor vehicle fuel during operation as calculated from CalEEMod is shown in Table 5-3. Total estimated energy use during operation of the Project, including motor vehicle fuel, is summarized and compared to statewide usage in Table 5-4. The Project would result in increased weekday trips, and vehicle miles traveled (VMT) as compared to the current undeveloped site. However, the Project would constitute less than 0.01 percent of statewide energy consumption and would not adversely affect energy supplies.

Table 5-3 Estimated Project Annual Motor Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips[1]	Annual Vehicle Miles Traveled[2]	Average Fuel Economy (miles/gallon)[3]	Total Annual Fuel Consumption (gallons)
Passenger Cars	54.4%	8,657,596	36.4	237,546.0
Light/Medium Trucks	37.0%	5,888,791	23.5	250,586.9
Heavy Trucks/Other	8.0%	1,279,064	7.7	166,122.2
Motorcycles	0.5%	83,790	50	1,675.8
Total	100.00%	15,908,575	–	656,220.9

[1] Percent of vehicle trips found in Table 4.3 "Trip Type Information" in CalEEMod output (see Appendix D)

[2] Mitigated annual VMT found in Table 4.2 "Trip Summary Information" in CalEEMod output (see Appendix D)

[3] Average fuel economy for light/medium trucks, heavy trucks/other, and motorcycles provided by the United States Department of Transportation, Bureau of Transportation Statistics (2010); average fuel economy for passenger vehicles provided by the United States Department of Transportation, Bureau of Transportation Statistics (2016).

Note: Totals may not add up due to rounding.

Table 5-4 Estimated Project Energy Use Compared to Statewide Energy Use

Form of Energy	Units	Annual Project-Related Energy Use	Annual State-Wide Energy Use	Project % of State-Wide Energy Use[6]
Electricity	MWh	6,150[1]	290,567,000[2]	0.002%
Natural Gas	MMBtu	11,780[1]	2,313,000,000[3]	0.0005%
Motor Vehicle Fuels	gallons	656,220.9[4]	19,400,000,000[5]	0.003%

[1] Energy Use provided in the CalEEMod output for the Air Quality Analysis (see Appendix D);

[2] California Energy Commission, California Energy Almanac, 2017. Total Electricity System Power, data as of June 2017. Available: *http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html*.

[3] California Energy Commission, California Energy Almanac, Overview of Natural Gas in California – Natural Gas Supply. Available: *http://www.energy.ca.gov/almanac/naturalgas_data/overview.html*.

[4] See Table 5-3.

[5] California Energy Commission, Revised Transportation Energy Demand Forecast 2018-2030, Available at: https://efiling.energy.ca.gov/getdocument.aspx?tn=221893.

[6] As a conservative estimate that those uses have not been subtracted.

As discussed previously, the Project would also be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances. The Code provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including: appliances; water and space heating and cooling equipment; and insulation for doors, pipes, walls and ceilings. The Code emphasizes saving energy at peak periods and seasons, and improving the quality of installation of energy efficiency measures. In addition, the California Green Building Standards Code sets targets for: energy efficiency; water consumption; dual plumbing systems for potable and recyclable water; diversion of construction waste from landfills; and use of environmentally sensitive materials in construction and design, including ecofriendly flooring, carpeting, paint, coatings, thermal insulation, and acoustical wall and ceiling panels.

The Project is required to comply with Title 24 standards. Specific sustainability features to be incorporated into the Project are described in Section 2, *Project Description*. Meeting Title 24 energy conservation requirements in combination with the Project's sustainability components described in Section 2, *Project Description*, would ensure that energy is not used in an inefficient, wasteful, or unnecessary manner per Public Resources Code Section 21100(b)(2).

6 Alternatives

As required by Section 15126.6 of the *CEQA Guidelines*, this section examines a range of reasonable alternatives to the proposed Project that would attain most of the basic Project objectives but would avoid or substantially lessen the significant adverse impacts.

As discussed in Section 2, *Project Description*, the objectives for the Project, are as follows:

- Reduce vehicle trips by providing a mixed-use, Transit Oriented Development in close proximity to transit.
- Help meet Citywide housing demand and RHNA requirements through the provision of new, quality living options in the City.
- Enhance linkages to transit by creating a streetscape that encourages pedestrian activity with a widened sidewalk and installing a new bike lane.
- Enhance the value of the site and economic vitality of the City of Burbank through the development of a project at an existing underutilized site that is responsive to market demands.
- Contribute to the economic health of the City though development of a Project that would generate new construction and long-term jobs, house new residents to support local businesses, and provide additional long-term revenues for the City, in the form of transient occupancy and sales taxes.
- Help meet the recreational needs of Project and other residents at no cost to the City by providing publicly accessible, privately maintained open space.

Included in this analysis are four alternatives, including the CEQA-required "no project" alternative, that involve changes to the Project that may reduce the Project-related environmental impacts as identified in this EIR. Alternatives have been developed to provide a reasonable range of options to consider that would help decision-makers and the public understand the general implications of revising or eliminating certain components of the Project.

The following alternatives are evaluated in this EIR:

- Alternative 1: No Project
- Alternative 2: Existing Zoning
- Alternative 3: No Hotel
- Alternative 4: Reduced Density

Table 6-1 provides a summary comparison of the development characteristics of the Project and each of the alternatives considered. Detailed descriptions of the alternatives are included in the impact analysis for each alternative. The potential environmental impacts of each alternative are analyzed in Sections 6.1 through 6.4.

Table 6-1 Comparison of Project Alternatives' Buildout Characteristics

Feature	Project	Alternative 1: No Project	Alternative 2: Existing Zoning	Alternative 3: No Hotel	Alternative 4: Reduced Density
Lot Area[1]	294,868 sf	294,868 sf	294,868 sf	294,868 sf	294,868 sf
Floor Area[2]	859,223 sf	–	155,000 sf	646,873 sf	462,563 sf
Height	Residential Building 1: 7 stories, 80' 4" Residential Building 2: 8 stories, 82' 6" Retail: 1 story, 28' Hotel: 7 stories, 85'	–	Dealership 1: 3 stories, 36' 6" (Building 1); 1 story, 12' 2" Dealership 2: 1 story, 16'	Residential Building 1: 7 stories, 80' 4" Residential Building 2: 8 stories, 82' 6" Retail: 1 story, 28'	Residential Building 1: 4 stories, 46' Residential Building 2: 5 stories, 51' 6" Hotel" 4 stories, 48' 6" Retail: 1 story, 28'
Residential Units	573 units	–	–	573 units	315 units
Hotel	212,350 sf 307 guestrooms	–	–	–	116,793 sf 169 guestrooms
Retail	1,067 sf	–	–	1,067 sf	587 sf
Restaurant	1,800 sf	–	–	–	990 sf
Open Space	106,400 sf	–	6,868 sf	143,895 sf	97,750 sf
Parking Required	Residential: 1,143 spaces Retail: 4 spaces Hotel: 307 spaces	–	Dealership 1: 363 spaces Dealership 2: 149 spaces	Residential:1,143 spaces Retail: 4 spaces	Residential: 628 spaces Retail: 2 spaces Hotel: 169 spaces Restaurant: 10 spaces
Parking Provided	Residential (excluding tandem): 1,143 spaces Retail: 4 spaces Hotel (excluding tandem): 307 spaces	–	Dealership 1: 363 spaces (plus inventory) Dealership 2: 149 spaces (plus inventory)	Residential: 1,143 spaces (excluding tandem) Retail: 4 spaces	Residential: 628 spaces (excluding tandem) Retail: 2 spaces Hotel: 169 spaces (excluding tandem) Restaurant: 10 spaces
Floor Area Ratio[3]	0.58	–	0.52	0.003	0.34

[1]Lot area is net square footage, used to calculate Floor Area Ratio (FAR).

[2]The floor area is adjusted gross floor area, calculated pursuant to Burbank Municipal Code §10-1-203 and does not include exterior and interior walls, columns, stair shafts, elevator shafts, and duct shafts.

[3]Based on adjusted gross floor area and net square footage of lot area.

6.1 Alternative 1: No Project

6.1.1 Description

As required by Section 15126.6 (e)(1) of the CEQA Guidelines, the purpose of analyzing a no project alternative is to allow decision makers to compare the impacts of approving the Project with the impacts of not approving the Project. The No Project Alternative assumes that the Project is not constructed and that the site would remain in its current condition. As discussed in Section 2, *Project Description*, the Project site is currently vacant, aside from occasional use for storage and as a filming location for the entertainment industry. The site contains remnant building slabs, mounds of soil, and construction materials.

The No Project Alternative assumes that the proposed residential buildings, totaling 573 residential units, as well as the 307-room hotel and 1,067 sf retail gallery, would not be constructed. Current uses on the Project site could continue intermittently under the No Project Alternative. However, this alternative would not involve physical changes, and the Project site would remain vacant. As such, the existing conditions on the Project site would generally remain the same with respect to all resource areas, including air quality and greenhouse gas (GHG) emissions, noise, and traffic. Construction impacts associated with the Project were found to be less than significant, but because there would be no demolition or construction under this alternative, even the Project's less than significant construction impacts, such as air quality emissions, construction stormwater runoff, and equipment noise, would be avoided.

6.1.2 Impact Analysis

a. Aesthetics

As described in Section 4.1, *Aesthetics,* the Project site is currently vacant, undeveloped land containing mounds of soil and construction materials. The site is partially fenced along Front Street. Under the No Project Alternative, the site would remain undeveloped. No residential or commercial uses would be constructed. There would be no change in shadows, light, or glare at or in the vicinity of the Project site, as no new sources of light would be installed and no buildings or structures would be constructed. Consequently, there would be no impacts to light-sensitive uses in the surrounding area. However, the visual character would remain unimproved as that of a vacant, urban industrial site. In comparison, the proposed Project would increase potential impacts associated with shadows, light, or glare due to construction of seven and eight-story residential and hotel buildings on the Project site. With incorporation of code compliance and Aesthetics Project Design Feature (PDF) 1 - Photometric Lighting Plan. the Project's impact would be less than significant. The No Project Alternative would result in no aesthetic impacts, and such impacts would be reduced.

b. Air Quality

The No Project Alternative would not include development of any of the land uses proposed under the Project so no air pollutant emissions from construction would be generated. The Project, in comparison, would generate temporary emissions of ozone precursors, ROG and NOx, as well as CO, fugitive dust, and fine particulate matter during construction. The Project's emissions for all of these pollutants would be below SCAQMD regional and localized significance thresholds, with the exception of NOx emissions, which would be reduced to a less than significant level with adherence to Mitigation Measure AQ-2 High Efficiency Truck Engines. Nevertheless, this alternative would have less impact and Mitigation Measure AQ-2 would not be required.

The Project site is currently vacant land, used occasionally as storage and a filming location. Under the No Project Alternative, the site would remain vacant, and, consequently, long-term operational emissions would remain the same as existing conditions. Operational emissions associated with current uses of the Project site are minimal and include mobile emissions resulting from access to the site for storage and filming and fugitive dust emissions from exposed soil piles on the site. Furthermore, the No Project Alternative would not result in any traffic increases that could exacerbate CO hotspots at nearby intersections. By comparison, the Project would generate additional CO emissions, though such emissions would be less than significant.

The No Project Alternative would not place residences or hotels on the Project site. Therefore, the No Project Alternative would not expose sensitive receptors to pollutant concentrations. By comparison, the Project would involve construction of residences and a hotel adjacent to the I-5 Freeway that would expose residents and extended stay hotel patrons to diesel exhaust and paved roadway dust. Exposure to particulate concentrations would be reduced below SCAQMD thresholds by restricting the rate of infiltration to the proposed buildings through filtration systems pursuant to Air Quality PDF 3 - Air Quality Control Measures. While this impact would be less than significant under the Project, the No Project Alternative would result in no impact. In addition, like the proposed Project, the No Project Alternative would not create objectionable odors during operation, and would also avoid temporary odor generation associated with construction activities. The No Project Alternative would result in no impact to air quality, and impacts would be less than those of the proposed Project.

c. Cultural Resources

As discussed in Section 4.3, *Cultural and Tribal Cultural Resources,* no known cultural or tribal cultural resources are present on the Project site. The site is previously disturbed, and a cultural resources records search and pedestrian field survey did not identify any prehistoric or historic cultural resources on the site. The No Project Alternative would not involve ground disturbance and would have no potential impacts to archaeological or tribal cultural resources. Construction of the Project would involve ground-disturbing activities, which would have the potential to unearth or adversely impact previously unidentified archaeological, paleontological, or tribal cultural resources. The Project's potential impacts to paleontological resources and human remains would be less than significant with incorporation of Mitigation Measures CUL 1-a through CUL-1d. However, given that the No Project Alternative would result in no construction or ground disturbance, there would be no impact to cultural resources. Impacts would be less than those of the proposed Project and Project-required mitigation would not apply.

d. Geology and Soils

As discussed in Section 4.4, *Geology and Soils,* the Project site is located in seismically-active Southern California and identified as having liquefaction potential. Under the No Project Alternative, the Project site would remain in its current vacant condition. This alternative would not involve construction of facilities on the Project site and, therefore, would not expose people or structures to adverse effects involving liquefaction. Consequently, there would be no impact. By comparison, the Project would involve construction of two residential buildings and a hotel on the Project site. With adherence to all recommendations contained in the geotechnical report prepared for the project by GeoCon West, Inc. (refer to Appendix F), and incorporation of Geology PDF 1 through Geology PDF

3, the design and construction of the proposed buildings would be engineered to withstand potential impacts associated with ground acceleration and liquefaction that may occur at the Project site, and impacts would be less than significant under the Project.

The No Project Alternative would not result in ground disturbance on the Project site, eliminating the potential for construction-related loss of topsoil or soil erosion in comparison to the proposed Project. However, soil erosion from exposed soil piles on the Project site could still occur under this alternative. The proposed Project would have potential to result in loss of topsoil or soil erosion during construction activities, including excavation and grading. Preparation of a SWPPP pursuant to the BMC would render this impact less than significant.

Although the Project would result in less than significant impacts with respect to geology and soils, impacts under the No Project Alternative would be less than those associated with the Project and also less than significant.

e. Greenhouse Gas Emissions

Under the No Project Alternative, no construction-related GHG emissions would be generated and no increase in operational GHG emissions above existing conditions would occur. Minimal GHG emissions associated with the site's intermittent use for storage and filming would continue. As discussed in Section 4.5, *Greenhouse Gas Emissions,* proposed Project would generate GHG emissions during construction and operation, but such emissions would remain below the City's 2020 GHG emissions target and 2035 goal.

Like the Project, the No Project Alternative would not conflict with any applicable plan, policy, or regulation adopted for reducing GHG emissions. Therefore, although the Project would have less than significant impacts with respect to GHG emissions, and this alternative's impact regarding GHG emissions would be less than those of the proposed Project.

f. Hazards and Hazardous Materials

As discussed in Section 4.6, *Hazards and Hazardous Materials,* the Project site is located on the San Fernando Valley, Area 2, Crystal Springs Superfund site and, therefore, included on lists of hazardous materials sites on government databases. The Project site contains soils and groundwater contaminated with VOCs and metals, remnant building foundations that may contain asbestos, and an abandoned oil pipeline.

Under the No Project Alternative, no ground disturbance would occur and there would be no increased potential for release of hazardous materials. However, the Project would involve implementation of a Los Angeles Regional Water Quality Control Board- (LARWQCB-) approved Response Plan and Soil Contingency and Management Plan, which would not occur under the No Project Alternative. The proposed remediation plans would involve shallow soil excavation, installation of a soil vapor barrier, operation of a Soil Vapor Extraction (SVE) system, and removal of the abandoned pipeline (see Hazards PDF 1 through Hazards PDF 4, and Mitigation Measure HAZ-1a and HAZ-1b). Additionally, Mitigation Measure HAZ-1c would require surveys for and proper removal and disposal of asbestos containing materials (ACMs) present on the site. Potential impacts associated with hazardous materials would be less than significant with implementation of mitigation under the proposed Project, and site remediation would reduce hazardous conditions in the long term. Under the No Project Alternative, the Project site would remain vacant and undisturbed, and the remediation plans would not be implemented. Therefore, under the No Project Alternative, construction would not occur and the existing contamination would not be removed, which would result in reduced impacts in comparison to the Project with respect to the potential release of hazardous materials during construction. Project-required mitigation would not apply, but this alternative would not result in the long-term reduction in hazardous conditions that would occur under the proposed Project.

g. Hydrology and Water Quality

Under the No Project Alternative, there would be no increase in runoff, no changes to local or area-wide drainage patterns, and no impacts to groundwater or surface water. As discussed in Section 4.7, *Hydrology and Water Quality,* the Project would potentially adversely affect water quality due to erosion resulting from exposed soils during construction and the generation of water pollutants, construction materials, and equipment fluids. The Project would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) pursuant to the requirements of the NPDES Statewide General Construction Activity Stormwater permit, reducing construction-related water quality impacts to a less than significant level.

The Project site is approximately 91 percent impervious surface cover under existing conditions. Potential sources of pollutants on the Project site include soil piles and construction materials stored on the site. Under the No Project Alternative, the site would remain in its existing condition, and these pollutant sources would remain. By comparison, implementation of the Project would decrease the impervious surface cover on the site to approximately 88 percent due to installation of landscaping, and the peak discharge rates for the 25-year and 85^{th} percentile storms would also be reduced. Additionally, implementation of Hydrology PDF 1 and Hydrology PDF 2 would further reduce impacts from stormwater runoff volumes and stormwater pollutants. Consequently, the Project would result in less than significant impacts to hydrology and water quality. The No Project Alternative would not involve construction-related water quality impacts, but would not reduce impervious surfaces or peak discharge on the Project site or implement such BMPs. As a result, hydrology and water quality impacts under this alternative would be marginally greater to those of the Project; however, impacts under this alternative would be less than significant.

h. Land Use and Planning

Under the No Project Alternative, the Project site would remain vacant and there would be no potential conflicts with any applicable land use plans, policies, or regulations intended to reduce or avoid environmental impacts. Development under the Project would require approval of a Specific Plan Amendment to the Burbank Center Plan to allow housing on the site, along with a Planned Development and Zone Map Amendment to change the zoning from AD to Planned Development (PD). Upon approval of these entitlements and incorporation of Land Use PDF 1, the Project would be compliant with applicable land use plans and policies and impacts would be less than significant. However, the No Project Alternative would not include the open space transit plaza with pedestrian bridge to Magnolia Boulevard, nor would it include the retail gallery with pedestrian link to Burbank Boulevard. As a result, pedestrian linkages and transit linkages to housing would be diminished under this alternative as compared to the Project, making Alternative 1 less consistent with the goals of the 2016-2040 RTP/SCS discussed in Section 4.8, *Land Use and Planning*. Overall, because neither land use amendments proposed under the Project nor the No Project Alternative would not result in physical impacts to the environment, impacts to land use and planning would be similar.

i. Noise

The No Project Alternative would not involve construction activities so temporary construction-related noise and vibration impacts would not occur. The Project site would remain undeveloped, and this alternative would avoid new sources of noise associated with operation of the Project, such as increased vehicle traffic, commercial HVAC equipment, and outdoor recreational spaces. In comparison, as discussed in Section 4.9, *Noise*, temporary construction activities under the Project would generate noise, although construction noise levels would not exceed the City's standards at the nearest sensitive receptors. In addition, vibration caused by Project construction would not exceed thresholds and would not cause damage to existing structures. Furthermore, although Project operation would result in incremental increases in noise, operational impacts associated with Project and traffic noise increases would not exceed the City's significance thresholds. With incorporation of Noise PDF 1 and Noise PDF 2, and Mitigation Measures N-4a through N-4e, impacts under the Project would be less than significant. However, since construction activities and development of the Project site would not occur under the No Project Alternative, this alternative's noise impacts would be less than those of the Project and also less than significant.

j. Population and Housing

The No Project Alternative would not include any of the development proposed under the Project; therefore, it would have no direct impact to population and housing growth. In comparison, development of the Project may directly and indirectly increase the City's population by up to 1,680 people from new residents of the proposed 573 residential units and employees associated with the proposed hotel and retail gallery. The population growth would fall within the City's housing element and SCAG population forecasts. Therefore, the Project would not induce population growth beyond that which was already planned, and this impact would be less than significant. Nevertheless, because the No Project Alternative would result in no direct or indirect population growth, its impact would be less than that of the Project and also less than significant. It should be noted, however, that because the No Project Alternative would not include any housing on the Project site, it would not help the City meet any of the RHNA goals related to meeting regional housing needs.

k. Public Services

Because the No Project Alternative would not include the development proposed under the Project, it would have no impact related to public services. The No Project Alternative would not require the construction of new fire protection facilities or contribute to the need for such facilities in the future. The No Project Alternative would result in no population growth, and therefore, no increase in demand for fire or police services or student enrollment at Burbank Unified School District (BUSD) facilities. Although the impact of the Project would be less than significant with mitigation incorporated through contribution to the City's Development Impact Fee (DIF) program pursuant to Mitigation Measure PS-1, the No Project Alternative's impact related to public services would be less than that of the Project, and also less than significant and Project-required mitigation would not apply.

l. Transportation and Traffic

Under the No Project Alternative, no increase in traffic would occur and traffic would remain at current levels. Current trips generated by the vacant site are associated with access to the site for intermittent storage and filming. While such trips would continue under the No Project Alternative, they are infrequent and this alternative would not increase trip generation at the Project site beyond current conditions. The No Project Alternative would avoid the Project's significant and unavoidable impacts at the Burbank Boulevard and I-5 Southbound Off-Ramps/Front Street and North Victory Place and West Burbank Boulevard intersections, for which mitigation is not feasible. Similar to the Project, the No Project Alternative would not result in design features that would increase hazards or inhibit emergency access, nor would it disrupt the local active transportation system. However, because the No Project Alternative would avoid the Project's significant and unavoidable impacts to City intersections, impacts under this alternative would be less than under the Project and less than significant. Project-required mitigation, specifically Mitigation Measures T-1a, T-1b, T-5a, T-5b, and T-6 addressing intersection congestion, bicycle and pedestrian access, ADA access, and construction management would not apply.

m. Utilities and Service Systems

The Project site would remain vacant under the No Project Alternative and, thus, no impact to utilities or service systems would occur. As discussed in Section 4.13, *Utilities and Service Systems*, proposed development under the Project would increase water demand, wastewater generation, and solid waste generation. Based on the water demand projections, projected water supplies are sufficient to meet the projected water demand of the proposed Project, approximately 498.5 AFY. Solid waste generated by the Project, approximately 1.3 tons per day, would be served by a landfill with sufficient capacity. Additionally, wastewater generated by the Project would be treated at the Burbank Water Reclamation Plant (BWRP) and account for approximately 10.6 percent of the plant's remaining capacity. With incorporation of Mitigation Measure UTIL-3, *Recycling Facilities, Measures, and Guidelines*, the Project would result in less than significant impacts with respect to utilities and service systems. The No Project Alternative would avoid increases in water demand, solid waste generation, and wastewater generation altogether; therefore, this alternative's impact would be less than that of the Project.

6.2 Alternative 2: Existing Zoning

6.2.1 Description

The Existing Zoning – Alternative 2 would involve development consistent with the existing Automobile Dealership (AD) zoning and Downtown Commercial and Mixed Commercial/Office/Industrial land use designations for the Project site. According to Section 10-1-2519.1.5 of the BMC, developments in the AD zone with a Downtown Commercial General Plan land use designation are restricted to a FAR of 2.5. All development in the AD zone is required to comply with the development standards of the Burbank Center Commercial General Business (BCC-3) zone. In the Burbank Center Plan area, the maximum allowable height for structures greater than 300 feet from a R-1 or R-2 zoned lot line without a Conditional Use Permit is 70 feet. As described in the Burbank Center Plan, the Mixed Commercial/Office/Industrial land use designation is intended to retain the light industrial employment base while encouraging future development of mixed use commercial and office projects. However, per Section 10-1-502 of the BMC, the only permitted land uses in the AD zone are automobile dealer – new car sales only and park and recreational facility – municipal.

As shown in Table 6-1, development under this alternative would involve construction of two automobile dealerships. Dealership 1 would include a three-story showroom, lobby, and office area totaling approximately 63,000 square feet. Adjacent to the showroom would be a one-story office and service center building, totaling approximately 47,000 square feet. Both buildings would include rooftop parking for customers, employees, and inventory. Additional inventory would be parked in parking lots surrounding the buildings. Dealership 2 would consist of a single, one-story showroom and office building with rooftop parking, totaling approximately 45,000 square feet. In addition to the buildings, the dealerships would include approximately 175,000 square feet of paved area for parking, inventory display, and circulation throughout the Project site. Dealership 1 would provide 363 parking spaces for visitors and employees, and additional spaces for inventory. Dealership 2 would provide 149 spaces for visitors and employees, plus additional inventory spaces. Total FAR on the Project site under this alternative would be approximately 0.52, given the substantial amount of parking surrounding the dealership buildings. Building heights would also be reduced, with the tallest building under this alternative being three stories, or approximately 36.5 feet.

6.2.2 Impact Analysis

a. Aesthetics

As described in Section 4.1, *Aesthetics,* the Project site is currently vacant, undeveloped land containing mounds of soil and construction materials. The Existing Zoning Alternative would involve construction of two automobile dealerships on the site. Like the Project, this alternative would introduce new sources of light and glare on the Project site. Although the Existing Zoning Alternative would result in a lower intensity of development, this alternative would result in highly visible exterior pole mounted lighting in the outdoor parking lots of the automobile dealerships, as well as wall-mounted lighting, walkway lighting, commercial signage, as well as interior showroom lighting and office lighting in structures.

The Project site is located in an urban part of the City. The nearest residential properties are approximately 0.2 mile northeast of the site across I-5, with additional single-family residences approximately 0.4 mile to the west. Commercial properties and warehouse/manufacturing spaces between Front Street and Victory Boulevard obstruct views of the Project site from these residences. Therefore, similar to the Project, increased light and glare on the Project site under the Existing Zoning Alternative would not affect surrounding residential properties.

Development under this alternative would also be required to adhere to Division 4, 10-1-628(W) of the BMC, requiring outdoor lighting fixtures to be directed away from adjacent properties. Structures associated with the automobile dealerships would cast shadows, but the lower height of these structures would result in reduced shadows compared to the Project, which was determined to result in less than significant impacts related to shade and shadows. Under the Existing Zoning Alternative, the visual character of the Project site would change from that of a vacant urban site to that of a commercial automobile center. The site would be characterized by commercial signage, extensive vehicle parking, and minimal open space. While this alternative would not necessarily degrade the visual character of the Project site relative to existing conditions, it would not enhance the visual character of the site to the same degree as the Project, which would incorporate more landscaping, open space, and reduced commercial signage. Although the Existing Zoning Alternative would result in a lower intensity of development, as compared to the proposed Project, this alternative would result in highly visible exterior pole mounted lighting in the outdoor parking lots of the automobile dealerships, as well as wall-mounted lighting, walkway lighting, commercial signage, as well as interior showroom lighting and office lighting in structures. Similar to the Project, Alterative 2 would also implement Aesthetics PDF 1 - Photometric Lighting Plan. As such, potential light impacts would be similar in comparison to the Project. However, due to the reduced density under this alternative, potential shadow impacts would be less in comparison to the Project. Overall, the Existing Zoning Alternative would result in a less than significant impact with respect to aesthetics similar to the proposed Project.

b. Air Quality

Construction-related air pollutant emissions associated with the Existing Zoning Alternative would be incrementally less than those of the proposed Project because this alternative would include less square footage than the Project. Additionally, while shallow soil excavation and export associated with site remediation would generally be the same as under the Project, total soil excavation and export would be reduced under this alternative because it would not include a subterranean parking garage. During construction of Alternative 2, emissions would not exceed SCAQMD thresholds, and construction-related impacts would be less than significant. By comparison, NOx emissions during Project construction would exceed SCAQMD thresholds, requiring implementation of Mitigation Measure AQ-2. While this impact would be less than significant with mitigation incorporated under the Project, this impact would be reduced under the Existing Zoning Alternative. Project-required mitigation would not apply.

Alternative 2 would not place residences or hotels on the Project site. Therefore, the Alternative 2 would not expose sensitive receptors to pollutant concentrations. By comparison, the Project would involve construction of residences and a hotel adjacent to the I-5 freeway, which would expose residents and extended stay hotel patrons to diesel exhaust and paved roadway dust. Exposure to particulate concentrations would be reduced below SCAQMD thresholds by restricting the rate of infiltration to the proposed buildings through filtration systems pursuant to Air Quality PDF 3 - Air Quality Control Measures. Alternative 2 would also generate fewer long-term operational emissions than the proposed Project, in part because it would generate 1,071 fewer daily vehicle trips. Overall air quality impacts associated with this alternative would be less than significant, and would be less those of the proposed Project.

c. Cultural Resources

As discussed in Section 4.3, *Cultural and Tribal Cultural Resources,* the Project site is previously disturbed, with no known cultural or tribal cultural resources present. A cultural resources records search and pedestrian field survey did not identify any prehistoric or historic cultural resources on the site. Similar to the Project, construction of the automobile dealerships under the Existing Zoning Alternative would involve ground-disturbing activities, including excavation, grading, and removal of remnant building foundations on the site. Excavation and grading, however, would be reduced since subterranean parking would not be constructed under this alternative. Nevertheless, such activities would have the potential to unearth or adversely impact previously unidentified archaeological, paleontological, or tribal cultural resources. As with the Project, incorporation of Mitigation Measures CUL-1a, through CUL-1d would reduce potential impacts with respect to previously unidentified archaeological resources, paleontological resources, and human remains such that they would be less than significant with mitigation incorporated. The potential for impacts under the Existing Zoning Alternative would be incrementally reduced in comparison to the Project, given that total excavation would be less under this alternative.

d. Geology and Soils

The Project site is located in seismically-active Southern California and identified as having liquefaction potential. With adherence to all geotechnical recommendations, the design and construction of the proposed buildings under this alternative would be engineered to withstand the potential ground acceleration and liquefaction that may occur at this Project site. This impact would be similar to that of the Project and would be less than significant.

Construction activities associated with development under the Existing Zoning Alternative would have potential to result in loss of topsoil or soil erosion during construction activities, including excavation and grading. Like the Project, this alternative would require preparation of a SWPPP pursuant to Article 4, 9-3-407, 9-3-413, and 9-3-414 of the BMC, which would include BMPs to reduce construction-related erosion and stormwater runoff. As with the Project, this impact would be less than significant. Total disturbance area on the Project site would be similar to the Project under this alternative. Therefore, this impact would be similar that of the Project.

e. Greenhouse Gas Emissions

Similar to the proposed Project, the Existing Zoning Alternative would not conflict with applicable plans or policies related to GHG emissions because this alternative would involve infill development that would comply with applicable energy conservation requirements and proposed sustainability features, while being consistent with regional efforts to reduce vehicle miles traveled (VMT) by providing employment opportunities in an urban area that is located near public transit. Impacts would be less than significant for Alternative 2.

In comparison to the Project, this alternative would result in reduced construction and operational emissions and trip generation (see Table 6-2). Therefore, although the impact of both this alternative and the proposed Project would be less than significant, the overall potential GHG emissions associated with construction and operation would be less than those of the Project.

f. Hazards and Hazardous Materials

As discussed in Section 4.6, *Hazards and Hazardous Materials,* the Project site contains soils and groundwater contaminated with VOCs and metals, remnant building foundations that may contain asbestos, and an abandoned, unmarked oil pipeline. Under the Existing Zoning Alternative, ground disturbance during construction would increase the potential for release of hazardous materials due to excavation and transport of soils. As with the Project, the Existing Zoning Alternative would require implementation of the LARWQCB-approved Response Plan and Soil Contingency Management Plan. Activities required under the plans include shallow soil excavation, installation of a soil vapor barrier, operation of a SVE system, and removal of the abandoned pipeline (see Hazards PDF 1 through Hazards PDF 4, and Mitigation Measures HAZ-1a and HAZ-1b). Additionally, Mitigation Measure HAZ-1c would be required to reduce impacts related to hazards and hazardous materials to a less than significant level. As with the Project, the RP and SCMP would be implemented under this alternative and would minimize risk associated with hazardous material emissions during construction activities.

The Project site is located approximately 0.25 mile southwest of Burbank High School. Automobile dealerships constructed under this alternative may store or handle automotive chemicals typical of automobile dealerships and service centers. Given the distance from the Project site and the nature of such chemicals, potential leaks or spills of automotive chemicals would be unlikely to affect the school. Automobile dealerships constructed under the Existing Zoning Alternative would be subject to applicable federal, state, and local regulations regarding the handling, storage, transport, and disposal of any hazardous materials. This impact would be less than significant, but greater than the proposed Project.

Overall, impacts related to hazards and hazardous materials under the Existing Zoning Alternative would be less than significant with mitigation incorporated, and this impact would be incrementally greater than that of the Project.

g. Hydrology and Water Quality

Similar to the Project, Alternative 2 would potentially adversely affect water quality due to erosion resulting from exposed soils during construction and the generation of water pollutants from construction materials and equipment fluids. Erosion impacts under this alternative would be similar to the Project, as the total disturbance area on the Project site would be similar to the Project under this alternative. However, construction of the automobile dealerships would not require excavation of subterranean parking structures and, therefore, overall excavation would be reduced. Development under the Existing Zoning – Alternative 2 would also be required to prepare a SWPPP pursuant to the requirements of the NPDES Statewide General Construction Activity Stormwater permit. As with the proposed Project, implementation of stormwater and sediment control BMPs under the SWPPP would reduce construction-related water quality impacts to a less than significant level.

As discussed in Section 4.7, *Hydrology and Water Quality,* the Project site is approximately 91 percent impervious surface cover under existing conditions. The Existing Zoning – Alternative 2 would involve construction of two automobile dealerships that would cover the site with paved parking for inventory, visitors, and employees; paved entrance ways and exits; and structures. As a result, impervious surface cover on the site would likely remain the same or increase in comparison to the proposed Project. As with the Project, the Existing Zoning - Alternative 2 would involve a commercial/industrial development with more than 10,000 sf of impervious surface cover, and therefore, would be subject to the post-construction stormwater peak flow and pollutant discharge requirements of the Los Angeles County SUSMP. Additionally, development of the automobile dealerships would be subject to the City's LID ordinance, which requires control of runoff from impervious surfaces through infiltration, evapotranspiration, bioretention, and/or rainfall harvest and use. By comparison, the Project would involve some reduction in impervious surface cover on the Project site due to installation of landscaping, including landscaped residential courtyards, which the automobile dealerships under the Existing Zoning Alternative would not include. Additionally, due to the sustained presence of parked or idling cars on inventory lots and repair facilities, the automobile dealerships proposed under the Existing Zoning Alternative would potentially result in more polluted runoff relative to the Project.

Both the Project and the Existing Zoning Alternative would result in less than significant impacts to hydrology and water quality given adherence to existing regulatory requirements and project design features. However, given the potential increase in impervious surface and pollution from automobile chemicals, impacts under this alternative would be greater than the Project.

h. Land Use and Planning

This alternative would involve development consistent with the existing zoning requirements for the Project site that would include a building height of up to 70 feet and a total FAR of 0.52. In comparison, the Project would require a Specific Plan Amendment to the Burbank Center Plan to allow for housing on the Project site, Development Review, Planned Development, a Development Agreement, and a Vesting Tentative Tract Map. With approval of the Planned Development, the zoning of the Project site would be changed from AD (Automobile Dealership) to PD (Planned Development). Because the Existing Zoning Alternative would not require a Specific Plan

Amendment or a zone change, this alternative would comply with the existing General Plan designation and zoning regulations and, therefore, would reduce land use impacts in comparison to the Project.

Similar to the Project, this alternative would not conflict with any General Plan land use policies or goals adopted for the purposes of avoiding or mitigating an environmental effect. However, development under the Existing Zoning Alternative would not include the open space transit plaza with pedestrian bridge to Magnolia Boulevard, nor would it include the retail gallery with pedestrian link to Burbank Boulevard. As a result, pedestrian linkages and transit linkages to housing would be diminished under this alternative as compared to the Project, making Alternative 2 less consistent with the goals of the 2016-2040 RTP/SCS discussed in Section 4.8, *Land Use and Planning*. Alternative 2 would result in greater consistency with the Burbank Center Plan and existing zoning designation of the Project site; however, this alternative would result in reduced consistency with the 2016-2040 RTP/SCS and less consistency with the City's conceptual goals for mixed use development in the Downtown area. Alternative 2 would also require implementation of Land Use PDF 1. Therefore, impacts to land use and planning under the Existing Zoning Alternative would be similar to those under the Project. Such impacts would be less than significant.

i. Noise

Construction of the Existing Zoning – Alternative 2 would require construction equipment similar to that needed for the Project. While the duration of construction activities would be reduced in comparison to that of the Project, peak construction noise would be similar during each phase of construction (e.g., grading, building construction, paving, etcetera). Construction noise would not expose the nearest noise sensitive receptors—single-family homes across the I-5 freeway, Burbank High School, and single-family homes along West Burbank Boulevard—to noise levels in excess of applicable City standards. Furthermore, construction would be limited to authorized construction hours pursuant to Chapter 9-1-1-105.8 of the BMC. As with the Project, construction vibration levels associated with buildout of the Existing Zoning Alternative would not cause physical damage to structures or exceed the FTA's threshold for perceptibility. Overall, as with the Project, construction noise and vibration impacts would be less than significant. However, given the reduced duration of construction activities under this alternative, temporary construction noise and vibration impacts would be reduced in comparison to the proposed Project. Overall, construction noise and vibration impacts would be less than significant.

As shown in Table 6-2 below, operation of the Existing Zoning – Alternative 2 would generate approximately 4,190 ADT, or about 1,071 (20 percent) fewer vehicle trips than the Project would generate (5,261 ADT). Therefore, the decrease in vehicle trips associated with this alternative would incrementally lower noise levels on study area roadways. As with the Project, traffic-related noise impacts would be less than significant.

As discussed in Section 4.9, *Noise*, ambient noise in the vicinity of the Project site can reach approximately 81 dBA Ldn due to the proximity to I-5 Freeway that is considered "normally unacceptable" for the residences, hotel lodging, and public plaza proposed under the Project, according to the City's land use compatibility criteria for transportation noise sources. This impact would be less than significant with incorporation of Mitigation Measures N-4a through N-4e. However, the City's General Plan Noise Element does not contain noise compatibility criteria for retail/commercial uses such as auto dealerships outside of the Airport Influence Area. Therefore, ambient noise levels would not exceed any noise compatibility criteria for the proposed automobile dealership uses under the Existing Zoning Alternative. This impact would be less than significant, and no mitigation would be required.

As with the Project, operation of this alternative would result in noise from on-site sources such as stationary equipment, rooftop ventilation and heating systems, trash hauling, conversations and other noises associated with automobile sales and office activity. However, given the reduced intensity of development under the Existing Zoning Alternative, operational noise from such sources would likely be reduced in comparison to the Project. As with the Project, operational noise under this alternative would be less than significant.

Overall, although neither this alternative nor the proposed Project would result in significant noise impacts, both temporary and long-term noise impacts would be incrementally reduced in comparison to the Project.

j. Population and Housing

The Existing Zoning Alternative would involve construction of two automobile dealerships, with approximately 155,000 sf of floor area in total that would generate employees. Based on the SCAG Employment Density Study Summary, retail and services in Los Angeles County generate one employee per 424 sf. Therefore, automobile dealerships constructed on the Project site would generate approximately 366 employees. Conservatively assuming all of these employees would relocate to the City, this would constitute a 0.3 percent increase in the City's population, increasing the population to 107,515. As with the Project, this increase in population would remain within the SCAG's 2035 population forecast of 116,500 from the 2016 RTP/SCS, and this impact would be less than significant. By comparison, residents and employees associated with the housing, lodging, and retail gallery land uses constructed under the Project would increase the City's population by up to 1,680 people. Although this population increase is within City forecasts, the Existing Zoning Alternative's impact would be incrementally lower since this alternative would result in less population growth. However, it should be noted that because the Existing Zoning – Alternative 2 would not include any housing on the Project site, it would not help the City meet any of the RHNA goals related to meeting regional housing needs.

k. Public Services

Like the Project, all site and building development carried out under the Existing Zoning Alternative would be required to comply with all applicable fire code and ordinance requirements for construction, access, water mains, fire flows, and hydrants, and would be subject to review and approval by the BFD prior to building permit and certificate of occupancy issuance. Since both the Project and the Existing Zoning Alternative would involve development on a currently vacant parcel, both would have the potential to increase calls to BFD for emergency service. This increase could result in the need for additional fire protection equipment, staff, or facilities. Mitigation Measure PS-1 would reduce this impact to a less than significant level by requiring development on the Project site to pay Development Impact Fees and fees resulting from building permits and other associated with the requested Development Agreement. The amount of such fees are set by the City as part of the annual fee schedule or as negotiated by through the requested Development Agreement and these fees would be paid prior to issuance of a building permit. Overall, this impact would be similar to the Project and less than significant with mitigation incorporated.

The Project site is served by BPD. Employees generated by the automobile dealerships proposed under this alternative would have the potential to increase the City's population by up to 366 people. Based on BPD's current staffing level of 168 sworn officers, the BPD's officer/resident ratio would drop from 1.57 to approximately 1.56 sworn officers per 1,000 residents. This ratio meets the City's goal of 1.55, and the impact on service levels would not be significant. By comparison, population growth under the Project would reduce BPD's officer/resident ratio to 1.54, below the City's goal of 1.55. The reduction would be less under the Existing Zoning – Alternative 2.

The Existing Zoning - Alternative 2 would result in reduced impacts to schools as compared to the Project, due to the reduction in potential population growth that would occur. As with the Project, development under the Existing Zoning Alternative would be required to pay developer fees to the BUSD pursuant to Government Code 65995 (b), fully mitigating potential impacts to schools as a result of any population growth associated with development on the Project site. Like the Project, the Existing Zoning Alternative would result in less than significant impacts to public services with mitigation incorporated. However, given the reduction in potential population growth under this alternative, impacts would be incrementally less than those of the Project.

l. Transportation and Traffic

Operation of the Existing Zoning - Alternative 2 would add traffic to area roadways. Table 6-2 compares trip generation under the Existing Zoning Alternative and the Project.

Table 6-2 Trip Generation Comparison - Existing Zoning - Alternative 2

Total Trips	Project	Existing Zoning Alternative	Comparison to Project
Average Daily Traffic (ADT)	5,261	4,190	-1,071
AM Peak Hour Trips	314	276	-38
PM Peak Hour Trips	398	286	-112

Source for trip generation rates: Fehr & Peers, *Trip Generation Manual, 10th Edition*, Institute of Transportation Engineers (ITE), 2017.
See Appendix J for calculations for traffic associated with the Project and Existing Zoning Alternative.

The Existing Zoning – Alternative 2 would result in a reduction of AM and PM peak hour trips by 12 percent and 28 percent, respectively. While the reduction in trip generation would reduce traffic at study area intersections, it would not be sufficient to avoid any significant intersection impacts described in Section 4.12, *Transportation and Traffic*, under Existing (2018) + Project or Future (2022) + Project conditions. As with the Project, Mitigation Measures T-1a and T-1b would be necessary to reduce intersection impacts. However, as with the Project, the intersection impacts at I-5 Southbound Off-Ramps/North Front Street and Burbank Boulevard, as well as North Victory Place and West Burbank Boulevard, would remain significant and unavoidable.

Similar to the Project, the Existing Zoning - Alternative 2 would not result in design features that would increase hazards or propose any incompatible uses. The Existing Zoning Alternative would not inhibit emergency access, and fire apparatus access roads would comply with standards in Section 503.1 of the California Fire Code. Like the Project, the Existing Zoning - Alternative 2 would increase pedestrian and bicycle access to the site. While this increase would be reduced relative to the Project, Mitigation Measures T-5a, T-5b and T-6 would also be implemented to reduce impacts to the active transportation system to a less than significant level.

While the Existing Zoning Alternative would result in reduced trip generation and, therefore, reduced traffic impacts relative to the Project, it would not avoid significant impacts at two study area intersections. Thus, impacts would remain significant and unavoidable under this alternative. Nevertheless, transportation and traffic impacts would be incrementally reduced in comparison to the Project.

m. Utilities and Service Systems

Like the Project, the Existing Zoning - Alternative 2 would increase wastewater generation, water demand, and solid waste generation on the Project site above existing conditions. Table 6-3 compares wastewater generation, annual water demand, and annual solid waste generation for development associated with the Existing Zoning Alternative to that of the Project.

Table 6-3 Existing Zoning – Alternative 2 Utilities Summary

	Existing Zoning Alternative	Project	Comparison to Project
Daily Wastewater Generation (GPD)[1]	12,400[2]	370,861	-358,461
Annual Water Demand (AFY)[3]	16.7	498.5	-481.8
Annual Non-Potable Water Demand (AFY)[4]	69.5[5]	130.4	-60.9
Annual Operational Solid Waste Generation (tons per year)[6]	592.1	458.8	133.3

[1] Wastewater generation factors obtained from City of Los Angeles 2006.

[2] Based on 155,000 square feet of commercial use.

[3] Annual Potable Water Demand based on 120 percent of wastewater generation.

[4] Annual Non-Potable Water Demand based on landscaping area using the Estimated Total Water Use equation for outdoor landscaping contained in the City's Water Budget Form.

[5] Assumes 6,868 square feet of landscaped area, which is the lot area less building footprints and paved area. This is a net reduction in landscaped area compared to the Project. As with the Project, it was assumed that the Existing Zoning Alternative would require a "low" Plant Factor.

[6] Annual Solid Waste Generation obtained from CalEEMod (Appendix D).

Wastewater generated by the Existing Zoning - Alternative 2 would account for approximately 0.4 percent of the BWRP's available capacity. By comparison, wastewater generated by the Project would account for approximately 10.6 percent of the BWRP's available capacity. Like the Project, impacts related to wastewater generation and treatment would be less than significant. However, wastewater generation would be reduced under Alternative 2.

The Existing Zoning Alternative would result in lower annual potable and non-potable water demand relative to the Project since this alternative would construct commercial automobile dealerships instead of housing or lodging which result in higher water consumption. Automobile dealerships constructed under this alternative would use approximately 16.7 AFY of potable water, with landscaping accounting for an additional approximately 69.5 AFY of non-potable water. In total, the Existing Zoning Alternative's projected annual water demand would account for approximately 0.3 percent of the BWP's 2040 multiple-dry year supply of 27,531 AF. Like the Project, the Existing Zoning Alternative would not require new or expanded water supply entitlements. This impact would be less than significant and impacts would be reduced in comparison to the Project.

Similar to the Project, the Existing Zoning Alternative would generate solid waste during both construction and operation. Construction solid waste would include disposal of contaminated and nonhazardous soil. However, the Existing Zoning Alternative would require less excavation since no subterranean parking would be required under this alternative. However, implementation of the RP and SCMP would still occur under this alternative, requiring shallow soil excavation and disposal as California or Federal hazardous waste. As described in Section 4.13, *Utilities and Service Systems*, up to 52,555 tons of excavated soil may require disposal as California hazardous waste, with considerably less requiring disposal as Federal (RCRA) hazardous waste. As with the Project, this material would be disposed of at the Waste Management Kettleman Hills Hazardous Waste Facility where it would account for approximately 0.8 percent of permitted remaining capacity. During the operation period, the Existing Zoning Alternative would have the potential to generate more solid waste due to the generation of waste associated with automotive repairs and maintenance that would occur at the Project site. Operational solid waste generated under this alternative would be less than that generated by the Project and would be disposed of at the Burbank Landfill, or an area landfill via a private waste collection hauler, where it would represent approximately 1.2 percent of the Burbank Landfill's 135-ton daily capacity. Like the Project, the Existing Zoning Alternative would comply with Federal, State, and local statutes and regulations related to recycling and handling of solid waste, such as AB 939, Title 4, Chapter 2, Article 1 of the BMC, and the City's Zero Waste Policy. Impacts related to solid waste generation under this alternative would, as under the Project be less than significant, and would increase in comparison to the Project.

Overall, both the Existing Zoning Alternative and the Project would result in less than significant impacts with respect to utilities and service systems with incorporation of UTIL-3 Recycling Facilities, Measures, and Guidelines. Automobile dealerships constructed under the Existing Zoning Alternative would result in increased solid waste generation, but reduced water consumption and wastewater generation. As a result, impacts would be incrementally reduced in comparison to the Project.

6.3 Alternative 3: No Hotel

6.3.1 Description

The No Hotel - Alternative 3 would involve construction of the two residential buildings and the 1,067 sf retail gallery on the Project site and would eliminate the proposed hotel. Under this alternative, the seven-story, 85-foot tall building proposed for hotel use under the Project would not be constructed, and the area occupied by the proposed hotel's building footprint would instead be additional open space. Residential Buildings 1 and 2 would be constructed as proposed under the Project and would include 252 units in Residential Building 1 and 321 units in Residential Building 2. As with the Project, a total of 573 residential units would be constructed on the Project site under this alternative.

As shown in Table 6-1, the total square footage constructed under this alternative would be reduced by 212,350 sf to 646,873 sf. Consequently, FAR would also be reduced from 0.58 under the Project to 0.003 under the No Hotel Alternative (i.e., Alternative 3). Parking spaces provided for Residential Buildings 1 and 2 would remain the same as under the Project, with 1,143 spaces provided (not including tandem spaces). However, this alternative would not require construction of parking for the hotel and, therefore, would avoid construction of the five-story parking structure and one level of subterranean parking.

6.3.2 Impact Analysis

a. Aesthetics

Aesthetic impacts under the No Hotel Alternative would be similar to those described for the Project in Section 4.1, *Aesthetics*. The No Hotel Alternative would involve construction of the seven- and eight-story residential buildings, the seven-story residential parking structure, and the publicly-accessible open space plaza proposed under the Project. Like the Project, this alternative would introduce new sources of light and glare on the Project site. This lighting would be similar in comparison to the Project and include exterior parking lot lighting, wall-mounted lighting, walkway lighting, as well as interior lighting associated with the residential structures. Lighting associated with the hotel proposed under the Project would be replaced by outdoor lighting associated with the additional open space. Therefore, potential light and glare impacts would reduce be reduced in comparison to the Project.

The Project site is located in an urban part of the City. As described in Section 4.1, *Aesthetics,* commercial properties and warehouse/manufacturing spaces between Front Street and Victory Boulevard obstruct views of the Project site from the nearest residences. Therefore, similar to the Project, while the No Hotel - Alternative 3 would increase sources of light and glare on the Project site, this increase would not affect surrounding residential properties. Development under this alternative would adhere to Division 4, 10-1-628(W) of the BMC, requiring outdoor lighting fixtures to be directed away from adjacent properties. Residential building heights under this alternative would remain the same as under the Project. Residential buildings and parking structures would cast shadows similar to the Project, which was determined to result in less than significant impacts related to shade and shadows. However, this alternative would not include the shadow impacts associated with the hotel building. Like the Project, the No Hotel Alternative would improve the visual character of the site from that of a vacant urban industrial lot to a landscaped, mixed-use development. Overall, the No Hotel Alternative would result in a less than significant impact with respect to aesthetics, and impacts would be reduced in comparison to the Project due to reduced lighting and shade and shadow impacts.

b. Air Quality

Construction-related NO_X emissions associated with Alternative 3 would be incrementally less than those of the proposed Project because this alternative would avoid construction of the seven-story hotel building, the five-story parking structure, and one level of subterranean parking proposed under the Project. Similar to Alternative 2, NO_X emissions would not exceed the SCAQMD threshold during construction of Alternative 3. All other criteria air pollutants (ROG, CO, and PM) would be incrementally reduced relative to the Project and would not exceed SCAQMD thresholds. Because construction-related emissions would not exceed applicable thresholds, construction-related air quality impacts would be less than significant. This impact would be reduced relative to the Project, and Project-required mitigation would not apply.

Alternative 3 would generate fewer operational emissions than the Project because no emissions associated with the hotel land use would occur. As with the proposed Project, Alternative 3 would not conflict with the SCAQMD's 2016 AQMP. Likewise, the inclusion of Air Quality PDF 3 - Air Quality Control Measures. would reduce the chronic, annual, and 24-hour particulate exposures from diesel exhaust and the re-entrainment of paved roadway dust to a less than significant level. Overall, both temporary air quality impacts during construction and long-term operational impacts would be reduced in comparison to the Project. Impacts would be less than significant under this alternative, and mitigation would not be required.

c. Cultural Resources

Under the No Hotel – Alternative 3, building footprints and belowground parking for the residential component would remain the same as the Project. However, the hotel, five-story parking structure, and one level of subterranean parking under the hotel building would not be constructed, as such, overall ground-disturbance would be incrementally reduced in comparison to the Project. As discussed in Section 4.3, *Cultural and Tribal Cultural Resources,* the Project site is previously disturbed, with no known cultural or tribal cultural resources present. Nevertheless, ground-disturbing activities would have the potential to unearth or adversely impact previously unidentified archaeological, paleontological, or tribal cultural resources. As with the Project, incorporation of Mitigation Measures CUL-1a through CUL 1-d would reduce potential impacts with respect to previously unidentified archaeological resources, paleontological resources, and human remains such that they would be less than significant with mitigation incorporated. The potential for impacts under the Alternative 3 would be incrementally reduced in comparison to the Project, given that total excavation would be less under this alternative.

d. Geology and Soils

The Project site is located in seismically-active Southern California and identified as having liquefaction potential. With adherence to all recommendations contained in the Project-specific geotechnical report, revised as needed for compliance with current CBC requirements and to the satisfaction of the City Engineer, the design and construction of the proposed buildings would be engineered to withstand the expected ground acceleration and potential liquefaction that may occur at the Project site. Potential impacts would be similar to that of the Project, and would be less than significant with adherence to applicable Project Design Features.

As with the Project, the entire Project site would be graded. The No Hotel - Alternative 3 would not construct the proposed hotel, five-story parking structure, and one level of subterranean parking under the hotel, and as such, total soil export would be incrementally less than that of the Project Construction activities under the No Hotel - Alternative 3 would have potential to result in loss of topsoil during excavation and grading. Like the Project, this alternative would require preparation of a SWPPP pursuant to the BMC and the NPDES Statewide General Construction Activity Stormwater permit, which would include BMPs to reduce construction-related erosion and stormwater runoff. Typical BMPs for controlling erosion and loss of topsoil include installation of silt fences, erosion control blankets, and use of anti-tracking pads at site exits to prevent off-site transport of soil materials. As with the Project, this impact would be less than significant. The potential for impacts under the Alternative 3 would be incrementally reduced in comparison to the Project, given that total excavation would be less under this alternative.

e. Greenhouse Gas Emissions

Similar to the proposed Project, Alternative 3 would not conflict with applicable plans or policies related to GHG emissions because Alternative 3 would involve infill development that would comply with applicable energy conservation requirements and proposed sustainability features, while being consistent with regional efforts to reduce VMT by providing housing in an already urban area. Impacts would be less than significant for Alternative 3.

In comparison to the Project, this alternative would result in reduced construction emissions, trip generation (see Table 6-4), and operational emissions because the hotel land use would not be constructed. Therefore, the overall impacts associated with GHG emissions would be less than those of the Project.

f. Hazards and Hazardous Materials

As discussed in Section 4.6, *Hazards and Hazardous Materials,* the Project site contains soils and groundwater contaminated with VOCs and metals, remnant building foundations that may contain asbestos, and an abandoned, unmarked oil pipeline. Under the No Hotel – Alternative 3, ground disturbance during construction would increase the potential for release of hazardous materials due to excavation and transport of soils. As with the Project, the No Hotel - Alternative 3 would require implementation of the LARWQCB-approved Response Plan and Soil Contingency Management Plan, which would involve shallow soil excavation, installation of a soil vapor barrier, operation of a SVE system, and removal of the abandoned pipeline (see Hazards PDF 1 through Hazards PDF 4, and Mitigation Measures HAZ-1a and HAZ-1b). Additionally, Mitigation Measure HAZ-1c would be required to reduce impacts related to hazards and hazardous materials to a less than significant level.

The Project site is located approximately 0.25 mile southwest of Burbank High School. Residential land uses constructed under this alternative would not store or handle hazardous materials. As with the Project, the RP and SCMP would minimize potential hazards associated with excavation, transport, and disposal of contaminated soil. Given the distance from the Project site, ACMs would not be expected to impact the school. This impact would be less than significant, same as under the Project.

Overall, impacts related to hazards and hazardous materials under the No Hotel - Alternative 3 would be less than significant with mitigation incorporated, and this impact would be similar to that of the Project.

g. Hydrology and Water Quality

Similar to the Project, the No Hotel Alternative would potentially adversely affect water quality due to erosion and pollutant runoff during construction activities. Since total ground disturbance and earthwork under this alternative would be similar to the Project, erosion impacts would also be similar. Like the Project, development under this alternative would be required to prepare a SWPPP pursuant to the requirements of the NPDES Statewide General Construction Activity Stormwater permit. Implementation of stormwater and sediment control BMPs under the SWPPP would reduce construction-related water quality impacts to a less than significant level.

As with the Project, the No Hotel - Alternative 3 would be subject to the post-construction stormwater peak flow and pollutant discharge requirements of the Los Angeles County SUSMP and the City's LID ordinance that requires control of runoff from impervious surfaces through infiltration, evapotranspiration, bioretention, and/or rainfall harvest and use. Total impervious surface cover under the No Hotel Alternative would be less than under the Project, as landscaped open space would replace the proposed hotel and five-story parking structure. Both the Project and the No Hotel Alternative would reduce impervious surface cover on the Project site and peak discharge rates for the 25-year and 85th percentile storms relative to existing conditions.

Both the Project and the No Hotel Alternative would result in less than significant impacts to hydrology and water quality given adherence to existing regulatory requirements. Impacts under this alternative would be less than those of the Project due to the provision of additional open space.

h. Land Use and Planning

Similar to the Project, the No Hotel - Alternative 3 would require a Specific Plan Amendment to the Burbank Center Plan to allow for housing on the Project site, Development Review, Planned Development and Zone Map Amendment to change zoning from Automobile Dealership (AD) to Planned Development (PD), a Development Agreement, and a Tentative Tract Map.

Similar to the Project, this alternative would not conflict with any General Plan land use policies or goals adopted for the purposes of avoiding or mitigating an environmental effect. Like the Project, this alternative would include construction of pedestrian linkages, a transit plaza, and bike lane improvements along Front Street. Therefore, Alternative 3 would be consistent with the goals of the SCAG's 2016-2040 RTP/SCS pertaining to facilitating access to active transportation and transit. Impacts to land use and planning under the No Hotel - Alternative 3 would be less than significant and similar to those under the Project.

i. Noise

Construction of the No Hotel - Alternative 3 would require similar types of construction equipment as the Project and would occur over an incrementally shorter period of time. As a result, peak construction noise would be similar during each phase of construction (e.g., grading, building construction, paving, etc.), but the duration of temporary noise impacts would be reduced. As with the Project, construction noise would not expose the nearest noise sensitive receptors—single-family homes across the I-5 freeway, Burbank High School, and single-family homes along West Burbank Boulevard—to noise levels in excess of applicable City standards. Furthermore, construction would be limited to authorized construction hours pursuant to Chapter 9-1-1-105.8 of the BMC, and construction vibration levels would not cause physical damage to structures or exceed the FTA's threshold for perceptibility. However, given the reduced duration of construction activities under this alternative, temporary construction noise and vibration impacts would be reduced in comparison to the proposed Project. Overall, construction noise and vibration impacts would be less than significant.

Operation of the No Hotel Alternative would generate approximately 2,811 ADT, or 2,450 (47 percent) fewer vehicle trips than the Project (5,261 ADT). The decrease in vehicle trips associated with this alternative would incrementally lower noise levels on study area roadways. As with the Project, traffic-related noise impacts under Alternative 3 would be less than significant.

As discussed in Section 4.9, *Noise*, ambient noise in the vicinity of the Project can reach approximately 81 dBA Ldn that is considered "normally unacceptable" for the exteriors of multi-family residential land uses. As with the Project, implementation of Mitigation Measures N-4a through N-4e would reduce this impact to a less than significant level.

Like the Project, operation of this alternative would result in noise from on-site sources such as delivery and trash trucks, HVAC equipment, and public and private recreational and open space areas. Similar to the Project, parking activities would occur in enclosed or subterranean parking structures; therefore, on-site circulation and parking would not be a significant source of operational noise. As with the Project, operational noise under this alternative would be less than significant, but this impact would be reduced relative to the Project as operational noise associated with the hotel would not occur. Overall, both short-term and long-term noise impacts would be incrementally less than the Project.

j. Population and Housing

The No Hotel - Alternative 3 would involve construction of 573 housing units in the two residential buildings on the Project site, but no population growth associated with employees of the hotel would occur. Therefore, this alternative would have reduced impacts with respect to population and housing. Based on the City's average household size of 2.5 persons and rates published for employee generation from retail land uses in the SCAG Employment Density Study, the No Hotel Alternative would result in a population increase of up to 1,436 people. These residents would increase the City's population from 107,149 to 108,585, which remains within SCAG's 2035 population forecast for the City of 116,500 from the 2016 RTP/SCS. By comparison, the Project would increase population in the City by up to 1,680 people due to construction of housing and employment opportunities associated with the proposed hotel and retail gallery.

Given that population growth would remain within SCAG's 2035 population forecast for the City, population and housing impacts under the No Hotel Alternative would be less than significant. Impacts would be reduced relative to the Project. The No Hotel Alternative would construct the same number of residential units as the Project and, like the Project, would satisfy approximately 21 percent of the City's 2,684-unit RHNA.

k. Public Services

The Project site is in an existing BFD fire service area and would not be exposed to substantial wildfire risk. Like the Project, the No Hotel - Alternative 3 would be required to comply with all applicable fire code and ordinance requirements for construction, access, water mains, fire flows, and hydrants, and would be subject to review and approval by the BFD prior to building permit and certificate of occupancy issuance. Nevertheless, both the Project and the No Hotel – Alternative 3, in combination with other pending development in the City, may result in a significant increase in calls for emergency service, ultimately requiring additional BFD equipment, staff, and facilities. Mitigation Measure PS-1 would reduce this impact to a less than significant level by requiring development on the Project site to pay Development Impact Fees and fees resulting from building permits and other associated with the requested Development Agreement. The amount of such fees are set by the City as part of the annual fee schedule or as negotiated by through the requested Development Agreement and these fees would be paid prior to issuance of a building permit. Overall, this impact would be similar to the Project and less than significant with mitigation incorporated.

Residents in the proposed 573 housing units and employees of the retail gallery constructed under this alternative would have the potential to increase the City's population by up to 1,436 people to 108,585. Based on BPD's current staffing level of 168 sworn officers, the BPD's officer/resident ratio would drop from 1.57 to approximately 1.55 sworn officers per 1,000 residents, meeting the City's goal of 1.55 officers per 1,000 residents. Given the reduced potential population growth under the No Hotel Alternative, this impact would be less than that of the Project.

Since population growth would be reduced under this alternative, potential impacts to schools would also be reduced relative to the Project. Development under the No Hotel - Alternative 3 would be required to pay developer fees to the BUSD pursuant to Government Code 65995 (b), fully mitigating potential impacts to schools as a result of any population growth.

Like the Project, impacts to public services under the No Hotel - Alternative 3 would be less than significant with mitigation incorporated. Given the reduced population growth and demand for public services under the No Hotel Alternative, impacts would be less than those of the Project.

l. Transportation and Traffic

Operation of the No Hotel Alternative would add traffic to area roadways in comparison to the existing vacant site. Table 6-4 compares trip generation under the No Hotel Alternative and the Project.

Table 6-4 Trip Generation Comparison – No Hotel Alternative 3

Total Trips	Project	No Hotel Alternative	Difference
Average Daily Traffic (ADT)	5,261	2,809	-2,452
AM Peak Hour Trips	314	170	-144
PM Peak Hour Trips	398	214	-184

Source for trip generation rates: Fehr & Peers, *Trip Generation Manual, 10th Edition*, Institute of Transportation Engineers (ITE), 2017.
See Appendix J for calculations for traffic associated with the Project and No Hotel Alternative.

In comparison to the Project, the No Hotel Alternative would result in a reduction of AM and PM peak hour trips by 45 percent and 46 percent, respectively. This reduction in trips would avoid impacts during the AM Peak Hour at the North Victory Place and West Burbank Boulevard, Victory Boulevard and West Magnolia Boulevard, and South Victory Boulevard and West Olive Avenue intersections. As with the Project, Mitigation Measures T-1a and T-1b would be necessary to reduce intersection impacts to the degree feasible and impacts at I-5 Freeway Southbound Off-Ramps/North Front Street and Burbank Boulevard, as well as North Victory Place and West Burbank Boulevard, would remain significant and unavoidable.

Similar to the Project, the No Hotel Alternative would not result in design features that would increase hazards or propose any incompatible uses nor would it inhibit emergency access. Fire apparatus access roads would comply with standards in Section 503.1 of the California Fire Code. Like the Project, the No Hotel Alternative would increase pedestrian and bicycle access to the site. Mitigation Measures T-5a, T-5b and T-6 would be necessary to reduce impacts to the active transportation system to a less than significant level.

The No Hotel Alternative would result in reduced trip generation and, therefore, incrementally reduced traffic impacts relative to the Project. Nevertheless, it would not avoid significant impacts at two study area intersections, and similar to the Project, impacts would remain significant and unavoidable.

m. Utilities and Service Systems

The No Hotel Alternative would increase wastewater generation, water demand, and solid waste generation on the Project site compared to existing conditions. Table 6-5 compares wastewater generation, annual water demand, and annual solid waste generation under the No Hotel Alternative to the Project.

Table 6-5 No Hotel - Alternative 3 Utilities Summary

	No Hotel Alternative	Project	Comparison to Project
Daily Wastewater Generation (GPD)[1]	74,205	370,861	-296,656
Annual Potable Water Demand (AFY)[2]	99.7	498.5	-398.8
Annual Non-Potable Water Demand (AFY)[3]	187.3	130.4	56.9
Annual Operational Solid Waste Generation (tons per year)[5]	264.7	458.8	-194.1

[1] Wastewater generation factors obtained from City of Los Angeles 2006 and based on breakdown of studio, one-bedroom, two-bedroom, and three-bedroom housing units, hotel rooms, and retail and restaurant square footage proposed under each alternative.

[2] Annual Potable Water Demand based on 120 percent of wastewater generation.

[3] Annual Non-Potable Water Demand based on landscaping area using the Estimated Total Water Use equation for outdoor landscaping contained in the City's Water Budget Form.

[4] Assumes 18,517 square feet of landscaped area, which is the total landscaped area under the Project (12,893 square feet), plus 15 percent of the hotel and five-story parking structure building footprints that would be converted to open space (consistent with the 15 percent minimum landscaped open space requirement applied to the Project). This is a net increase in landscaped area compared to the Project. As with the Project, it was assumed that the No Hotel Alternative would require a "low" Plant Factor.

[5] Annual Solid Waste Generation obtained from CalEEMod (Appendix D).

Wastewater generated by the No Hotel - Alternative 3 would account for approximately 2.1 percent of the BWRP's available capacity. By comparison, wastewater generated by the Project would account for approximately 10.6 percent of the BWRP's available capacity. Impacts related to wastewater generation and treatment under this Alternative would be incrementally less than the Project, and would also be less than significant.

The No Hotel - Alternative 3 would result in less potable and greater non-potable water demand relative to the Project because landscaped open space would replace the hotel land use proposed under the Project. Residential units constructed under this alternative would use approximately 99.7 AFY of potable water, with landscaping on the Project site using an additional approximately 187.3 AFY of non-potable water for irrigation. Combined, the No Hotel Alternative's projected annual water demand would account for approximately 1.0 percent of the BWP's 2040 multiple-dry year supply of 27,531 AF. Like the Project, the No Hotel Alternative would not require new or expanded water supply entitlements. This impact would be similar to the Project and would be less than significant.

Similar to the Project, construction solid waste generated under the No Hotel – Alternative 3 would include disposal of contaminated and nonhazardous soil, as well as foundation slabs removed from the Project site. As with the Project, implementation of the RP and SCMP would require shallow soil excavation and disposal as California or Federal hazardous waste, with up to 52,555 tons of excavated soil requiring disposal as California hazardous waste and considerably less requiring disposal as Federal (RCRA) hazardous waste. Similar to the Project, this material would be disposed of at the Waste Management Kettleman Hills Hazardous Waste Facility, where it would account for approximately 0.8 percent of permitted remaining capacity. Operational solid waste generated under this alternative would be less than that generated by the Project and would be disposed of at the Burbank Landfill, or an area landfill via a private waste collection hauler, where it would represent less than one percent of the Burbank Landfill's 135-ton daily capacity. Like the Project, the No Hotel Alternative would comply with Federal, State, and local statutes and regulations related to recycling and handling of solid waste, such as AB 939, Title 4, Chapter 2, Article 1 of the BMC, and the City's Zero Waste Policy. Impacts related to solid waste generation under this Alternative would be less than significant and incrementally reduced relative to the Project.

Overall, both the No Hotel Alternative and the Project would result in less than significant impacts with respect to utilities and service systems with incorporation of UTIL-3 Recycling Facilities, Measures, and Guidelines. Because the No Hotel Alternative would generate substantially less wastewater and solid waste, impacts would be less than those of the Project.

6.4 Alternative 4: Reduced Density

6.4.1 Description

The Reduced Density - Alternative 4 would involve a 45 percent reduction in all land uses proposed under the Project. Like the Project, residential, hotel, and retail gallery land uses would be constructed on the Project site. However, Residential Building 1 would be reduced to four stories and approximately 46 feet in height while Residential Building 2 would be reduced to five stories and approximately 52 feet in height. The residential buildings would contain 63 studios, 135 one-bedroom units, 98 two-bedroom units, and 19 three-bedroom units, consistent with the breakdown of proposed housing units under the Project. In total, the residential component of the Reduced Density - Alternative 4 would provide 315 housing units across 344,193 square feet of floor area, as described in Table 6-1. The hotel component would involve construction of 169 hotel rooms across 116,793 square feet of floor area. The hotel building under this alternative would be reduced to four stories and approximately 49 feet in height. Additionally, the Reduced Density - Alternative 4 would involve construction of a 587-square-foot retail gallery and 990-square-foot high-turnover restaurant. Under this alternative, construction of pedestrian linkages, the publicly-accessible transit plaza, and the bike lane improvements to Front Street would still occur.

Total FAR on the Project site under this alternative would be approximately 0.34, given the reduced floor area constructed. This alternative would also involve a reduction in parking constructed on the Project site relative to the Project. The Reduced Density Alternative would provide a total of 809 spaces, including 628 residential spaces, 169 hotel spaces, two spaces to serve the retail component, and 10 spaces to serve the restaurant. Given the reduced parking required, this alternative would not involve construction of subterranean parking under the residential buildings and would require only one level of subterranean parking under the hotel building.

6.4.2 Impact Analysis

a. Aesthetics

Aesthetic impacts under the Reduced Density - Alternative 4 would be similar in nature but reduced in magnitude compared to the Project given the reduced intensity of development on the Project site. The Reduced Density - Alternative 4 would involve construction of all buildings proposed under the Project, but at reduced heights. This alternative would introduce new sources of light and glare on the Project site similar to those introduced by the Project, including exterior parking lot lighting, wall-mounted lighting, walkway lighting, as well as interior lighting associated with the residential, hotel, and retail gallery structures. However, overall lighting on the Project site would be reduced in comparison to the Project due to the reduced density. Similar to the Project, the increase in light and glare sources on the Project site relative to existing conditions would not affect surrounding residential properties, as commercial properties and warehouse/manufacturing spaces between

Front Street and Victory Boulevard obstruct views of the Project site from these receptors. Development under this alternative would adhere to lighting standards outlined in the BMC, which require outdoor lighting to be directed away from adjacent properties.

Both the Project and the Reduced Density - Alternative 4 would result in similar improvements to the visual character of the Project site, as both would involve construction of landscaped open space and a mix of land uses and building heights consistent with surrounding development on a vacant urban, industrial site. However, building heights under this alternative would be reduced substantially, with the tallest buildings on the Project site being five stories as opposed to eight stories under the Project. Residential buildings and parking structures would cast shadows under the Reduced Density - Alternative 4, but this impact would be diminished compared to the Project. Like the Project, aesthetic impacts under the Reduced Density - Alternative 4 would be less than significant, and this impact would be reduced in comparison to the Project.

b. Air Quality

Construction-related air pollutant emissions associated with Alternative 4 would be incrementally less than those of the Project because fewer residential, hotel and retail uses would be constructed. Similar to Alternatives 2 and 3, NO_X emissions would not exceed the SCAQMD threshold during construction of Alternative 4. By comparison, the Project would require implementation of Mitigation Measure AQ-2 to reduce construction NOx emissions to a less than significant level. Under Alternative 4, construction-related impacts would be less than significant. Project-required mitigation would not apply, and this impact would be reduced relative to the Project.

Alternative 4 would also generate fewer long-term operational emissions than the proposed Project because the number of residential units would decrease from 573 to 315, a reduction of 258 units, the number of hotel room would decrease from 307 to 169, a reduction of 138 rooms, and the amount of retail would decrease from 1,067sf to 587 sf, a reduction of 480 sf. Similar to the proposed project, Alternative 4 would not conflict with the SCAQMD's 2016 AQMP. Likewise, the inclusion of Air Quality PDF 3 - Air Quality Control Measures, would reduce the chronic, annual, and 24-hour particulate exposures from diesel exhaust and the re-entrainment of paved roadway dust to a less than significant level. Therefore, the air quality impacts associated with Alternative 4 would be less than significant, and would be reduced in comparison to the Project.

c. Cultural Resources

The Project site is previously disturbed, with no known cultural or tribal cultural resources present. A cultural resources records search and pedestrian field survey did not identify any prehistoric or historic cultural resources on the site. Under the Reduced Density - Alternative 4, all buildings proposed under the Project would be constructed, though buildings would be reduced in height. Because belowground parking would be reduced, ground-disturbing activities associated with this alternative would be reduced as well. Nevertheless, the Project site would be graded under this alternative, and excavation associated with remediation efforts and construction of one level of subterranean parking under the proposed hotel building would have the potential to unearth or adversely impact previously unidentified archaeological, paleontological, or tribal cultural resources. As with the Project, incorporation of Mitigation Measures CUL-1a through CUL-1d would reduce potential impacts to previously unidentified archaeological resources, paleontological resources, and human remains such that they would be less than significant with mitigation incorporated. Impacts under this alternative would be reduced in comparison to the Project, given the reduction in excavation that would occur on the Project site.

d. Geology and Soils

As described in Section 4.4, *Geology and Soils*, the Project site is located in seismically-active Southern California and identified as having liquefaction potential. With adherence to all recommendations contained in the geotechnical report prepared for the Project (Appendix F), revised as needed for compliance with current CBC requirements and to the satisfaction of the City Engineer, the design and construction of the proposed buildings under the Reduced Density - Alternative 4 would be engineered to withstand the expected ground acceleration and potential liquefaction that may occur on the Project site. This impact would be similar to that of the Project, and it would be less than significant with adherence to applicable Project Design Features.

As with the Project, the entire Project site would be graded under the Reduced Density - Alternative 4. However, this alternative would require less excavation due to the reduction in subterranean parking. As a result, total export from the Project site would be less than the 90,000 cy required under the Project. Nevertheless, because soil export would still occur under this alternative, construction activities would have potential to result in loss of topsoil or soil erosion during excavation and grading. Like the Project, this alternative would require preparation of a SWPPP pursuant to the BMC and the NPDES Statewide General Construction Activity Stormwater permit. The SWPPP would include BMPs to reduce construction-related erosion and stormwater runoff, such as installation of silt fences, erosion control blankets, and use of anti-tracking pads at site exits to prevent off-site transport of soil materials. As with the Project, this impact would be less than significant. Total disturbance area on the Project site would be similar to the Project under this alternative; however this alternative would require less excavation due to the reduction in subterranean parking. Therefore, this impact would be slightly reduced than that of the Project but overall would be less than significant.

e. Greenhouse Gas Emissions

Similar to the Project, the Reduced Density - Alternative 4 would not conflict with applicable plans or policies related to GHG emissions because this alternative would involve infill development that would comply with applicable energy conservation requirements and proposed sustainability features, while being consistent with regional efforts to reduce vehicle miles traveled (VMT) by providing housing and services in an already urban area. Impacts would be less than significant for Alternative 4. However, in comparison to the Project, because this alternative would result in reduced density, the potential GHG emissions associated with construction and operation and trip generation would be less than the Project.

f. Hazards and Hazardous Materials

Ground disturbance during construction would increase the potential for release of hazardous materials due to excavation and transport of contaminated soils present on the Project site. However, like the Project, the Reduced Density - Alternative 4 would require remediation of the Project site through implementation of the LARWQCB-approved RP and SCMP during construction and prior to development. Activities required under the RP and SCMP include shallow soil excavation, installation of a soil vapor barrier, operation of a SVE system, and removal of the abandoned pipeline (see Hazards PDF 1 through Hazards PDF 4, and Mitigation Measures HAZ-1a and HAZ-1b). Additionally, Mitigation Measure HAZ-1cwould require proper testing, removal, and disposal of any ACMs detected on the Project site. Like the Project, this impact would be less than significant with mitigation incorporated.

Although the Project site is located approximately 0.25 mile from Burbank High School, the Reduced Density - Alternative 4 would construct all of the same types of land uses proposed under the Project. Residential, hotel, and retail land uses constructed under the Project or this alternative would not store or handle hazardous materials. The RP and SCMP would minimize potential hazards associated with off-site transport and disposal of contaminated soil. Potential impacts related to handling, storage, transportation, or disposal of hazardous materials near a school would be less than significant.

Overall, impacts related to hazards and hazardous materials under the Reduced Density - Alternative 4 would be less than significant with mitigation incorporated, and this impact would be similar to that of the Project.

g. Hydrology and Water Quality

Similar to the Project, the Reduced Density - Alternative 4 would potentially adversely affect water quality due to erosion and pollutant runoff during construction activities. As with the Project, the entire Project site would be graded, and development under the Reduced Density - Alternative 4 would require preparation of a SWPPP pursuant to the requirements of the NPDES Statewide General Construction Activity Stormwater permit. Implementation of stormwater and sediment control BMPs under the SWPPP would reduce construction-related water quality impacts to a less than significant level.

The Project site is approximately 91 percent impervious surface cover under existing conditions. While this alternative would involve a 45 percent reduction in the land uses developed on the Project site in comparison to the Project, building footprints and impervious surface cover on the Project site would be similar to Project conditions. Therefore, like the Project, installation of landscaping on the Project site under the Reduced Density - Alternative 4 would reduce impervious surface cover to approximately 88 percent. Peak discharge rates for the 25-year and 85th percentile storms would also be reduced. As with the Project, development under the Reduced Density - Alternative 4 would be subject to the post-construction stormwater peak flow and pollutant discharge requirements of the Los Angeles County SUSMP and the City's LID ordinance, which requires control of runoff from impervious surfaces through infiltration, evapotranspiration, bioretention, and/or rainfall harvest and use.

Both the Project and the Reduced Density - Alternative 4 would result in less than significant impacts to hydrology and water quality given adherence to existing regulatory requirements. Impacts under this alternative would be similar to those of the Project.

h. Land Use and Planning

Like the Project, the Reduced Density - Alternative 4 would require a Specific Plan Amendment to the Burbank Center Plan to allow for housing on the Project site, Development Review, Planned Development and Zone Map Amendment to change zoning from AD to Planned Development (PD), a Development Agreement, and a Vesting Tentative Tract Map.

This alternative would not conflict with any General Plan land use policies or goals adopted for the purposes of avoiding or mitigating an environmental effect. Like the Project, the Reduced Density - Alternative 4 would involve construction of a mixed-use, transit-oriented development with pedestrian linkages, bike lane improvements, and a transit plaza, consistent with the goals of SCAG's 2016-2040 RTP/SCS. Impacts to land use and planning under the Reduced Density - Alternative 4 would be similar to those under the Project. Such impacts would be less than significant.

i. Noise

Construction of the Reduced Density - Alternative 4 would require similar types of construction equipment as the Project. While construction would occur over a shorter duration due to reduced development on the Project site, peak construction noise would be similar during each phase of construction (e.g., grading, building construction, paving, etc.). As with the Project, construction noise would not expose the nearest noise sensitive receptors—single-family homes across the I-5 freeway, Burbank High School, and single-family homes along West Burbank Boulevard—to noise levels in excess of applicable City standards. Furthermore, construction would be limited to authorized construction hours pursuant to Chapter 9-1-1-105.8 of the BMC. Construction vibration levels would not cause physical damage to structures or exceed the FTA's threshold for perceptibility. However, given the reduced duration of construction activities under this alternative, temporary construction noise and vibration impacts would be reduced in comparison to the proposed Project. Overall, construction noise and vibration impacts would be less than significant.

Operation of the Reduced Density - Alternative 4 would generate approximately 2,891 ADT, or 2,370 (45 percent) fewer trips than the Project would generate (5,261 ADT). Therefore, the decrease in vehicle trips associated with this alternative would result in lower noise levels on study area roadways. As with the Project, traffic-related noise impacts would be less than significant.

Ambient noise in the vicinity of the Project can reach approximately 81 dBA Ldn due to the proximity to I-5 Freeway that is considered "normally unacceptable" for the exteriors of multi-family residential and transient lodging land uses. As with the Project, implementation of Mitigation Measures N-4a through N-4e would reduce this impact to a less than significant level.

Like the Project, operation of this alternative would result in noise from on-site sources, such as delivery and trash trucks, HVAC equipment, and public and private recreational and open space areas. Similar to the Project, parking activities would occur in enclosed or subterranean parking structures; therefore, on-site circulation and parking would not be a significant source of operational noise. Given that building sizes would be reduced and delivery and trash truck access to the site would be less frequent under this alternative, operational noise from such sources would less than that generated by the Project. As with the Project, operational noise under this alternative would be less than significant. Overall, due to reductions in construction duration, off-site vehicular traffic, and on-site operational noise, short- and long-term noise impacts under this alternative would be reduced in comparison to the Project.

j. Population and Housing

The Reduced Density - Alternative 4 would involve construction of 315 housing units on the Project site, a 258-unit decrease in comparison to the Project. Based on the City's average household size of 2.5 persons, the 315 residential units constructed under the Reduced Density - Alternative 4 would result in a population increase of up to 788 people. According to the SCAG Employment Density Study Summary, hotels in Los Angeles County have an average of 51.91 employees per acre of floor area. Commercial developments, which would include the proposed 990-square-foot restaurant and 587-square-foot retail gallery under this alternative, have an average of one employee per 424 square feet of floor area (SCAG 2001). Based on these averages, the hotel would generate about 139 employees and the gallery and restaurant would generate about four employees. In total, this alternative could result in a population increase of up to 931 people, increasing the City's population from 107,149 to 108,080. This increase remains within SCAG's 2035 population forecast for the City of 116,500 from the 2016 RTP/SCS and is less than the 1,680-person increase anticipated by the Project.

Like the Project, population and housing impacts under the Reduced Density - Alternative 4 would be less than significant because population growth would remain within SCAG's 2035 population forecast for the City. Since the Reduced Density - Alternative 4 would result in a smaller potential population increase than the Project, this impact would be reduced in comparison to the Project. Due to the construction of fewer housing units, the Reduced Density - Alternative 4 would satisfy approximately 12 percent of the City's 2,684-unit RHNA while in comparison the Project would satisfy approximately 21 percent.

k. Public Services

As discussed in Section 4.11, *Public Services*, the Project site is in an existing BFD fire service area and would not be exposed to substantial wildfire risk. As with under the Project, all site and building development carried out under the Reduced Density-Alternative 4 would be required to comply with all applicable fire code and ordinance requirements for construction, access, water mains, fire flows, and hydrants, and would be subject to review and approval by the BFD prior to building permit and certificate of occupancy issuance. However, as with the Project, development under the Reduced Density-Alternative 4, in combination with other pending development in the City, may result in a significant increase in calls for emergency service, ultimately requiring additional BFD equipment, staff, and facilities. This impact would be incrementally reduced under the Reduced Density-Alternative 4 due to the reduced development that would occur on the Project site, but it would still be potentially significant. As with the Project, Mitigation Measure PS-1 would reduce this impact to a less than significant level by requiring development on the Project site to pay Development Impact Fees and fees resulting from building permits and other associated with the requested Development Agreement. The amount of such fees are set by the City as part of the annual fee schedule or as negotiated by through the requested Development Agreement and these fees would be paid prior to issuance of a building permit.

The Project site is served by BPD. Residents in the proposed 315 housing units and employees of the hotel, retail, and restaurant uses that would be constructed under this alternative would have the potential to increase the City's population by up to 931 people to 108,080. Based on BPD's current staffing level of 168 sworn officers, the BPD's officer/resident ratio would drop from 1.57 to approximately 1.55 sworn officers per 1,000 residents, which meets the City's goal of 1.55 officers per 1,000 residents. This impact would be reduced in comparison to the Project.

Additionally, increased population associated with this alternative would increase enrollment at area schools, though to a lesser degree than the Project. Development under the Reduced Density - Alternative 4 would be required to pay developer fees to the BUSD pursuant to Government Code 65995 (b), fully mitigating potential impacts to schools as a result of any population growth associated with development on the Project site. Like the Project, impacts to public services under the Reduced Density - Alternative 4 would result in less than significant impacts with mitigation incorporated. Given the decrease in potential population growth and demand for public services, impacts under the Reduced Density - Alternative 4 would be less than those of the Project.

l. Transportation and Traffic

Operation of the Reduced Density - Alternative 4 would add traffic to area roadways. Table 6-6 compares trip generation under the Reduced Density - Alternative 4 and the Project.

Table 6-6 Trip Generation Comparison – Reduced Density - Alternative 4

Total Trips	Project	Reduced Density - Alternative 4	Difference
Average Daily Traffic (ADT)	5,261	2,891	-2,370
AM Peak Hour Trips	314	173	-141
PM Peak Hour Trips	398	210	-188

Source for trip generation rates: Fehr & Peers, *Trip Generation Manual, 10th Edition*, Institute of Transportation Engineers (ITE), 2017.
See Appendix J for calculations for traffic associated with the Project and Reduced Density - Alternative 4.

As compared to the Project, the Reduced Density - Alternative 4 would result in a reduction of AM and PM peak hour trips by 45 percent and 47 percent, respectively. This reduction would be sufficient to avoid significant impacts at North Victory Place and West Burbank Boulevard, Victory Boulevard and West Magnolia Boulevard, and South Victory Boulevard and West Olive Avenue during the AM peak hour under Future (2022) + Project conditions. As with the Project, Mitigation Measure T-1a would be necessary to partially mitigate impacts at the I-5 Southbound Off-Ramps/North Front Street and Burbank Boulevard intersection. Mitigation Measure T-1b, which involves optimization of the Citywide Signal Control System (CSCS) along Victory Boulevard between Burbank Boulevard and Alameda Avenue, would also be necessary to reduce intersection impacts during the PM peak hour at Victory Boulevard and West Magnolia Boulevard. However, impacts at I-5 Southbound Off-Ramps/North Front Street and Burbank Boulevard during the AM and PM peak hours, as well as North Victory Place and West Burbank Boulevard during the PM peak hour, would remain significant and unavoidable.

Similar to the Project, the Reduced Density - Alternative 4 would not result in design features that would increase hazards or propose any incompatible uses. The Reduced Density - Alternative 4 would not inhibit emergency access, and fire apparatus access roads would comply with standards in Section 503.1 of the California Fire Code. This alternative would also increase pedestrian and bicycle access to the site, though to a lesser degree than under the Project. Mitigation Measures T-5a, T-5b and T-6 would be necessary to reduce impacts to the active transportation system to a less than significant level.

While the Reduced Density - Alternative 4 would result in reduced trip generation and reduce impacts at study area intersections, it would not avoid significant impacts at two study intersections. Though impacts would be reduced relative to the Project, they would remain significant and unavoidable.

m. Utilities and Service Systems

The Reduced Density - Alternative 4 would increase wastewater generation, water demand, and solid waste generation on the Project site above existing conditions, though to a lesser degree than the Project due to the reduction in residential, lodging, and retail land uses. Table 6-7 compares wastewater generation, annual water demand, and annual solid waste generation for the Reduced Density - Alternative 4 to the Project.

Table 6-7 Reduced Density – Alternative 4 Utilities Summary

	Reduced Density - Alternative 4	Project	Comparison to Project
Daily Wastewater Generation (GPD)[1]	63,034	370,861	-307,827
Annual Potable Water Demand (AFY)[2]	84.7	498.5	-413.8
Annual Non-Potable Water Demand (AFY)[3]	130.4	130.4	0
Annual Operational Solid Waste Generation (tons per year)[4]	249.8	458.8	-209.0

[1] Wastewater generation factors obtained from City of Los Angeles 2006 and based on breakdown of studio, one-bedroom, two-bedroom, and three-bedroom housing units, hotel rooms, and retail and restaurant square footage proposed under each alternative.

[2] Annual Potable Water Demand based on 120 percent of wastewater generation.

[3] Annual Non-Potable Water Demand based on 12,893 square feet of landscaping under each alternative. Landscaping area was assumed to remain the same under the Reduced Density - Alternative 4, since building footprints and arrangement on the Project site would remain similar.

[4] Annual Solid Waste Generation obtained from CalEEMod (Appendix D).

Wastewater generated by the Reduced Density - Alternative 4 would account for approximately 1.8 percent of the BWRP's available capacity. By comparison, wastewater generated by the Project would account for approximately 10.6 percent of the BWRP's available capacity. Like the Project, impacts related to wastewater generation and treatment would be less than significant.

The Reduced Density - Alternative 4 would result in lower annual potable water demand relative to the Project, due to reduced development on the Project site. Residential units, hotel rooms, retail space, and the restaurant constructed under this alternative would use approximately 84.7 AFY, with landscaping on the Project site using an additional approximately 130.4 AFY. In total, the Reduced Density - Alternative 4's projected annual water demand would account for approximately 0.8 percent of the BWP's 2040 multiple-dry year supply of 27,531 AF. Like the Project, the Reduced Density - Alternative 4 would not require new or expanded water supply entitlements. This impact would be less than significant.

Similar to the Project, the Reduced Density - Alternative 4 would generate solid waste during both construction and operation. Construction solid waste generated by the Reduced Density - Alternative 4 would include disposal of contaminated and nonhazardous soil as well as foundation slabs removed from the Project site. While this alternative would require less excavation due to reduced construction of subterranean parking, implementation of the RP and SCMP would still require shallow soil excavation and disposal as California or Federal hazardous waste, with up to 52,555 tons of excavated soil requiring disposal as California hazardous waste and considerably less requiring disposal as Federal (RCRA) hazardous waste. As with the Project, this material would be disposed of at the Waste Management Kettleman Hills Hazardous Waste Facility, where it would account for approximately 0.8 percent of permitted remaining capacity. Operational solid waste generated under this alternative would be less than that generated by the Project and would be disposed of at the Burbank Landfill, where it would represent less than one percent of the facility's 135 ton daily capacity. Like the Project, the Reduced Density - Alternative 4 would comply with Federal, State, and local statutes and regulations related to recycling and handling of solid waste, such as AB 939, Title 4, Chapter 2, Article 1 of the BMC, and the City's Zero Waste Policy. Impacts related to solid waste generation would be less than significant.

Overall, both the Reduced Density - Alternative 4 and the Project would result in less than significant impacts to utilities and service systems with incorporation of UTIL-3 Recycling Facilities, Measures, and Guidelines. Because the Reduced Density - Alternative 4 would use less water and generate less wastewater and solid waste, impacts would be reduced relative to the Project.

6.5 Alternatives Considered But Rejected

Consideration of developing the proposed project on an alternative site was rejected as the applicant does not own or control another site in the project vicinity. Development of the proposed project on an alternative urban infill site within the general vicinity would likely result in similar impacts as that of the proposed project. As this alternative was found to be infeasible no further analysis was conducted.

During consideration of the No Hotel Alternative (Alternative 3), an expanded residential alternative was initially analyzed. This alternative would convert the proposed hotel into housing units, which would be more in line with the City's General Plan goals to increase the housing stock in comparison to the Project. However, an expanded residential alternative would reduce the ADT by only approximately 30% below that of the Project. As discussed in Section 6.3 above, the No Hotel Alternative would reduce the ADT by approximately 45% below that of the Project. Considering the significant traffic impacts associated with the Project, the No Hotel Alternative was chosen in order to analyze an alternative that would focus on minimizing the significant traffic impacts.

During consideration of the Reduced Density - Alternative 4 (Alternative 4), Fehr and Peers evaluated the percentage of reduction that would eliminate or reduce the significant and unavoidable traffic impacts. It was determined that an approximately 97 percent reduction of the Project would reduce all the significant traffic impacts to less than significant. This alternative would result in approximately 17 residential units and 9 hotel rooms. A reduction of approximately 70 percent of the Project would reduce significant impacts at Victory Place & Burbank Boulevard, Victory Boulevard & Magnolia Boulevard, and Victory Boulevard & Olive Avenue intersections to less than significant. This alternative would result in approximately 172 residential units and 92 hotel rooms. However, these alternatives were rejected because it was determined that these alternatives would not achieve the most project objectives, in particular, by providing a substantial amount of housing units that would help meet Citywide housing demand and RHNA requirements. In contrast, the Reduced Density - Alternative 4, which would reduce AM and PM peak hour trips by 45 percent and 47 percent, respectively, would meet most of the project objectives.

6.6 Environmentally Superior Alternative

Pursuant to the CEQA Guidelines (15126.6 (d), an EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project in order to identify the environmentally superior alternative. Table 6-8 shows a matrix displaying the major characteristics and significant environmental effects of each alternative and compares the physical impacts for each of the alternatives to the physical impacts of the Project.

As summarized in Section 1, *Executive Summary,* the Project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated for the majority of environmental issues considered in this EIR. The Project would result in a significant and unavoidable impact to transportation and traffic, however, due to increased congestion at area intersections.

The No Project Alternative would be the overall environmentally superior alternative since it would result in no impact or less than significant impacts to all environmental issues and would avoid all project impacts. However, the No Project Alternative would not achieve the basic project objectives as stated in Section 2, *Project Description,* of this EIR. Additionally, pursuant to CEQA Guidelines, if the No Project Alternative is the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives *(15126.6(e)(2) CEQA Guidelines).*

Alternative 2 (Existing Zoning Alternative) would generate impacts similar to or reduced in comparison to the Project with respect to most environmental issues, as shown in Table 6-8. The Existing Zoning Alternative would result in reduced trip generation, a substantially shorter construction period, and reduced excavation, which would reduce air quality, noise, and transportation and traffic impacts relative to the Project. Nevertheless, this alternative would not avoid the Project's significant and unavoidable impact to area intersections, as intersections would still exceed LOS standards due to additional trips generated by the automobile dealerships under this alternative. Additionally, the Existing Zoning Alternative would result in increased impacts to hydrology and water quality and hazards and hazardous materials due to potential storage, transport, and leakage of automotive chemicals. As with the Project, impacts to hydrology and water quality would remain less than significant and impacts would hazards and hazardous materials would be less than significant with mitigation incorporated.

Alternative 3 (No Hotel Alternative) would involve construction of both residential structures proposed under the Project; however, the 307-room hotel and five-story parking structure proposed under the Project would not be constructed. Consequently, construction-related impacts would be reduced in comparison to the Project. Like Alternative 2, the No Hotel Alternative would result in reduced impacts to aesthetics, as well as population and housing and public services due to the reduced potential for population growth. As with the Project, these impacts would remain less than significant and less than significant with mitigation incorporated, respectively. The No Hotel Alternative would result in similar overall water demand, but reduced wastewater, solid waste, and trip generation, in turn reducing impacts to utilities and transportation and traffic relative to the Project. However, the reduction in trip generation under this alternative would not be sufficient to avoid significant and unavoidable impacts to area intersections.

Alternative 4 (Reduced Density - Alternative 4) would involve construction of all buildings proposed under the Project, but buildings would be reduced in height to accommodate fewer residential units, hotel rooms, and less retail space. Alternative 4 would result in similar or reduced impacts to all environmental issues considered in this EIR. The Reduced Density - Alternative 4 would involve reduced construction-related impacts due to a shorter construction schedule and reduced excavation on the Project site. Furthermore, impacts related to population and housing, public services, and utilities and service systems would be reduced in comparison to the Project because the potential for population growth on the Project site would be reduced. The Reduced Density - Alternative 4 would reduce overall trip generation by approximately 45 percent relative to the Project. While this reduction would avoid certain peak hour impacts to area intersections, overall impacts to area intersections would remain significant an unavoidable.

None of the alternatives would avoid the Project's significant and unavoidable transportation and traffic impact. Alternative 2 would result in increased impacts to hydrology and water quality and hazards and hazardous materials and, therefore, would not be the environmentally superior alternative. Additionally, Alternative 2 would fail to meet key project objectives, as it would not provide a mixed use development, would not help meet housing demand and the City's RHNA, and would not meet the recreational needs of the City by providing publicly accessible, privately maintained open space. Both Alternative 3 and Alternative 4 would result in reduced impacts relative to the Project for all environmental issues considered in this EIR.

Table 6-8 Impact Comparison of Alternatives

Issue	Project Impact	Alternative 1: No Project	Alternative 2: Existing Zoning	Alternative 3: No Hotel	Alternative 4: Reduced Density
Aesthetics	Less than Significant	- (Less than Significant)	- (Less than Significant)	- (Less than Significant)	- (Less than Significant)
Air Quality	Less than Significant with Mitigation Incorporated	- (No Impact)	- (Less than Significant)	- (Less than Significant)	- (Less than Significant)
Cultural and Tribal Cultural Resources	Less than Significant with Mitigation Incorporated	- (No Impact)	- (Less than Significant with Mitigation Incorporated)	= (Less than Significant with Mitigation Incorporated)	- (Less than Significant with Mitigation Incorporated)
Geology and Soils	Less than Significant	- (No Impact)	= (Less than Significant)	= (Less than Significant)	= (Less than Significant)
Greenhouse Gas Emissions	Less than Significant	- (No Impact)	- (Less than Significant)	- (Less than Significant)	- (Less than Significant)
Hazards and Hazardous Materials	Less than Significant with Mitigation Incorporated	- (Less than Significant)	+ (Less than Significant with Mitigation Incorporated)	= (Less than Significant with Mitigation Incorporated)	= (Less than Significant with Mitigation Incorporated)
Hydrology and Water Quality	Less than Significant	= (Less than Significant)	+ (Less than Significant)	- (Less than Significant)	= (Less than Significant)
Land Use and Planning	Less than Significant	= (Less than Significant)	= (Less than Significant)	= (Less than Significant)	= (Less than Significant)
Noise (Impacts N-1, N-2, and N-3)	Less than Significant	- (No Impact)	- (Less than Significant)	- (Less than Significant)	- (Less than Significant)
Noise (Impact N-4)[1]	Less Than Significant with Mitigation Incorporated	- (No Impact)	- (Less than Significant with Mitigation Incorporated)	= (Less than Significant with Mitigation Incorporated)	= (Less than Significant with Mitigation Incorporated)

Issue	Project Impact	Alternative 1: No Project	Alternative 2: Existing Zoning	Alternative 3: No Hotel	Alternative 4: Reduced Density
Population and Housing	Less Than Significant	- (No Impact)	- (Less than Significant)	- (Less than Significant)	- (Less than Significant)
Public Services	Less than Significant with Mitigation Incorporated	- (No Impact)	- (Less than Significant with Mitigation Incorporated)	- (Less than Significant with Mitigation Incorporated)	- (Less than Significant with Mitigation Incorporated)
Transportation and Traffic	Significant and Unavoidable	- (No Impact)	- (Significant and Unavoidable)	- (Significant and Unavoidable)	- (Significant and Unavoidable)
Utilities and Service Systems	Less than Significant with Mitigation Incorporated	- (No Impact)	- (Less than Significant with Mitigation Incorporated)	- (Less than Significant with Mitigation Incorporated)	- (Less than Significant with Mitigation Incorporated)

- Impact would be lower (better) than that of the proposed project

+ Impact would be greater (worse) than that of the proposed project

= Impact would be the same as the proposed project

[1] Impact N-4 analyzes the potential effects of ambient noise conditions on land uses that would be constructed on the Project site under each alternative. The effect of ambient noise on a proposed project is not an impact under CEQA. The potential noise levels at the Project site and impacts to proposed land uses are provided for public disclosure and informational purposes.

In summary, the Project would have a less than significant impact or a less than significant impact with mitigation incorporated with respect to most environmental issues considered in this EIR. However, the Project would result in a significant and unavoidable impact to transportation and traffic due to increased delays at area intersections. Alternative 3 and Alternative 4 would result in similar or reduced impacts relative to the Project for all environmental issues considered in this EIR. Alternative 3 would result in the greatest reduction to trip generation (aside from the No Project Alternative) and would meet most project objectives by increasing the City's housing supply and enhancing the value of the Project site through redevelopment, though to a lesser degree than the Project given the reduction in housing that would be constructed. However, the No Hotel - Alternative 3 would not provide long-term revenues for the City through transient occupancy tax, as described in the final project objective. Alternative 4 would meet all project objectives, though to a lesser degree than the Project given the reduction in housing that would be constructed, and would result in similar reduction in trip generation relative to the Project as Alternative 3. Because Alternative 4 would meet all project objectives while resulting in reduced environmental impacts, it would be the environmentally superior alternative.

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